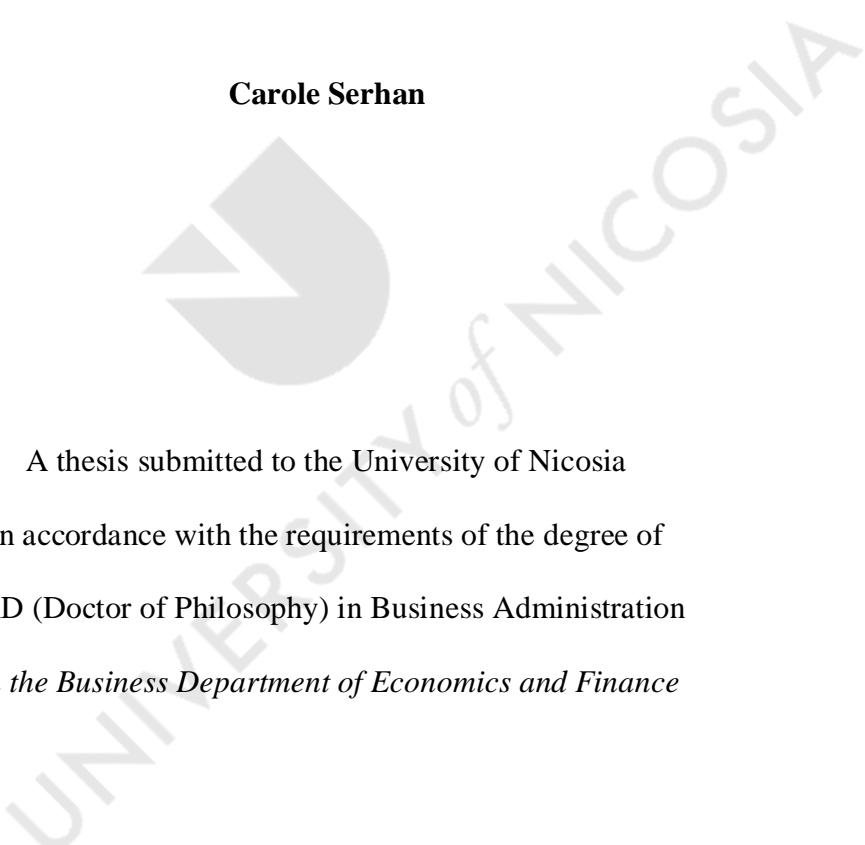

**An Integrated Framework to Examine the Effects of Labor Market, Job and Personal
Characteristics on the Retention of Fresh Graduates**

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PhD (Doctor of Philosophy) in Business Administration
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Abstract

This research is an exploration of how various practices, conditions and psychological states could influence fresh graduates' retention. The conducted critical and narrative literature review on the retention of fresh graduates provided the foundations for the development of an initial conceptual framework which comprises six main components. These are (1) individual differences (2) core job dimensions (3) psychological states (4) labor market conditions (5) personal and work outcomes and (6) labor market outcome.

The empirical stage of the study was developed through a cross-sectional study based on a mix of quantitative and qualitative data to explore the effect of individual differences, core job dimensions, psychological states, labor market conditions and resulting personal/work outcomes on the retention of fresh graduates in their local labor market. Quantitative data were first collected from Lebanese fresh graduates through an exploratory structured questionnaire followed by qualitative data that were collected from employers through semi-structured interviews. The collected quantitative data were analyzed via using the SPSS program (Statistical Package for the Social Sciences) version 21.0 and the collected qualitative data were analyzed via the template technique. Results were compared and contrasted with the initial conceptual framework and the relevant literature.

The research findings from the quantitative research suggest that the main components of the framework affect the fresh graduates' retention. The empirically validated conceptual framework reflects an in-depth exploration of the individual differences, core job dimensions, experienced psychological states, labor market conditions along with personal/work outcomes affecting fresh graduates' retention. More particularly, core job dimensions are positively related to personal/work outcomes subscales. Experienced psychological states are strongly related to core job dimensions as predicted by the model. They also are very highly significantly related to personal/work outcomes. Besides, results showed that for the core job dimensions which affect all personal/work outcomes, it is verified that experienced psychological states mediate between core job dimensions and personal/work outcomes. Labor market conditions predict personal/work outcomes and most labor market conditions achieve moderate to high levels of statistical significant correlations with personal/work outcomes with correlations varying from negative to positive. Furthermore, it was confirmed that personal/work outcomes maximize in

the presence of labor market conditions and all five experienced psychological states. Individual differences moderate the relationships between core job dimensions and experienced psychological states and between experienced psychological states and personal/work outcomes. And finally, fresh graduates retention is impacted by four (Internal Motivation, Growth Satisfaction, Work Effectiveness and Work Commitment) out of five Personal/Work Outcomes.

According to the interviews' findings, the variety of steps considered by employers as being the most essential for retaining their fresh graduates met with most of the fresh graduates' expectations. The findings of these interviews are in line with the findings of the quantitative study and are considered as a contribution to knowledge (to literature and theory). Employers were able to perceive the importance of core job dimensions and labor market conditions along with individual differences as a stimulus to maximize fresh graduates' stay at their organizations through the development of multiple personal/work outcomes which confirms the quantitative research part of this study and adds to the literature review.

Finally, this study discusses the contribution to the fresh graduates' retention field of study and the implications for both scholars and practitioners.

Keywords: Core Job Dimensions; Labor Market Conditions; Individual Differences; Motivation; Job Satisfaction; Employment Retention; Fresh Graduates

Declaration

I declare that the work in this thesis was carried out in accordance with the regulations of the University of Nicosia and is original except where indicated by specific reference in the text. No part of the thesis has been submitted as part of any other academic award. The thesis has not been presented to any other education institution in Cyprus or overseas. Any views expressed in the thesis are those of the author and in no way represent those of the University.

Signed: Carole Serhan

Date: 18/04/2018

About the Author

Carole Serhan (Lebanon, December 9, 1976) received her bachelor degree with distinction in Business Administration from the University of Balamand, in Lebanon. Immediately after, Carole Serhan was employed as a credit officer at Bank Al Madina SARL. Four years after, she continued to the University of Balamand to learn more about management and economics. Two years after, she received a Master degree with distinction in Business Administration (MBA). Immediately after, and ten years from now she was employed as a part-time instructor at two Lebanese Universities (1) The Holy Spirit University of Kaslik and (2) The University of Balamand. Carole is currently employed as a full time lecturer and faculty coordinator at the University of Balamand, in the Business Management and Administration Department. In addition to teaching various courses, she is responsible for many tasks (1) supervising research students (2) designing and researching new course units (3) advising and registering students (4) preparing course offerings (5) organizing students' summer trainings and (6) arranging orientation programs.

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Dissemination

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Abbreviations

CAS	Central Administration of Statistics
CR	Critical Realism
EFA	Exploratory factor analysis
ERG	Existence, Relatedness and Growth
F	Frequency
GDP	Gross Domestic Product
GNP	Gross National Product
GNS	Growth Need Strength
JCM	Job Characteristics Model
JDS	Job Diagnostic Survey
H	Hypothesis
ILO	International Labour Organization
IMF	International Monetary Fund
KMO	Kaiser-Meyer- Olkin
LBP	Lebanese Pounds
MJCM-R	Modified Job Characteristics Model – for Retention
MJDS-R	Modified Job Diagnostic Survey – for Retention
MICS3	Multiple Indicators Cluster Survey, Round 3
MMPS	Modified Motivating Potential Score
MPS	Motivating Potential Score
NSSF	National Social Security Fund
OECD	Organization for Economic Cooperation and Development

PCA	Principal Components Analysis
RO	Research Objective
RQ	Research Question
SD	Standard Deviation
SH	Secondary Hypothesis
SHRM	Society for Human Resource Management
SPSS	Statistical Package for the Social Sciences
UN	United Nations
UNDP	United Nations Development Program
USD	United States Dollars

Dedication

To my parents who supported me endlessly all throughout this journey!



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Finally I thank God, my merciful savior, for guiding my steps.

Chapter 1

Introduction

1.1 Introduction

This chapter serves as an introduction to this thesis. It presents an overview of the research background and describes the research problem. Furthermore, it states the aim and objectives of the study and provides a brief analysis of the contribution to knowledge offered by this research study. Finally, the chapter provides an outline of the overall structure of the thesis.

1.2 Background of the Research and Problem Statement

In today's challenging labor markets where fresh graduates require constant attention, governments and organizations are urged to make relentless efforts to explore new ways to maximize retention. One of the key effects of the present age of globalization and technological progress has been to recognize the importance of fresh graduates' roles in confronting labor market challenges and increasing organizational efficiency and effectiveness. The relationship between various core job dimensions and employee's motivation and job satisfaction has been studied for many decades now (Herzberg, 1964; Vroom, 1964; McClelland, 1975), where direct and significant relationships have been identified. Hackman and Oldham's Job Characteristics Model (JCM) has identified the role of job enrichment and stressed the importance of increasing employees' motivation and satisfaction to increase employment retention (Hackman & Oldham, 1975, 1976, 1980). Hackman and Oldham developed the instrument "Job Diagnostic Survey" (JDS) to test JCM and assess the constructs of their theory (Hackman & Oldham, 1975, 1980). JCM has been recognized as one of the best theories on organizational behavior and has been the key base of various research studies since its creation in 1975 (Behson, 2010). Nevertheless, studies testing JCM were mostly conducted in western countries and many researchers emphasized the need to test the model in other regions (Abu Elanain, 2009). Besides, not much complete and well planned work has been achieved in relation to fresh graduates' job satisfaction and its relationship with the labor market conditions though many scholars stressed the need for it (Shierholz et al., 2012).

In view of all the above, in the current study a modified and extended version of JCM has been created. This modified JCM framework combines the effect of core job dimensions and related

psychological states, individual differences as well as labor market conditions on fresh graduates' job satisfaction and employment retention. The new instrument will be hereby called "Modified Job Characteristics Model-for retention" ("MJCM-R" hereinafter).

Since the retention of fresh graduates is affected by a variety of factors, the use of a reliable tool is helpful and necessary, with the aim to increase the stay of fresh graduates in their local labor markets. Indeed, the development of this tool should make it possible for managers to wisely plan and carry out their offered job designs, help legal authorities to reconsider the extant labor laws, facilitate efforts by behavioral scientists to understand how job enrichment works and by this should help filling the void in research involving redesigning jobs while taking into consideration, for the first time, the effect of labor market conditions on fresh graduates' affective and personal work outcomes.

To fill the theoretical gap of mainly testing JCM in western countries, it was decided to test the modified version, MJCM-R, in a non-western population. Lebanese fresh graduates appear as an appropriate choice, since they have been documented to suffer from outdated labor policies, complexity of work integration and lack of motivation and satisfaction, and are often obliged to accept available opportunities though they might not be matching their qualifications (The World Bank, 2013). Adding to this, in Lebanon, there do not exist many research studies in the field of fresh graduates' satisfaction and retention because there are limited funds for such research (Atallah, 2013). Little attention has been given to this issue despite the great need for it which can be mainly defined in the government failure to create significant investment policies besides many market segmentation problems: private / public sector divide, male / female divide, geographic divide, foreign / national worker divide, formal / informal divide etc.

In brief, fresh graduates' employment satisfaction and retention needs further exploration. A further more detailed gap analysis and discussion will follow in section 2.5 of chapter 2.

1.3 Research Aim and Objectives

This study seeks to review the existing literature on core job dimensions, psychological states, individual differences, labor market conditions and resulting personal and work outcomes affecting fresh graduates' retention, to identify and address the related research gaps and to develop an integrated framework highlighting how fresh graduates' retention can be affected by various practices, conditions and psychological states. The framework draws on several

disciplines and theories, including mainly the job characteristics theory and integrates and synthesizes factors derived from the literature according to the specific context of Lebanon.

This research study is guided by the following **main research questions**:

- *Research Question 1 (RQ1):*

Which factors influence the retention of fresh graduates and how are they interrelated?

- *Research Question 2 (RQ2):*

Can individual differences, core job dimensions and labor market conditions become integrated into a single framework?

Aim

The aim of this research is to explore and to discuss the factors affecting the retention of fresh graduates in order to create a framework for retaining them.

Accordingly, the **objectives** of the research are the following:

- *Research Objective 1 (RO1):*

To examine the existing literature in relation to the theories related to the retention of fresh graduates.

- *Research Objective 2 (RO2):*

To explore the core job dimensions, the psychological states, the labor market conditions and the resulting personal/work outcomes that influence fresh graduates' retention.

- *Research Objective 3 (RO3):*

To investigate the effect of individual differences in moderating the relationship between core job dimensions and the affective and behavioral responses of fresh graduates.

- *Research Objective 4 (RO4):*

To modify the Job Diagnostic Survey (JDS) by synthesizing additional core job dimensions, psychological states and individual differences and integrating labor market conditions to assess the influence of personal/work outcomes on the retention of fresh graduates.

- *Research Objective 5 (RO5):*

To test the psychometric properties of the newly developed comprehensive instrument named the Modified Job Diagnostic Survey-for retention (MJDS-R) in order to ensure the use of a reliable and valid tool.

- *Research Objective 6 (RO6):*

To develop an understanding of the various practices and conditions affecting the fresh graduates' retention in the cultural context of Lebanon, and use these results to provide practical recommendations for the Lebanese government.

The achievement of these objectives will contribute to new knowledge by developing a new framework for the retention of fresh graduates that will assist in setting effective employment retention strategies. The overall research questions, objectives and the relevant hypotheses and proposed methodology are summarized in Table 1.1.

Table 1.1: Research Questions, Objectives, Hypotheses and Proposed Methodology

Research Question	Relevant Research Objective(s)	Hypotheses (H) & Secondary Hypotheses (SH)	Proposed Methodology
RQ1. Which factors influence the retention of fresh graduates and how are they interrelated?	Research Objectives 1, 2, 4 and 5	<p>H1. Personal/work outcomes are influenced by core job dimensions.</p> <p>SH1.1. There is a significant and positive relationship between core job dimensions and personal/work outcomes.</p> <p>SH1.2. There is a significant and positive relationship between core job dimensions and critical psychological states.</p> <p>SH1.3. There is a significant and positive relationship between critical psychological states and personal/work outcomes.</p> <p>SH1.4. In the presence of all five psychological states, personal/work</p>	<p>Stage 1: Literature Review</p> <p>Stage 2: Quantitative Research Survey (630 Questionnaires)</p> <p>Research Analysis: Exploratory Factor Analysis, Descriptive Statistics, Zero-order Correlations, Partial Correlations, Simple Regression Analysis, Multiple Regression Analysis, Hierarchical Regression analysis, Fisher's Z Test, and Binary Logistic Regression (through using SPSS version 21.0)</p> <p>Stage 3: Qualitative Research Interview (five structured</p>

		<p>outcomes maximize.</p> <p>H2. Personal/work outcomes are influenced by labor market conditions.</p> <p>SH2.1. There is a significant and positive relationship between labor market conditions and personal/work outcomes.</p> <p>SH2.2. In the presence of labor market conditions, personal/work outcomes maximize.</p> <p>H5. Personal/work outcomes are a good predictor of labor market outcomes (Retention of fresh graduates).</p>	<p>interviews)</p> <p>Research analysis: Template Analysis</p>
RQ2. Can individual differences, core job dimensions and labor market conditions become integrated into a single framework?	Research Objectives 3, 4 and 5	<p>H3. Individual differences are moderators affecting the relationships among core job dimensions, critical psychological states and personal/work outcomes.</p> <p>SH3.1. Individual differences moderate the relationship between core job dimensions and critical psychological states.</p> <p>SH3.2. Individual differences moderate the relationship between critical psychological states and personal/work outcomes.</p> <p>H4. Psychological states have a mediating role between core job dimensions and personal/work outcomes.</p>	<p>Stage 2: Quantitative Research Survey (630 Questionnaires)</p> <p>Research Analysis: Exploratory Factor Analysis, Descriptive Statistics, Zero-order Correlations, Partial Correlations, Simple Regression Analysis, Multiple Regression Analysis, Hierarchical Regression analysis, Fisher's Z Test, and Binary Logistic Regression (through using SPSS version 21.0)</p> <p>Stage 3: Qualitative Research Interview (Five structured interviews)</p> <p>Research analysis: Template Analysis</p>
	Research Objective 6		According to the research findings and results, recommendations will be given.

1.4 Contribution to Knowledge

This study contributes to knowledge by developing an integrated fresh graduates' retention framework, as there is no direct framework that focuses on fresh graduates. The significance of this research lies in its importance to organizations and business practitioners, allowing them to increase the retention of fresh graduates. This new contribution to knowledge can further be explained as a contribution to literature, theory, methodology and practice. These contributions are briefly highlighted below, and analyzed in detail in the Conclusions chapter.

Contribution to literature; This study is the first to conduct a systematic assessment and critical review of present research on fresh graduates' attitudes and perceptions toward their jobs and local labor markets. Also, it maps the field of fresh graduates' retention, evaluates the results from the present literature, and offers unique and inclusive insights, providing an in-depth understanding of the relevant literature.

Contribution to theory is achieved by providing an in-depth understanding of core job dimensions, psychological states, individual differences, labor market conditions and resulting personal and work outcomes affecting fresh graduates' retention. This contribution can further be detailed as follows: (1) developing a new comprehensive model which examines the combined effect of labor market conditions, core job dimensions and psychological states on personal and work outcomes, together with the moderating role of individual differences; (2) integrating labor market conditions (geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap) into the validation of the model and assessing the influence of personal and work outcomes on labor market outcomes; (3) integrating additional moderating variables (age, gender, education, social rank, and culture); (4) integrating new core job dimensions (participation, work load, working conditions, physical effort, technology use, promotion and social environment) into the validation of the framework; (5) integrating additional psychological states (self-esteem and prestige inside outside) into the validation of the framework and assessing their mediating role; (6) integrating additional personal and work outcomes (high involvement) into the validation of the framework; (7) Using binary logistic regression for measuring retention, so far not used in any other work; and (8) Validating the model for idiosyncratic conditions in Lebanon.

Contribution to methodology is achieved by introducing abductive research approach in examining the fresh graduates' retention. This provides a high level of in-depth theoretical understanding because it places equal weight to both theory and empirical data (Ryan et al., 2012), allowing for the incorporation of existing theories, to build a new theory or modify existing ones.

Contribution to practice; Finally, this study provides managers and business practitioners with an in-depth understanding of fresh graduates' thoughts, beliefs and attitudes regarding their jobs and the local labor market to which they belong and helps them to create a better awareness about the factors that should be particularly given a great attention in order to retain these fresh graduates.

Also, this study provides a guiding framework and operational guidance to managers and business practitioners for conducting successful organizational strategies, in terms of core job dimensions and labor market conditions so as to increase the personal, work and labor market outcomes.

Furthermore, this should be of a great value to the Lebanese government, allowing it to adjust its outdated labor laws, to reconsider its already set curriculum of studies and re-evaluate its employment strategies.

1.5 Research Outline

The outline of the present research is guided by the aforementioned research objectives and is structured around six main chapters.

Chapter one is an introduction to the research study and provides an overview of the study's background. It describes the importance of fresh graduates' retention in confronting labor market challenges and increasing organizational efficiency and effectiveness. It illustrates the various research questions that are to be answered in the study and the research hypotheses that are to be tested and clearly defines the objectives.

Chapter two is the literature review of the research study. First, it provides a critical narrative review of the fresh graduates' retention literature including the identification of knowledge gaps and inconsistencies informing further investigation. Second, it presents a critical review of the existing literature on the main factors affecting fresh graduates' retention as they become known

from the identification of knowledge gaps and inconsistencies, reviewing and synthesizing the extant literature and presenting directions for further research.

Chapter three states the philosophical perspective of the research study and plans the research methodology, the modeling framework, the research empirical setting and the data collection methods. Both quantitative and qualitative methodology approaches were applied. The initial conceptual framework of the study is developed, along with a figural presentation of the framework itself. The empirical setting of the thesis is described, that is, Lebanon and the context of the fresh graduates' labor market of the country. The primary data were first gathered from fresh graduates of the labor market for the quantitative study, by using an exploratory structured questionnaire. Second, in order to do more in-depth investigations and to validate the outcomes of the quantitative research, primary data were gathered from employers, by using face-to-face semi-structured interviews.

Chapter four tests the validity and reliability of the questionnaire as well as the interview questions. The internal consistency of the instrument and each dimension was estimated with Cronbach's alpha coefficients. Exploratory factor analysis (EFA) with Promax rotation was conducted to evaluate the construct validity of the instrument using Principal Components Analysis (PCA) as the extraction method. Robustness tests were additionally performed. Finally, content validity was checked by a panel of experts through reviewing the content of each new item in the modified version. All the statistical analyses were performed using SPSS version 23.0 (SPSS, Inc., Chicago, IL, USA). Besides, the construct validity and reliability of the interview questions were tested and proved along with special caution for the ethical considerations.

Chapter five relies on exploratory factor analysis, descriptive statistics, zero-order correlations, partial correlations, multiple regression analysis, Fisher's Z test and binary logistic regression to analyze and explain the findings of the quantitative study so as to accept or reject the hypotheses of the study.

Thereafter, Chapter six illustrates the retrieved data from the empirical investigation related to the qualitative study so as to address the research questions and further achieve the research objectives. First, it analyzes and explains the findings of the qualitative study. Second, it integrates and compares the primary and secondary data, a process that further enhances the knowledge on fresh graduates' retention. This knowledge is valuable, as it provides the relevant

foundation for the government and business practitioners to re-evaluate strategies related to increasing the stay of fresh graduates.

Chapter seven summarizes the research contributions and the managerial implications of this research study where conclusions are drawn and recommendations are made. It illustrates the continuously improved, redefined and empirically validated conceptual framework as well.

This is followed by the limitations and avenues for further empirical and theoretical research. Table 1.2 illustrates the outline of the present research study.

Table 1.2: The Outline of the Present Study

Chapter Number and Title	Chapter Details
Chapter 1: Introduction	Provides an overview of the study's background Illustrates the various research questions, objectives and hypotheses
Chapter 2: Literature Review	Provides a critical narrative review of the fresh graduates' retention literature Identifies knowledge gaps and inconsistencies informing further investigation Conducts a critical review of the existing literature on the main factors affecting fresh graduates' retention as they become known from the identification of knowledge gaps and inconsistencies in literature
Chapter 3: Research Philosophy, Research Methodology and Modeling Framework	States the philosophical perspective of the research study Plans the research methodology and develops the initial conceptual framework Describes the empirical setting of the research, that is Lebanon and the context of the fresh graduates' labor market in the country Plans the data collection methods for both the quantitative and qualitative research studies along with data analysis and ethical considerations
Chapter 4: Testing the Validity and Reliability of the New Model	Tests the validity and reliability of the questionnaire as well as the interview questions
Chapter 5: Data Analysis of the Quantitative Study	Analyzes and explains the findings of the quantitative study Accepts or rejects the hypotheses of the study
Chapter 6: Data Analysis of the Qualitative Study	Analyzes and explains the findings of the qualitative study Integrates and compares the primary and secondary data, a process that further enhances the knowledge on fresh graduates' retention in the Lebanese labor market
Chapter 7: Research Conclusions	Summarizes the research contributions and the managerial implications of this research study Illustrates the continuously improved, redefined and empirically validated conceptual framework Draws conclusions and gives recommendations Presents the limitations and avenues for further empirical and theoretical research

1.6 Conclusion

This chapter provided an overview of the research study. It delineated the background of the research and presented the research questions, aim, objectives and hypotheses of the study, along with a brief analysis of the study's contributions to knowledge. Then, it presented an outline of the overall structure of the study. The next chapter presents the theoretical basis of the study.

Chapter 2

Literature Review

2.1 Introduction

This chapter seeks to provide the theoretical basis of the present research study. Hence, it reviews the existing knowledge so as to identify and undertake the described research phenomena as well as to find answers for the research questions and objectives stated previously. Consequently, this chapter is divided into five main sections. The first section describes and justifies the selected literature review method that best fits this research study. The second section illustrates an overview of the fresh graduates' transition into job life, their expectations and competencies. The third section examines the existing literature in relation to the theories related to the retention of fresh graduates. The fourth section covers the review of extant knowledge of the defined research fields: (1) core job dimensions (2) experienced psychological states (3) individual differences (4) labor market conditions (5) personal / work outcomes and (6) labor market outcomes. This section is the core of the literature review in which relevant extant knowledge is collected, discussed and assessed in order to derive implications for fresh graduates. The fifth section appraises relationships in the sparse fresh graduates' retention literature so as to identify gaps between the different research studies related to the subject of review and based on the discovered gaps, presents a critical narrative review in order to identify and expose the most recent literature in relation to the identified key concepts. The limitations of this critical narrative review and the avenues for further empirical and theoretical research along with the implications for scholars, business practitioners and Governments are detailed afterward (Chapter 7: Research Conclusions). Finally, this chapter presents a conclusion to propose some reflections and observations in relation to the conducted literature review.

2.2 Selecting a Literature Review Method

A literature review is an evaluation of knowledge identified in the literature related to the subject of interest (Tranfield et al., 2003). The review aims to describe, summarize, evaluate and clarify this literature. It gives a theoretical foundation for the research and helps the researcher to detect gaps in the literature (*ibid.*).

A literature review is not only a search for knowledge or a collection of quotes and paraphrasing from other sources; it goes beyond being a descriptive narrative list of available information. Relationships and connections among the various literatures should be identified and detected, in relation to the subject of study and should be critically analyzed (Collins & Fauser, 2005).

Marshall and Rossman (2010) stated that the well prepared literature review has four significant advantages. First, it provides the opportunity to describe concepts that were the base to formulate the general research questions. Second, it proves that the researcher is aware of the extant knowledge related to the subject of study. Third, it leads to the identification of gaps which explain the need for the research. Fourth, it helps ameliorate the research questions or increase their numbers, as a result of placing them in wider theoretical and empirical frameworks.

This chapter seeks to provide a transparent and reproducible literature review and not only to follow a literature review process that allows the management of information. Therefore, the chosen literature review process, which is detailed, illustrated and justified below, plots and critically evaluates the relevant body of literature. This supports the standpoint of Tranfield et al. (2003) in regards to the literature review in management research that considers the literature review process as a major tool which helps to manage the variety of information for a precise academic query. Finally, the chosen literature review process seeks to identify the research questions and hypotheses which will be the foundation for more empirical research.

2.2.1 Comparing Narrative and Systematic Literature Reviews

As per Tranfield (2003) narrative literature reviews are used mainly in management studies. They follow usually a descriptive process that once achieved; conclusions from the results are drawn. This process has been criticized for not including materials objectively and by this lacking critical evaluation and leading to risky and not well founded generalizations out of these narrative literature reviews.

As for systematic literature reviews, they are used mainly in medical research (Tranfield, et al., 2003). However, nowadays some management studies follow this type of research which is achieved through conducting a predefined process which includes: (1) key words' usage, (2) sources' definitions, (3) search periods' documentations, (4) relevant literature listings and (5) quality assessments (Collins & Fauser, 2005). The systematic literature review has various

advantages based on the clearness and visibility of the process used. However, it has one key disadvantage which most probably influences the results and conclusions of the study: the risk of having some improper or incomplete key definitions may lead to inappropriate and inaccurate results (Bryman & Bell, 2007).

To sum up, each approach has its advantages and disadvantages. Narrative literature review suits well comprehensive topics which permits a wide coverage of the subject of study and allows a critical reasoning while systematic literature review works better for focused topics (Collins & Fauser, 2005). Knowing that this research study is the product of a long journey where research subject and research plan have been built up over time, the coming part illustrates the selection of the best fit approach for this research study taking into consideration the aforementioned comparison.

2.2.2 Assessing the Right Approach

The literature review of this research follows a narrative approach for various reasons. Indeed, through using this approach, the risk of not using enough and appropriate key words and then omitting main information is minimized and the general quality of the research study results is expected to be more accurate. Besides, this selection agrees with the ontological and epistemological position of this study which is described in the next chapter.

This narrative approach supports advances in theories and provides the background for the professional practice (Bareham et al., 2000). It then improves the overall quality of the research through providing fruitful critiques on the extant literature (Fiegen, 2010); in addition to the fact that most of the management research studies are based on narrative reviews (Tranfield et al., 2003). Furthermore, the topic of this research is characterized as being mainly comprehensive rather than focused and thus is best treated through a narrative literature review. Finally, knowing that narrative review consists of critical analysis of the extant literature, it is then able to provide up-to-date knowledge about the subject of study which helps building up a robust and well grounded basis for creating the fresh graduates' retention model of this study.

2.3 Fresh Graduates' Retention: Transition into Job Life

Fresh graduates are often described as young generations with high productivity potentials but with fewer chances to enter labor markets (Abel et al., 2014). After graduation, they frequently

find themselves in a complexity of work integration. Employers have expectations from them and they also have their own ambitions that are usually considered as high. Being the promise for a better tomorrow to any labor market, it matters for nations as well as organizations to retain these young generations. Nowadays, retaining fresh graduates has turned to be a great challenge especially that labor market conditions have become very tough and hard hit by economic crises, low wages and unequal labor rights.

Great worldwide recessions have made it difficult for many fresh graduates to find jobs that match their education. They are mostly accepting low salary jobs or part time offers. Serious questions about whether a university degree is still a need for people to find good jobs have been raised. Besides, research has shown that individuals when beginning their careers usually need time to transition into the labor market (Abel et al., 2014). Under these challenging circumstances, fresh graduates mostly feel unsecured and under pressure, which makes it very difficult for employers and organizations to retain them.

It should be noticed that there is no clear definition for a fresh graduate. However, the issue of “retention” in general has been subject to many discussions. It has been identified as being a basic reason behind the success of an organization and is affected by various motivational factors such as pay, appreciation, career achievements, job characteristics and others (Aguenza & Som, 2012). The community life has proved to have an effect as well (Mitchell et al., 2001).

A per Oxford dictionary (2015), fresh graduates are people that have just recently graduated. They usually have little to no skill sets, making them ideal for apprenticeships, entry-level positions and internships (*ibid.*). Besides, fresh graduates are those individuals who have newly completed the requirements to fulfill an academic degree (Bachelor, Masters, PhD or other) or a course of study and who have little to no work experience. However, there is no clear specification to the maximum time allowed after graduation or the maximum work experience duration for a graduate to still be considered as fresh.

Although many scholars and practitioners emphasize the importance of retaining fresh graduates in challenging labor markets, research related to the links among fresh graduates, core job dimensions, labor market conditions and retention has failed to keep up. Given the importance of this issue, this section seeks to review the extant literature on fresh graduates’ expectations and

competencies so as to understand how fresh graduates' retention can be affected by various practices, conditions and psychological states.

2.3.1 Expectations

Concerning fresh graduates' expectations, they are considered relatively high in comparison to satisfaction levels which are moderately low. Fresh graduates' job satisfaction seems more depending on the realization of their expectations (Tektas et al., 2010). Recent studies (Jackson & Chapman, 2012) on recent fresh graduates proved that they are notoriously disloyal and, unlike earlier generations, will happily move between jobs until their expectations are met. Furthermore, they have proved to have low expectations about their expected salaries when at least one of their parents is employed while in the contrary they expect to earn high salaries when finishing their postgraduate studies. However, market studies proved that post graduate studies have a small impact on the basic salary (Menon et al., 2012). Other than postgraduate studies, there are many variables that affect future salaries expectations and their impact varies from one study to another. However, gender remains the only variable that almost all studies agreed on its impact in that women's salary expectations are lower than men (Menon, 2008).

In Australia, labor market studies has proved that a job with a university degree requirement is not necessarily being given to university degree holders and that most Australian males and females fresh graduates are being called "overeducated" meaning that their education level exceeds the requirements of the available job (Linsley, 2005). These research studies, along with overseas similar ones (Hartog, 2000; Groot & Maassen van der Brink, 2000; McGuinness, 2006; Mehta et al., 2011), have asserted that overeducated fresh graduates earn less than expected compared to others in jobs that match their education level.

Some research studies (Cleveland et al., 2011) that tackled the issue of fresh graduates and their expectations considered these latter as young people who are experiencing transitions in their life. This transition has been the centre point for many research studies executed in order to understand the difficulties they face. After studying for a long time, new graduates expect a lot from the job they suppose it should be the reward for all this long time spent in studying (*ibid.*).

In addition, Fresh graduates talk about a mismatch between their expectations and what the market offers. Salary is not their primary concern although low pay is not desirable (Ministry of Higher Education Malaysia, 2012).

In this issue, Freeman (1976) argued that whenever the supply exceeds the demand for over educated fresh graduates, the pay is lower especially for jobs not matching their educational level. This fact is one of the most important keys behind fresh graduates' dissatisfaction (Caroll & Tani, 2012).

Besides, fresh graduates working on part time basis before graduation felt that they had a privilege over others once graduated while those with no previous experience before graduation considered the job interview as a first chance to get introduced to the organization to which they apply (Ulrich, 2003).

2.3.2 Competencies

Employers argue that nowadays fresh graduates lack three major qualifications: critical thinking, initiative and effective communication skills (Ministry of Higher Education Malaysia, 2012).

Beth Ulrich (2003), the regional vice president and editor for Nurse Week Publishing, Inc., explained in her study, "successful strategies for new graduates", the essential key factors to successfully move new graduates through the transition into the job life. One of these key factors is the interview process development which should clarify the benefits and compensation options and should respect the diversity of fresh graduates. The second one is the orientation and the internships development which should explore competencies (Ulrich, 2003).

In Portugal, as well as in many other countries, studies have shown that fresh graduates are being more and more obliged to accept job offers designed for non degree holders. However, the occurring skill-biased technological revolution in many sectors raises the efficiency of workers with higher university degrees, thus increases their salaries, and draws new ones with high competencies to such jobs (Cardoso, 2007).

Employers from different industries argue that the acquired university level doesn't match the required competencies for the job (Chiru et al., 2012; Agénore et al., 2007). Universities all over the world have been trying to design new education systems which take into consideration the required skills and competencies for fresh graduates to meet the expectations of employers.

In United Kingdom and Romania, scholars asserted that universities should work on adjusting their existing curriculum by introducing new competencies like language and communication, working in multi-cultural environments and decision making (Chiru et al., 2012; Coll & Zegwaard, 2006). Regardless of the progress made in this field of study, questions remain as to how well universities prepare fresh graduates to meet the challenges, in continually evolving and demanding work environments (Hills et al., 2003; Rubin & Dierdorff, 2009). Undergraduate business education is failing to adequately prepare graduates for today's workplaces (Andrews & Higson, 2008; Jackson, 2009; Washer, 2007) and many concerns remain that undergraduate programs may not be equipping students with the key skills needed to gain and maintain employment (Cranmer, 2006; De La Harpe et al., 2000; Azevedo et al., 2012).

Moreover, employers should support and understand fresh graduates in order to get the best results. Furthermore, they are responsible of empowering and helping them in developing their competence and confidence especially when launching a new program, this employer's commitment should help reduce new graduate turnover rates (Thomas, 2009).

In New Zealand, the government publications and websites showed a huge number of studies concerning fresh graduates who are newly employed and the impact of stress, role ambiguity, retention, and job selection on their experience (Clare et al., 1996; Wittmann-Price & Kupler, 2003). In most of these studies, the perspectives of new graduates were discussed regarding staffing issues, career and retiring (Rydon et al., 2008).

2.4 Theories Related to Fresh Graduates' Retention

The labor market refers to the place where employees find paying jobs, where employers find willing employees and where wage rates are determined (Phelps & Zoega, 2013; Rocio et al., 2013). Fresh graduates are often considered lucky when they enter the labor market and receive job offers that match their desires and expectations. Moreover, in order to be satisfied and to increase their commitment to their jobs, a strong and effective motivation at various levels is needed (Shujaat et al., 2014). Motivation and job satisfaction are often used interchangeably though they have different meanings. Job satisfaction is defined as the happiness or comfort that a job gives an individual while motivation refers only to the reasons behind the decision of an individual to achieve a job, regardless of whether the job brings him happiness (Parvin & Nurul Kabir, 2011). Still, these two terms are very much interrelated. For a better understanding of

these terms, many theories have discussed the concept of motivation and job satisfaction as an important predictor of employee retention. These theories are mainly classified into need based theories, cognitive process based theories, behavioral theories and the job characteristics theory. However, it is essential to state that factors that contribute to fresh graduates' satisfaction and retention in the labor market are not only factors related specifically to the job itself and the fresh graduate's personal needs, but also factors related directly to the job matching and to the labor market itself (Cassar, 2010; Serhan & Tsangari, 2015). Based on this, it is important to highlight the most used job matching and labor market theories that contribute to the issue of fresh graduates' satisfaction and retention. Together, these theories represent the base of all work on motivation, job satisfaction and employment retention. In what follows, need based theories, cognitive process based theories, behavioral theories, job characteristics theory and job matching and labor market theories are discussed to understand these variables and to incorporate them in the study of fresh graduates' retention.

2.4.1 Need Based Theories

Need based theories are those theories founded on the idea that motivation comes up from the individual's desire to satisfy a need. Unsatisfied needs are the stimulators that motivate individuals (Jex & Britt, 2008). Four theories may be placed under this category: Maslow's Hierarchy of Needs, Motivation Hygiene Theory, Existence, Relatedness and Growth Theory (ERG Theory) and McClelland Theory of Needs.

- *Maslow's Hierarchy of Needs:*

Maslow's Hierarchy of Needs (Maslow, 1954) is a theory for human motivation that was suggested by Abraham Maslow in 1943. This theory proposes that people have needs and motivation lies in the process of satisfying these needs. Maslow arranged needs in a way that lower level or more basic needs are to be satisfied before higher level needs and created what he called a hierarchy of needs, which focused on five categories of needs that were classified in an upward order of importance. Suggested lower level needs are: physiological needs, safety needs, and social needs. Physiological needs refer to air, water, food and sleep, which are considered as basic needs. If these needs are not satisfied then individuals will feel motivated for the mission to satisfy them. And according to Maslow, individuals will not seek higher needs unless they satisfy these needs first. Safety needs refer to living in a safe place and enjoying medical services, job

security and financial reserves while social needs refer to the need for friends, for belonging and love. Suggested higher level needs are: esteem and self-actualization. Esteem refers to self-respect, confidence, achievement, recognition and others. Self-actualization refers to needs such as truth, justice, wisdom and it is important to mention that according to Maslow this need is never fully satisfied and only few people reaches this level of very high satisfaction. Thus in brief, Maslow's Hierarchy of Needs assumes that a satisfied need can no longer be a motivator and at this stage only the next level of needs will become the new motivator and the attention will be driven to this next level in the hierarchy. Critiques to Maslow's Hierarchy were many. Whaba and Bridwell (1976) in their review of this theory asserted that there was no definite evidence that human needs are divided into five categories and that these categories are placed in the right hierarchy. Cianci and Gambrel (2003) stated that cultures place the social needs before any other ones. Hoftsede (1984) declared that there is no clear evidence that individuals tend to satisfy one need at a time and Kenrick et al. criticized the placement of sex in the basic physiological needs (Kernick, 2010; Kernick et al., 2010).

- *Motivation Hygiene Theory:*

Motivation Hygiene Theory (also called Two Factor Theory, Dual Theory or Herzberg's Motivation-Hygiene Theory) was developed by Frederic Herzberg in 1959. According to Herzberg (Herzberg et al., 1959), job satisfaction act in a different way than job dissatisfaction meaning that factors that cause job satisfaction are quite different from factors that cause job dissatisfaction. The job characteristics, which are related to the job, nature sound to be able to satisfy the needs of achievement, personal worth and self realization and by this create a feeling of happiness and job satisfaction. Nevertheless, the absence of these needs doesn't create a feeling of dissatisfaction because this latter is related to different factors such as organization's policy, salary, interpersonal relations, working conditions and others (Herzberg, 1964). Herzberg divided job characteristics into two different types: the motivators and the hygiene factors (Herzberg et al., 1959). The motivators refer to the intrinsic job characteristics that he believes are the reason behind a positive satisfaction such as recognition, achievement or personal growth while the hygiene factors refer to the extrinsic job characteristics that he believes doesn't create a feeling of positive satisfaction but prevents job dissatisfaction. At the end, it is important to mention that the motivator factors of Herzberg correspond to the higher level needs of Maslow (Herzberg, 1966). Critiques to the Two Factor Theory were many especially those concerning

the choice of the respondents and the form of the research itself. Holloway (1996) in his research to examine this theory concluded that Herzberg didn't include the office and production workers because they simply didn't give him the results he was expecting and focused on accountants and engineers instead. As well, Goldthorpe (1969) shared Holloway same point of view adding that a perfect model should be able to distinguish between the different types of workers and their corresponding different needs and expectations. Others criticized the differentiation between the satisfaction and dissatisfaction factors and considered this nonsense (King, 1970).

- *ERG Theory:*

ERG theory was developed by Clayton Alderfer in 1969 where E stands for Existence, R stands for Relatedness and G stands for Growth (Aldefer, 1969). Clayton, in his work, redefined the Maslow's Hierarchy of Needs Theory by classifying needs into three categories: Existence needs, Relatedness needs and Growth needs. Existence needs correspond to the basic and safety needs of Maslow's hierarchy, the Relatedness needs correspond to Maslow's social and self esteem needs while the Growth needs correspond to Maslow's self actualization needs and personal development desires (Aldefer, 1972). Unlike Maslow, ERG theory allows an individual to seek multiple needs at a time and the order of needs might vary from one individual to another. Furthermore it recognizes that when an individual is unable to satisfy a high level need, he will increase his desire for lower needs. For example if an individual is unable to satisfy his growth needs, he will increase his desire for relatedness needs and socialize more with coworkers or he will increase his desire for rewards. Critiques to this theory revealed the difficulty to obtain the information about what motivates the person to act in a certain way and then to discover what is the most important need for the person since ERG theory allows individuals to satisfy any of the needs at the same time (Hunter et al., 1990).

- *McClelland's Theory of Needs:*

McClelland's Theory of Needs (also called the Three Needs Theory, the Acquired-Needs Theory or the Learned Needs Theory) was developed by David McClelland in 1961. In his theory, McClelland (1975) focused on three needs: the need for achievement, the need for power and the need for affiliation. The need for achievement refers to the need to outshine, to achieve and to make every effort to be successful. Individuals who have a need for achievement prefer to

succeed in their jobs. They choose the tasks of reasonable difficulty and look for personal achievements instead of financial rewards. They look for finding solutions to problems and receiving feedback for their performance so they can evaluate their achievements. They need to feel that their success or failure is due to their own efforts (McClelland, 1975; McClelland & Burnham, 1976). The need for power refers to need to influence, to teach, and to control others. Individuals who have a need for power prefer to work in a group where there is competitiveness, where there are possibilities for convincing and influencing others and especially for gaining prestige much more than performing effectively. The need for affiliation refers to the need for spending more time with others, for maintaining social relationships and for being loved and accepted by others. Individuals who enjoy high affiliation needs look for friendship and prefer co-operation instead of competitiveness. Critiques to this theory reveal that it is not applicable in the public sector where employees are motivated mostly by job security, stability and teamwork rather than prestige and authority. Thus they have high affiliation needs and low achievement and power needs which will make it difficult for managers to assign tasks and create competitive environments (Jurkiewicz et al., 1998).

2.4.2 Cognitive Process Theories

Cognitive Process Theories are those theories that study the “process” of motivation and are interested mainly in knowing how motivation takes place (Mohr, 1982). Four theories can be placed under this category: Vroom’s Expectancy Theory, Adam’s Equity Theory, Goal Setting Theory and Bandura’s Social Cognitive Theory.

- *Vroom’s Expectancy Theory:*

Vroom’s Expectancy Theory was first developed by Victor Vroom in 1964. In his theory, Vroom (1964, 1982) didn’t follow Maslow, Alderfer, Herzberg and McClelland need theories which tried to examine what motivates people. Instead, he assumed that individuals are not only motivated by their needs but also make work related decisions concerning what they intend to do or not to do. These decisions are based on the expected abilities to achieve tasks and receive rewards. So this theory highlights the importance of relating rewards directly to performance and of making sure that these rewards are those expected by the employees. In addition, Vroom suggested a couple of cognitive variables that reveal differences in work motivation. These variables are: Expectancy, Instrumentality and Valence. Expectancy refers to the individual’s

expectations and confidence levels about what he is able to perform. Instrumentality refers to the level of trust an individual has that he will receive an appropriate reward if the task is achieved successfully while Valence refers to the value an individual assigns to his expected rewards. These three variables form a multiplicative model. Thus, all the three variables must be high in order to enjoy a high probability of motivated performance. Critiques to this theory were mostly based on the simplicity of this multiplicative model. Lawler (1973) described this simplicity as deceptive and Maloney and McFillen (1985, 1986) considered Vroom's theory as applicable for the construction industry employees only.

- *Adam's Equity Theory:*

Adam's Equity Theory was first developed by John Stacey Adams in 1963. Adam (1963, 1965) in his theory proposes that an employee compares his own outcome input ratio to the outcome input ratio of other employees called referents and whom he considers similar to himself. It is important to mention that outcome refers to salaries, benefits, recognition, job security, opportunities for advancement and others while input refers to skill level, education, training, work experience and others. Outcome input ratio refers to how much in percentage is the outcome received from a job out of the input put in this same job. Equal ratios create job satisfaction and motivate employees to maintain this equity or to increase their input if they want their output to increase while unequal ones end up with job dissatisfaction and motivate employees to bring back equity. Critiques to this theory concerned the hypothesis and the application of this theory. Huseman et al (1987) proposed questions about the applicability of this theory in real life situation and questioned the simplicity of the model stressing on the importance of various missing variables that affect individual's perceptions of equity such as demographic and psychological variables.

- *Goal Setting Theory:*

Goal Setting Theory was developed by Edwin Locke in the mid 1960s. The theory proposes an inductive correlation between goal setting and enhanced production performance (Locke, 1968) where goal is defined as the objective of a task that an individual seeks to perform and achieve (Locke & Latham, 2002, 2006). It further proposes that the intentions to achieve a goal are the main reason behind work motivation. Goals which are specific and which are judged difficult to perform are likely to increase performance more than other goals. The enhanced production

performance is deemed to be affected by goal setting in four ways: Choice, Effort, Persistence and Cognition. Choice means that goals focus attention towards the activities which are more relevant to the goal than others. Effort means that goals demands effort and the higher the goal the more the effort needed. Persistence means that goals affect perseverance so an individual needs to work hard in order to reach his goal. Finally, Cognition means that goals help individuals to deal with the situation they are facing. In his model, Locke added four conditions to make a goal effective in increasing motivation. These conditions are: goal acceptance, goal specificity, goal difficulty and goal feedback. Goal acceptance refers to the idea that for a goal to be motivating to an individual, it must be first accepted by this individual. Goal specificity refers to the idea that the more specific the goal the higher the performance. Goal difficulty refers to the idea that the more difficult the goal setting, the higher the motivation and the commitment and goal feedback refers to the idea that feedback is a necessity for goals to stay effective and to maintain commitment. It is important to mention that self made feedback is proved to be powerful than feedback from external sources such as supervisors and that employees who have the chance to set their own goals, their efforts will be superior to those related to goals consigned by others. Critiques to this theory were that managers' goals may not support the organization's goals and if this is the case a direct conflict will arise. As a result of this conflict, performance will suffer. Furthermore, if tasks are very difficult to perform, individuals will be more concerned in meeting their goals rather than achieving their tasks (Schweitzer et al., 2004).

- *Bandura's Social Cognitive Theory:*

Social Cognitive Theory was first proposed in 1941 by Miller and Dollard as a social learning theory. In 1986, Bandura and Walters extended this theory and since then it is known as Bandura's Social Cognitive Theory (Bandura, 1989). This theory proposes that performance is a function of ability and motivation. It assumes that innovative work behavior influences task performance and that innovative self-efficacy and outcome expectations in turn affect innovative work behavior (Bandura, 1991, 2001). This theory emphasizes the complex ways in which people, their behaviors and environments mutually influence one another and is mainly used to understand the career puzzle and to promote career success (ibid.). Bandura's theory was criticized for its ignorance to biological states. It ignored the fact that some behaviors in life are partially hereditary and not only acquired (Hart et al., 2006).

2.4.3 Behavioral Theories

Behavioral theories of motivation are those theories which consider that two factors are believed to be essential for motivation: rewards and incentives. The reward is the consequence of a particular form of behavior while the incentive encourages or discourages the behavior. The most used behavioral theory is the behavioral learning theory which is mostly applied in the teaching field and especially to students. This theory proposes that behavior changes can confirm that learning took place (Rousseau, 1995). Critiques to behavioral theories of motivation argue that incentives may reduce intrinsic motivation and cause students to focus on incentives instead of learning and that incentives can be effective however if they are based on the quality of the work (Rousseau, 1995).

2.4.4 Job Characteristics Theory

Hackman and Oldham Job Characteristics Theory, namely JCM, originally constructed in 1975, focuses on the relationship among three main parts: the critical psychological states of employees, the core job dimensions that affect these states and the individuals' attributes that determine how positively a person can respond to a complex and challenging job (Hackman & Oldham, 1975, 1976, 1980).

The core job dimensions are seen as affecting three psychological states that, in turn, lead to many valuable personal and work outcomes. The theory suggests that employees who experience high levels of the psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes of the work and knowledge of the actual results of the work activities) are likely to feel good about themselves and respond positively to their job (Hackman & Oldham, 1976, 1980). These critical psychological states are defined as follows:

- Experienced meaningfulness of the work: this first state means the degree to which an individual experiences the job as generally valuable and meaningful;
- Experienced responsibility for outcomes of the work: this second state means the degree to which an individual feels personally accountable and responsible for the results of his work;

- Knowledge of the actual results of the work activities: this third and last state means the degree to which an individual constantly understand how efficiently he or she is performing.

Moreover, it proposes that these states can be seen as influenced by five core job dimensions (skill variety, task significance, task identity, autonomy and feedback from job) which are defined as follows:

- Skill variety: this job dimension essentially refers to the degree to which the job requires a variety of different activities so the employee can use various skills and talent.
- Task significance: this job dimension refers to the degree to which the job affects the lives or work of other people within or outside the organization.
- Task identity: this job dimension refers to the degree to which the job requires completion of a ‘whole’ and identifiable piece of work, that is, a job that has a beginning and an end with a visible outcome.
- Autonomy: this job dimension refers to the degree to which the job offers an individual freedom, independence and judgment to plan the work and to decide the procedures for carrying it out.
- Feedback from job: this job dimension refers to the degree to which the job offers information about how well or how poor an individual has performed. This mainly helps employees to understand the effectiveness of their performance.

In particular, skill variety, task identity and task significance, joined together, are seen to form the experienced meaningfulness of the work. This can be explained by the fact that workers consider their jobs as worthwhile and meaningful when these jobs require the use of several different skills, allow them to complete a substantial piece of work (as opposed to the continuous repetition of a simple task) and have an impact on other people. Job autonomy is seen as influencing experienced responsibility for the outcomes of the work and feedback from job is seen as influencing knowledge of the actual results of the work activities (Rungtusanatham & Anderson, 1996). The three psychological states, all together, are seen as a determinant of the following different personal and work outcomes: high internal work motivation, high “growth” satisfaction, high general job satisfaction and high work effectiveness.

Moreover, this model notices that differences among people moderate how they react to their work and for this a variable named “Growth Need Strength” (GNS) has been created (Hackman & Oldham, 1975, 1980). This variable is considered as the characteristic features of individuals that determine how optimistically a person will react to a multifaceted and challenging job. As a result, an individual with a high GNS is supposed to react more positively to a job high in the five core job dimensions than an individual with a low GNS. Furthermore, GNS may have an influence on the link between core job dimensions and psychological states or on the link between this latter one and the outcome variables; meaning that people with a high GNS react more positively to the psychological states or experience more likely the outcome variables (Hackman & Oldham, 1976, 1980). Furthermore, the model notices that knowledge and skill (knowledge and skill to perform the work) and work context (pay, job security, coworkers and managers) in addition to GNS are additional variables which moderate how employees react to their work (Hackman & Oldham, 1980).

Besides, Hackman and Oldham (1976, 1980) combined the five core job dimensions into a single index that reflects the overall potential of a job to foster internal work motivation, named “The Motivating Potential Score” (MPS). In order to test their theory and to assess its constructs, they developed the “Job Diagnostic Survey” (JDS), which has been widely used in related studies (Cleave, 1993; Lee-Ross, 1998; Rungtusanatham& Anderson, 1996; Vorster et.al., 2005).

Some critiques to this theory concern the three psychological states which can be purely considered as intrinsic or internal to the job itself. Thus, this theory focuses only on intrinsic motivation and doesn't emphasize the importance of extrinsic motivation. Besides it doesn't take into consideration various job dimensions that have been found to have an effect on worker satisfaction and motivation, such as social relationships (e.g., ERG Theory or McClelland's Theory of Needs) and participation in the setting of goals and work load (e.g., Goal Setting Theory) and others (Serhan & Tsangari, 2015).

2.4.5 Job Matching Theories

Job matching theories have been generally accepted as a one of the most important descriptions of labor market retention (Shimer, 2005). John Holland's Theory of Career Choice as well as Search Theory are placed under this category.

- *John Holland's Theory of Career Choice:*

Many research studies concerning employee satisfaction (Reardon & Lenz, 1999; Dockins, 2004; Walsh, Craik, & Price, 2000) used John Holland's Theory of Career Choice which was developed in 1973. This theory states that people are more likely to be successful and satisfied when they choose to work in an environment similar to their personality where they can be around people who are like them (Holland, 1973, 1997). Holland proposes that most individuals fit into one of six personality types. These personality types are: realistic, investigative, artistic, social, enterprising and conventional. Realistic refers to those who prefer to deal with things like practical people, investigative refers to those who prefer to deal with people and things like intellectual and independent people, artistic refers to those who prefer to ideas and people like creative people, social refers to those who prefer to deal people like teachers and counselors, enterprising refers to those who prefer to deal with people and data like salespeople and conventional refers to those who prefer to deal with data and things like administrative and conservative people (Holland, 1973, 1997). Critiques to this theory were that females showed exclusive high scores in the following three personality types: artistic, social and conventional (Walsh & Huston, 1988). Holland defended his theory by noting that these results are because society guides women into female dominated careers (Holland, 1997).

- *Search Theory:*

Search theory played an important role in many areas of economics. It has been applied in labor economics to evaluate temporary unemployment resulting from looking for a job by workers or switching from one job to another (Rogerson et al., 2005). A suitable job is the one that gives a high pay, attractive benefits and satisfying and secure working conditions (Moscarini & Wright, 2010). Macroeconomists went beyond search theory and studied general equilibrium models in which different searchers act together. This is called “search and matching theory”, which states that the rate at which new jobs are formed depends both on workers’ search decisions, and on firms’ decisions to open job vacancies (Moscarini, 2005).

2.4.6 Labor Market Theories

Labor market theories seek to understand the characteristics and the performance of the labor market which functions through the interaction of employees and employers (IMF, 2012).

Neoclassical Microeconomic Model – Equilibrium, Labor Market Segmentation Theory and Capability Approach can be placed under this category.

- *Neoclassical Microeconomic Model – Equilibrium:*

The Neoclassical Microeconomic Model – Equilibrium (Birchenall, 2008) analyses the demand and supply of labors in a way to determine equilibrium wage and employment levels and it is important to stress on labor economics which can be viewed as the application of microeconomic and macroeconomic techniques to the labor market. The microeconomic technique emphasizes the role of individuals and firms in the labor market while the macroeconomic technique studies the relations between labor market and other markets and how these relations influence macro variables such as employment levels, participation rates, aggregate income and Gross Domestic Product (Kremer & Thomson, 1998; Duczynski, 2000). Furthermore, the Neoclassical Model remains the most convenient way to analyze internal and external migration rates at the regional, national and international level. It highlights the labor market dimension of migration and relates migration-induced population changes to the relative wage and employment situation found in homeland and destination region (Mitze & Reinkowski, 2010). Many sociologists and economists criticized the Neoclassical Microeconomic Model by claiming that this theory fails to analyze the role of unpaid labor. Despite the fact that this labor is unpaid, it is proved that it is an important part of the society (Eichner & Kregel, 1975).

- *Labor Market Segmentation Theory:*

The theory of Labor Market Segmentation (Reich et al., 1973) contradicts the view of the neoclassical models which believe that there is only one unified labor market. On the contrary, this theory proposes that labor market has been divided into different market segments. This segmentation results in different groups like male/female segmentation, private/public sector segmentation, formal/informal sector segmentation and others. It states that different job professionals work in completely different job markets. For example, doctors and lawyers work in different markets. Furthermore, it states that there are huge differences on the side of demand which entail differentiations in compensation and these differences are not explained by employee's personal characteristics (Reich et al., 1973). Employees with similar characteristics might get different compensation and this is mainly due to non market institutions such as unions and to different strategies set by employers (Freeman & Medoff, 1984). Normally, labor market

segmentation divides the labor market into primary and secondary market (Reich et al., 1973). Primary market refers to the market where all employees are motivated to please their employers because of high financial rewards, health benefits and job security. These employees are mainly skilled and hold high degrees. Secondary market refers to the market where jobs are of a very low skill level and require little training. Employees in this market are low paid, easily replaced and lack motivation. Therefore there is no motivation to stay, which results in high turnover rates. Employees switch from one job to another. Assessments of this labor market segmentation theory argue that despite the different market segments, it is important to mention that all employers should agree on minimum wages, maximum hour laws, health benefits and others regardless of the sector to which they belong. Employers cannot have complete control since there should be unified employment standards for all employees (Ehrenberg, 1994).

- *Capability Approach:*

Capability approach is known for being a leading model for analyzing human well being and for being a frame of reference for job satisfaction. This approach was developed by Amartya Sen and Martha Nussbaum in the 1980s. The basic concepts of this approach are: functionings, capabilities and Agency (Amartya, 1992). Functionings refer to the states and activities that constitute a person being which ranges from basic ones like being nourished to more complex ones like being happy and having self – respect (ibid.). Capabilities refer to the various combinations of the functionings that an individual can achieve and agency is best described by Amartya definition of an agent which he defines as someone who looks forward to making a change and whose accomplishments are assessed in the context of his or her personal values and goals (Amartya, 1999). In order to measure well-being, this model uses the Gross Domestic Product (GDP) and the Gross National Product (GNP) which are usually used to measure a nation's economic prosperity. This was the subject of many critiques that argued this inadequacy of well-being measurement (OECD, 2006).

2.5 Factors Affecting Fresh Graduates' Retention

Notwithstanding the above theories concerning motivation, job satisfaction, labor market and their relation to retention there is a significant body of literature showing the various and sometimes contradictory point of views concerning the relationship of various factors and retention. Despite these contradictions, the research studies devoted to tracing the linkages

between these factors and job satisfaction and retention has grown significantly in recent years. Hackman and Oldham (1980) mentioned that job characteristics are seen as affecting three psychological states that, in turn, lead to motivation and job satisfaction. Fritz-enz (1990) discussed the existence of various factors which are the reasons behind retaining employees in an organization. Osteraker (1999) and Walker (2001) believed that retention factors can be divided into multiple dimensions which are mainly classified as social, mental and physical dimensions while Clarke (2001) stressed the importance of human resource management factors in affecting retention. Pritchard (2007) mentioned that training and development are major reasons behind retaining employees. Dochy et.al, (2009) revealed that personal characteristics such as education level and others play a major role in the retention process. In order to better understand the dimensions of retention, a set of core job dimensions, psychological states, individual differences and labor market conditions are considered. These characteristics are defined below with reference to job satisfaction, motivation, involvement namely personal/work outcomes and to retention namely labor market outcomes.

2.5.1 Core Job Dimensions and Related Psychological States

Over the last decades, many research studies around the world have been carried out to examine the impact of core job dimensions and related psychological states on job satisfaction (Ahmed, 2012; Lee & Lee, 2012; Mokaya et al., 2013; Nurullah, 2010; Tourani & Rast 2012). Most research studies (Feyzi et al., 2012; Hsu & Chen 2012; Zagenczyk et al., 2010) conducted to study job satisfaction and retention has examined the role of some or all of the following job dimensions: skill variety, task significance, task identity, autonomy, feedback from the job, participation, work load, working conditions, physical effort, technology use, promotion and social environment of the job as well as the role of some or all of the following related psychological states: experienced meaningfulness of the work, experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities, self-esteem and prestige inside outside. These core job dimensions and related psychological states are often considered as factors predicting job satisfaction and the relationship between the two showed to be significantly strong in most research studies regardless of the type of job itself. This relationship is better described below and helps to create a better understanding for the retention issue.

- *Skill Variety:*

Skill variety is the extent to which a job requires an employee to use various skills, abilities or talents (Hackman & Oldham, 1976). Research studies (Ambrose et. al., 2013; Bremner & Carrière, 2011) conducted to study the relationship between skill variety and job satisfaction and retention found that skill variety significantly affect job satisfaction. More often, employees are expected to perform a wide range of duties mostly because of the limited staffing and capacity. This requires the usage of various skills, reduces boredom and thereby increases job satisfaction and motivation (ibid.).

- *Task Significance:*

Task significance is the extent to which a job has an impact on the lives or work of other people in or out the organization (Hackman and Oldham, 1976). Research studies (Abiodun et. al., 2013; Bremner & Carrière, 2011; Grant, 2008) conducted to study the relationship between task significance and motivation and job satisfaction found that task significance positively affects employee motivation and job satisfaction.

- *Task Identity:*

Task identity is the extent to which a job involves performing a whole piece of work from its beginning to its end (Hackman & Oldham, 1976). Research studies (Bremner & Carrière, 2011; Choge et. al., 2014) conducted to study the relationship between task identity and motivation and job satisfaction found that task identity has a positive effect on employee motivation and job satisfaction. As per Hadi and Adil (2010), task identity turned out to be the most important positive predictor of job satisfaction and intrinsic motivation.

- *Autonomy:*

Autonomy is nothing but giving power, freedom and independence to an employee to schedule work and decide how to carry it out and it is a forceful source of job satisfaction (Hackman and Oldham, 1976). Another term of autonomy is authority or empowerment which means that the organization is aware of the employee's ability and provides him with authority as a way to increase his job satisfaction (Bowen and Lawler, 1992). Many research studies (Hackman & Oldham, 1980; Malini & Pandian, 2013; Muindi, 2011) conducted to examine the relationship

between authority and job satisfaction agreed that authority has a significant positive relation with job satisfaction.

- *Feedback from Job:*

Feedback from job is the extent to which performing a job provides an employee with clear information about his or her effectiveness (Hackman & Oldham, 1976). Perista and Carrilho (2012) stated in their research that receiving constructive feedback proved to be an encouraging factor for most employees. It helps them to know where they are and how they can improve. Dugguh and Dennis (2014) and Sommer and Kulkarni (2012) showed that fresh graduates respond to positive feedback while experts respond to negative feedback. This negative feedback should include what was wrong, why it was wrong and how it can be corrected. Besides, constructive feedback gives great opportunities for advancement within the organization and in turn creates better mood at work and greater job satisfaction. Studies in Portugal and different European countries (Judge et al., 2001) showed that feedback from supervisors had the most positive effect on worker's satisfaction. These studies emphasized the importance of training the management people on the best way to give feedback.

- *Participation in Decision Making:*

Employee Participation is the process in which influence is shared among employees who are otherwise hierarchically unequal (Wagner, 1994). All conducted research studies concerning the relationship between employee participation and job satisfaction showed positive results. Tourani and Rast (2012) suggested that both employees' participation and communication have significant and positive effect on employees' job satisfaction. Muindi (2011) examined the relationship between participation in decision making and job satisfaction among academic staff in public University of Nairobi and the findings showed a significantly strong positive correlation. Bhatti and Qureshi (2007) conducted a study with thirty four organizations from different sectors and concluded that employee participation is a major determinant of job satisfaction.

- *Work Load:*

Many research studies (Hyttter, 2008; Zeytinoglu & Denton, 2005) conducted to study the relationship between work load and different aspects such as job satisfaction, organizational

commitment and employment retention revealed the importance of work load in influencing employee retention. It is very important to recognize the emerging needs of employees to have a balanced work load required to create a feeling of commitment and satisfaction. Ramlall (2003) declared that people try hard to stay in organizations that provide balanced work load. This creates a feeling of being valued and making difference.

- *Working Conditions and Work Benefits:*

The working condition is one of the major factors that influence job satisfaction (Mehmood et al., 2012; Sehgal, 2012). This includes the workplace environment (e.g., humidity, temperature, lighting, air conditioning and seating). Many research studies have shown that the better the working environment, the more the job satisfaction (Dawal & Taha, 2006; Kinzl et al., 2005; Shidhaye et al., 2011). However, Bakotié and Babié (2013) declared that there is no statistically significant difference in job satisfaction level between employees who work under difficult working conditions and those who work under normal working conditions.

The work benefits concern the working hours, the Health insurance, the sick leave and the vacations which are allowed for an employee. Studies related to work benefits showed different results. In Denmark and Portugal, there's a positive relationship between working hours for example and job satisfaction meaning that people who work for long hours are more satisfied than those who work on a standard full time basis. This has been explained by the fact that the longer the working hours the highest the income. However, in France, Germany, Italy and Spain, there seems to be a positive relationship between working time flexibility and job satisfaction while a negative relationship is found regarding overtime work (Eurofound, 2012).

- *Physical Effort:*

The physical effort is the use of physical energy to do an activity. Many researchers (Barr-Anderson et.al. 2011; Noorbakhsh & Ghambari, 2013) suggest that there is a relationship between physical effort and job satisfaction. Results showed that employees whose work requires physical energy show lower satisfaction levels than those who work in easier conditions.

- *Technology Use:*

Several authors (Limbu et al., 2014; McMurtrey, 2002) who studied the relation between technology use and job satisfaction stated that technology use can positively influence job

satisfaction and thus improve retention. Research discussed a statistically significant relationship between the combination technology use and job satisfaction. Attar and Sweis (2010) stated that new technologies can result in employees working in a smarter way as well as becoming more productive and efficient. Rewards system needs to be rearranged to support the use of technology. Oldham and Hackman (2010) recognized the importance of technological advances to help employees achieve an efficient coordination and a better team work and by this increase job satisfaction and retention.

- *Promotion:*

Promotions refer to rewards given for highly productive employees, creating an incentive to exert greater effort. They may be accompanied with wage, responsibilities and authority increases and most often it carries an increase in job amenities such as a bigger office (Dizgah et al., 2012; Ghaziani et al., 2012). Naveed et al. (2011) concluded that there is a positive and significant correlation between promotion and job satisfaction and Kosteas (2010) declared that not only employees who received promotions show higher satisfaction levels but also employees who are expecting to receive a promotion in the next two years report higher levels too.

- *Social Environment:*

Morgeson and Humphrey (2006) studied the social environment effect on the satisfaction and retention of fresh graduates. Throughout their research, they stressed the importance of the following social environment factors as prime determinants of retention: Interdependence, feedback from others, social support, and interaction outside the organization. Grant and Parker (2009) noticed that nowadays circumstances have changed and a great importance should be given to the social aspects of the work itself. Oldham and Hackman (2010) focused on the importance of the social characteristics of the job and stated that these aforementioned factors as well as other social aspects of the work need to be identified and are definitely worthy of empirical investigation. Interpersonal relationships refer to the elements that constitute the employee's social and support network in an organization. These might include the relationship with supervisors, the social relation with co-workers, and even the communications with clients or customers (Song & Olshfski, 2008). Research has demonstrated that positive interpersonal relationships at work have a great impact on job satisfaction (Zagenczyk et al., 2010). Thoms et al. (2012) conducted a study to determine the relationship between cross-rational interpersonal

relations and job satisfaction and they found that the most the effort an organization does in order to improve these relations, the most the job satisfaction. Furthermore, Mustapha and Zakaria (2012), in their study conducted to determine the influence of interpersonal relationship on job satisfaction among lecturers in public universities in Malaysia, concluded that there is a positive significant correlation between the two.

- *Experienced Meaningfulness of the Work:*

Experienced meaningfulness of the work is the degree to which employees feel their jobs are important, worthwhile and meaningful (Hackman & Oldham, 1976). As per Hackman and Oldham (1976), when the job has meaning to individuals and is not just as a set of movements to be repeated, then the work is considered as motivating by itself.

Meaningfulness is the result of the sentiment that job duties are of a great value. Individuals like to express their feelings and are innovative by nature and therefore they look for job responsibilities that enable them to communicate their own conceptions. Job responsibilities that meet with individuals' own conceptions should be aligned with higher meaningful work experiences (May et al., 2004). Employees with authority enjoy a bigger feeling of meaning from their work (Avolio et al., 2004). The re-establishment of meaning in work is considered as a method to increase an employee's motivation, job satisfaction and attachment to work (May et al., 2004; Nelson & Simmons, 2003; Olivier & Rothmann, 2007).

- *Experienced Responsibility for Outcomes of the Work:*

Experienced responsibility for outcomes of the work or accountability is the extent to which employees feel personally responsible or accountable for their job performance (Hackman & Oldham, 1976). Accountability, being the willingness to accept responsibility, has been proved to be a major determinant of job satisfaction (World Bank, 2005). Thoms et al. (2002), Sorensen et al. (2009) and Feyzi et al. (2012) examined in their research studies the idea that employees' perceptions of their level of accountability are related to their job satisfaction. They concluded the existence of a significant correlation between the two.

- *Knowledge of the Actual Results of the Work Activities:*

Knowledge of the actual results of the work activities is the extent to which employees know how well they perform their jobs on a continuous basis (Hackman & Oldham, 1976). As per Hackman

and Oldham (1976, 1980), knowledge of outcomes is a great determinant of motivation and job satisfaction for it provides the individuals information on how good their job has been, which sequentially allows them to gain knowledge from errors. It entails individuals' awareness of how successful they are transforming their efforts into performance. The more the employees know how well they perform their work, the more the motivation, the job satisfaction and thus resulting in a longer stay at work (Cho et al., 2006; Macey & Schneider, 2008; Stander & Rothmann, 2008).

- *Self-Esteem:*

Self-Esteem is a psychological state that stands for the overall judgment that one places on oneself as a person (Rosenberg, 1965). It includes beliefs and emotions such as triumph, despair, pride and shame. Research studies concerning the relationship between self-esteem and job satisfaction showed almost similar positive results. Korman (1970, 2001), Nurullah (2010) and Ahmed (2012) found that self-esteem and valued job characteristics are direct and strongest predictors of job satisfaction among the emerging adults and explained that “individuals will tend to choose and find most satisfying those jobs which are consistent with their self-cognitions”.

- *Prestige Inside Outside:*

The prestige inside outside refers to the prestige of the job position inside and outside the organization. The prestige of the job inside the organization is an internal factor of motivation while the prestige outside the organization is an external factor. They both help to create a positive feeling toward the job and with other factors such as self-esteem and working conditions are considered to have a positive correlation with job satisfaction (Hodson, 1989; Pierce & Gardner, 2004; Siegel, 1971; Treiman, 1977).

2.5.2 Individual Differences

In most job satisfaction studies (Khan et al., 2012; Lai & Chen, 2012; Olorunsola, 2012; Rast & Tourani, 2012; Shah, 2012), the most used individual differences are knowledge and Skill, growth need strength, context satisfaction and personal characteristics (gender, education, marital status, age, social class and culture). These individual differences are often used to describe the respondents and to find relationships among the variables of the study. They are often described as playing the role of moderators between the core job dimensions and the

personal/work outcomes. Their effects are positive in some studies and negative in others depending on the type of job and the psychological state of the individual (Olorunsola, 2012; Lai & Chen, 2012). This inconsistency in results is shown below in details.

- *Knowledge and Skill:*

Knowledge and skill allow employees to deal completely with the demands of their jobs (Llorens et al., 2007). Maslach et al. (2001) found a strong correlation between knowledge and skill and work engagement, motivation and satisfaction. Furthermore, knowledge and skill is proved to play the role of a moderator between core job dimensions and personal/work outcomes allowing a more significant correlation between the two (Hackman & Oldham, 1980). As per Kulik et al. (1987), skill and knowledge refers to the level of information and expertise the employee has and this moderates the relation between the psychological states of the employee and core job dimensions and outcomes. When jobs are deemed as motivating, sufficient information and expertise lead to feeling the critical psychological states and improved outcomes, whereas inadequate information and abilities discourage the psychological states and ends with negative outcomes. When jobs are considered as less or not motivating, employees don't experience the psychological states at all, therefore knowledge and skill have no effect (*ibid.*).

- *Growth Need Strength:*

Growth need strength is the strength of an individual's need for personal achievement, learning, and development (Hackman & Oldham, 1976, 1980). This feeling of accomplishment refers to the sense of achieving something worthwhile. Research studies concerning the relationship between the feeling of accomplishment and job satisfaction showed almost similar positive results. Sehgal (2012), Lee and Lee (2012) and Hsu and Chen (2012), in their studies concerning job satisfaction found a positive relationship between the feeling of accomplishment and job satisfaction. Growth need strength refers too to growth prospects which are linked to the various positions an employee expects to move to as he grows in an organization. This growth might be by moving vertically but also it might be by moving laterally or cross functionally to shift to a different type of job role. Meeting the growth prospects of employees has shown to be a major determinant of job satisfaction: Weng et al. (2012), in their study conducted on new staff nurses, concluded that managers should improve the growth possibilities' models in order to enhance job satisfaction, Gruneberg (1979) concluded as well that the more individuals' expectations and values are met

the more the job satisfaction and Rast and Tourani (2012) believe that job satisfaction is achieved for jobs which are found to be meeting employees' growth prospects. Furthermore, the higher the growth prospects the higher the correlation among core job dimensions and personal/work outcomes (Hackman & Oldham, 1980).

- *Context Satisfaction:*

As per Hackman and Oldham (1980), context Satisfaction is defined as the satisfaction with job security, compensation, co-workers and supervision. The job context as well has an effect on the experience of employees. Kulik, Oldham and Hackman (1987) advocate that satisfied employees with their managers, pay, co-workers and job security respond in a more positive way to jobs with high motivation and in a less positive way when they are not satisfied. This has been explained by the fact that employees are obliged to use attentional resources to change the unwanted work context, which draws the attention away from the richness intrinsic in the job (*ibid.*).

Job security is the guarantee that has an employee about keeping his job. In a traditional work environment, employees are employed for a life time while today this life time job has been mostly replaced with a part time job and a short-term contract which have created a feeling of job insecurity, decreased the employee participation in decision making and reduced the degree of involvement and job satisfaction (Khainga, 2006). Review of job security and job satisfaction studies indicates that the correlation between these two is significantly positive (Rast & Tourani, 2012; Sehgal, 2012). This has been stated by Herzberg, in his "Two Factor Theory" as well.

Compensation refers to financial rewards or the package of payrolls, remunerations, salaries, benefits or compensations rewarded to employees. It has proved to have a strong and positive correlation with job satisfaction (Mokaya et al., 2013). Employees who feel that their remuneration package is fair compared to the level of responsibility are the most satisfied. Oshagbemi (2000) and SHRM (2011) concluded that there is a statistically significant relationship between financial rewards and job satisfaction. Pay comparisons are also considered to be a part of job satisfaction factors (Card et al., 2012).

Satisfaction with co-workers and supervision has been described as a major determinant of enhancing the relationship between core job dimensions and personal and work outcomes. This means that the higher the satisfaction with co-workers and supervisors, the higher the correlation between core job dimensions and employment motivation and general satisfaction. The level of

satisfaction with supervisors is measured by the degree of respect, fair treatment, support and guidance that an employee receive from their work supervisors while the level of satisfaction with co-workers is measured by how much co-workers seem to be friendly and by the chance to get to know other people while on the job or to help other people while at work. It has been proved that the level of satisfaction with co-workers and supervisors has a strong and positive correlation with job satisfaction (Mokaya et al., 2013). Besides, people enjoying a high satisfaction with co-workers and supervision are more likely to show a high correlation between core job dimensions and employment motivation and satisfaction (*ibid.*).

- *Personal Characteristics:*

Age, Gender, Education (Level of Education, Type of Education (Subject of Study), Language of Instruction, Private or Public Sector), Social Class (Upper, middle and Lower Class), and Culture (Power Distance, Individualism versus Collectivism, Uncertainty Avoidance, Pragmatic versus Normative, Indulgence versus Restraint).

As for age, Herzberg et al. concluded in his study that at a young age satisfaction is high and then it decreases as age increases but later on and after hitting a low point it increases again (Holloway, 1996). However, Saleh and Otis (1964) proposed almost the contrary and indicated, in their study, that there is a positive relationship between age and job satisfaction until the pre-retirement period during which job satisfaction decreases. On the other side, Spector (1997) and Saner and Eyüpoğlu (2012) concluded, in their study, that job satisfaction increases with age because employees move to better positions as they grew older, touch better benefits such as rewards or pay and tend to adjust their expectations to be more realistic which make them happy.

In relation to gender, some research studies showed that men are the most satisfied (Bender et al., 2005; Donohue & Heywood, 2004); others showed that women are the most satisfied (Keith, et al., 2005; McDuff, 2001) while still others showed that there is no difference between men and women in regards to job satisfaction (Clark, 1997; Long, 2005; Ward & Sloane, 2000). The reasons behind the inconsistent results were described by Gruneberg (1979) as follows: men and women at the same organization might hold different positions and might have different promotion prospects, pay and need satisfaction level.

Concerning education, Carell and Elbert (1974), in their study, concluded a negative relationship especially when talking of young jobholders with high level of education that becomes less

satisfied when achieving routine jobs. Shah et al. (2012) and DeSantis and Durst (1996) declared a negative relationship between education and job satisfaction as well especially for the private sector employees while Tett et al. (2003) recognized a positive relationship between employees' educational level and job satisfaction. Fresh graduates' expectations remain the main reason behind the inconsistency in results.

A review of marital status and job satisfaction studies shows inconsistent results as well. Khan (2012), in his study, concluded that married teachers show more job satisfaction than their unmarried counterparts while Yoshikawa and Rasheed (2010), in their study, concluded that married teachers in higher education show less job satisfaction.

As for social class; while sociologists debate precisely how social classes are divided, many scholars believe in a simple three-class distribution that includes the rich or upper class, the middle class, and the poor or working class. Social class is a significant predictor of job satisfaction. Studies (Fontinatos-Ventouratos & Cooper, 1998, 2005) conducted to study the effect of social class distribution on motivation and job satisfaction showed that job satisfaction is significantly greater among the upper class while it decreases among the middle and lower class. This results mainly from low income, weak working conditions and absence of basic needs. Fontinatos-Ventouratos and Cooper (2005) stated that analysis provided evidence that the issue of job satisfaction is critical and different amongst the various social classes.

Finally, culture affects employee workplace behavior and helps management maximize the positive and minimize the negative effects on employee job satisfaction (Saari & Judge, 2004). Various scholars (Hofstede, 1991, 2001; Hofstede et al., 2010) studied the effect of employee culture on work attitudes and considered many cultural dimensions being (1) power distance, (2) individualism versus collectivism, (3) masculinity versus femininity, (4) pragmatic versus normative, and (5) indulgence versus restraint.

Power distance is the degree to which the employees who have the less power in their organizations accept or expect power to be unequally distributed at work. People with high extents of power distance accept inequalities at work and needs no further justification while those with low power distance ask for equality and expect a justification for any possible inequality. High power distance is often linked to autocratic style of management whereas the low power distance relates mainly to democratic style of management (Hofstede, 2001).

Individualism describes people who take care of themselves and their immediate families and their self image is often defined with “I” rather than “we” while collectivism is related to people who prefer team work rather than personal achievements (Hofstede, 2001). Masculinity describes those who prefer power, competitiveness, heroism and material rewards in life while femininity is often related to those who prefers modesty with cooperation and cares for the quality of life. In business context masculinity is linked to toughness while femininity is linked to tenderness (*ibid.*). Normative is the term often used to describe people who are suspicious toward changes in society and are more linked to traditions and norms, while pragmatic people encourage education as a way to build the future without being extremely related to the past (Hofstede, 1991). And finally, indulgence is related to people who like to have fun and enjoy life while restraint has different priorities like protecting one’s reputation and regulating needs’ satisfaction by strict social norms (*ibid.*).

2.5.3 Labor Market Conditions

In addition to the labor market theories and their relation to job satisfaction and retention, there is a considerable body of literature that describes the different and sometimes contradictory point of views concerning the linkages between various labor market factors and retention. Notwithstanding these inconsistencies, the research studies focusing on the fresh graduates’ perception towards their labor markets and their willingness to continue in a specific job (retention) in a context of satisfaction, motivation and involvement have increased tremendously in the last few years. In order to better understand the dimensions of retention, a set of labor market characteristics are considered. These characteristics are defined with reference to job satisfaction, motivation and involvement which affect fresh graduates’ retention.

The labor market can be local, national or international and it may contain interrelated labor markets characterized by different characteristics, skills and geographical locations. Many research studies conducted to study job satisfaction have examined the role of some or all of the following variables: Geographical location, unionization, labor status, comparison and job switching, job matching, policies and politics, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap (Abbas et al., 2010; Agrifoglio & Metallo, 2010; Aguilar et al., 2013; Falco et al., 2010; Keane et al., 2012; Phelps & Zoega, 2013; Rocio et al., 2013). These labor market characteristics are often considered as

factors predicting job satisfaction (Cho et al., 2014; Karavas, 2010; Qamar & Baloch, 2011) and are defined below with reference to satisfaction, motivation, involvement and retention. However, the relationship between these labor market characteristics and job satisfaction has been shown to be positive in some studies and negative in others depending on the personal characteristics of the job holder, the economy and the employment and investment policies of the country (Abdel Rahman, 2012; Cassar, 2010; Falco et al., 2010).

- *Geographical Location:*

Research studies conducted in the area of job satisfaction confirmed a clear significant relationship between geographical location and overall job satisfaction (Agrifoglio & Metallo, 2010; Baernholdt & Mark 2009; Eurofound, 2007; Karavas, 2010). Abbas et al. (2010) in their study concluded that there is a significant positive correlation between the geographical location factor and the overall job satisfaction. Gruneberg et al. (1974) discussed the idea that employees who are satisfied in their jobs are more likely satisfied with all the aspects related to their job and especially the national geographical factors which were proved to influence the level of overall job satisfaction. As well, Cho et al. (2014), in their study conducted on Korean new graduate nurses, stressed the importance of the geographical location as being a major factor of job satisfaction and results showed that nurses employed in the capital are more satisfied than others in rural areas. Hills et al. (2012) shared the same point of view and concluded a significant positive correlation between geographical location and job satisfaction in medical practitioner population.

- *Unionization:*

Unions are described as organizations that aim to achieve wage gains for their members through exercising a monopoly power (Freeman & Medoff, 1984; Freeman & Morris, 1990). Many existing research studies have stressed the link between employees' union membership and job satisfaction (Keane et al., 2012; Pichler & Wallace, 2008). Giving employees the opportunity to express their opinions has proved to increase job satisfaction (Donegani & McKay, 2012; Miller, 1990). Pfeffer and Davis-Blake (1990) concluded in their study that unions reduce the inequality of wages, help employees to have more control over their jobs, increase employees' involvement and add to their overall job satisfaction. However, Gius (2012) and Gracia-Serrano (2009) found a negative relationship between unionization and satisfaction and explained this result by the fact

that *unions make workers more critical toward the workplace and more willing to complain about problems.*

- *Labor Status:*

Labor status refers to whether the individual is an employee or self employed. Research studies concerning the relationship between labor status and job satisfaction reveal a significant correlation between the two (Blanchflower, 2000; Georgellis et al., 2007). In developed countries, the self employed shows a higher level of job satisfaction than the employed ones (Benz & Frey, 2008a, 2008b; Bradley & Roberts, 2004). In Latin America, self employed professionals are more satisfied than employed ones only with their incomes while self employed fishermen and farmers are less satisfied with their jobs and incomes (Aguilar et al., 2013). El Harbi and Grolleau (2012) examined the same issue but in OECD (Organization for Economic Cooperation and Development) countries and they found that there is a significant and direct negative correlation between self employment, job satisfaction and domestic happiness.

- *Job Matching:*

Many research studies considered job matching as one of the main factors ensuring a high level of satisfaction especially when talking about recent graduates. Belfield and Harris (1999) concluded in their study concerning UK recent graduates that job satisfaction is explained in terms of individual's matching to job, with the match depending on reservation returns, information sets and job offer rates. Ferreira and Taylor (2011) confirmed the same point of view in their study conducted to measure the match quality relationship with job satisfaction. The more the job matches the fresh graduates' expectations the more the overall level of satisfaction (Barmby & Eberth, 2008; Barmby et al., 2012).

- *Private and Public Sector:*

A huge number of research studies have demonstrated that job satisfaction levels vary widely between employees in the private and the public sector. DeSantis and Durst (1996) examined the American private and public sector and realized a huge difference in the American employees' satisfaction level due to the big differences in terms of pay, benefits and Psychic value. Qamar and Baloch (2011) concluded in their study conducted in Pakistan that employees in the public sector showed higher job satisfaction levels than those of the private sector and explained this

difference by the better public sector working conditions. Kaur (2012) studied the public and private sector employees of the insurance sector in India and results showed that, regarding some variables such as opportunities for skill upgrading and trainings, private sector employees were more satisfied than those in the public sector, while for other variables such as pay private sector employees were the most satisfied. Peters et al. (2010) and Shobhna and Hartesh (2013) shared the same point of view while studying the differences in job satisfaction levels between private and public sector employees in different Indian states. Katuwal and Randhawa (2007) concluded in their study conducted in Nepal that there were no differences in the job satisfaction levels between private and public sector employees in the textile sector since they all face the same employment policies, management behaviors and monetary issues. Wang et al. (2012) assumed that public sector employees in Taiwan show a lower satisfaction level than those of the private sector and this was explained by the lack of motivating potential.

- *Foreign and National Workers:*

According to the person environment fit theory which examines the degree to which individual and environmental characteristics match (Edwards, 2008; Kristof-Brown, et al., 2005), foreign workers, denominated expatriates, face exceptional challenges when trying to accommodate to workplace environments especially if employee characteristics do not match job requirements (Edwards et al., 1998). Research studies in this area presumed different point of views concerning national workers' and expatriates' overall level of satisfaction. In the United States, national workers and expatriates showed almost the same level of satisfaction. They both judged co-worker relationships to be more important than autonomy and challenging tasks to be more significant than job security (Raville, 2002). Abdel Rahman et al. (2012) examined the issue of foreign and national workers in the United Arab Emirates in terms of job satisfaction and the principal findings were that domestic employees convey a higher satisfaction level with pay, opportunities of promotion, job characteristics, co-workers, and supervisors than their expatriate counterparts. This inequality was mainly explained by the job stress, the complexity of work, the lack of integration in formal and social work group networks, the language and culture barriers, besides the authoritarian management style of Arab managers. Arthur and Bennett (1995) concluded in their study that family situation such as spouse adaptation and integration within the local community proved to be the most important factor that determines the expatriates' job satisfaction which is totally different from factors determining native workers' job satisfaction.

- *Formal and Informal Jobs:*

Informal jobs also called “under the table” jobs are those jobs that are not reported to the government. They are paid in cash, less secured and not protected by Government regulations. Informal jobs represent an important element in the economy of many developing countries where there is no efficient control for the application of regulations and the collateral of taxes (ILO, 2002, 2008). On the contrary, formal jobs are those that obey to the government laws and in which workers feel more secured and report a higher level of job satisfaction than those under the table (Fajnzylber et al., 2006; Falco et al., 2010). However, Maloney (1999) described two reasons that make employees prefer the informal job: The first reason is to evade taxes and the second one is to enjoy flexibility and independence. As well, Fajnzylber et al. (2006) shared the same point of view. However, the dualistic theory of labor markets presumes that job protection appears to be a positive determinant of job satisfaction rather than a cost to be avoided by engaging in informal activities (Fajnzylber et al., 2006; Falco et al., 2010). On the same level, Cassar (2010) investigated the relationship between job satisfaction and employment characteristics in Chile and confirmed the same results.

- *Educational and Labor Market Gap:*

Abel et al. (2014) discussed the urgent need for a significant communication between higher education institutions and labor market players in order to minimize the gap between them and as a trial to increase the sustenance of fresh graduates in their local labor markets. One means of beginning such communication would be for higher education institutions to set up or increase their affiliations with businesses (Giamouridis & Bagley, 2006). In this way, universities could establish a complete perceptive of the relation between their own curriculum, the needs of businesses, and the majors selected by their students. Besides, this would guarantee having a better understanding of the labor market setting and could help fresh graduates to find good quality jobs upon graduation (Khan, 2012).

2.5.4 Personal/Work Outcomes and Labor Market Outcome

As per Hackman and Oldham (1980), personal/work outcomes are high internal work motivation, high growth satisfaction, high general job satisfaction and high work effectiveness. Besides, various scholars (Adi, 2012; Brown, 1996; Chiu & Tsai, 2006) stated that the degree of involvement an individual has to his job is considered as a personal/work outcome and has a

great effect on employment retention which is considered as a labor market outcome. Thus it is essential to review the extant literature related to these variables which are considerably interrelated and have been the subject of many studies over many years.

Through exploring the dimensions of retention, no clear definition has been set for employee retention. However, researchers worldwide have discussed this issue especially that nowadays retaining employees is one of the most difficult challenges facing organizations. In the past, retaining employees was affected by two dimensions: the accomplishment of a good job by the employee and the capacity of the employer to pay him for this job. However, today, employees' loyalty decreased and alternative opportunities increased. Thus, retention has quickly turned out to be a priority for employers.

Aguenza and Som (2012) considered retention as being the process of retaining employees in an organization. According to him, retention is a basic reason behind the success of an organization and is affected by various motivational factors such as pay, appreciation, career achievements, job characteristics and others.

In order to understand the retention of employees, Mitchell et al. examined the importance of the community in retaining employees. The more employees participate in community life the more they establish relationships and connections in and out of their job which makes leaving a job a hard matter since it requires rearranging these connections (Mitchell et al., 2001). Thus, employees who have many connections are more likely to stay.

To be able to manage retention efficiently, organizations should diagnose the main reasons behind turnover. Human resource experts should consider the issue of retention before the employment of a worker, during his work and after he leaves (Fegley, 2006) knowing that every organization might have different retention objectives and challenges and has different human capital strategies (Frincke, 2006).

Howard et al. (2007) stated that some job characteristics are more probably the key factors behind the employee's will to stay within an organization which contradicts other opinions that state that employee satisfaction is the main factor associated with employee retention.

Forgacs defined employee retention as being an organized attempt by employers to build and promote an environment that supports existing employees to stay within the organization (Forgacs, 2009).

Wood defined employee retention as being the employee will to stay in and continue working in the same organization. This involves the desire to stay and to offer the best services to the same organization (wood, 1976).

Meyer and Allen (1991) described employee retention as being employee commitment, loyalty and desire to work for achieving the organization's goals and objectives. Furthermore, they stated that employee retention is a psychological state that defines the relationship between the employee and the organization with the decision to remain in the same organization. According to them there exist three types of individual's commitment that leads to retention. These types are: affective, continuance and normative commitment. Affective commitment refers to how an employee perceives his feelings towards the organization. Continuance commitment refers to how employees perceive the cost of leaving his work to join another organization while normative commitment is how employees perceive their natural obligation to the organization (Meyer & Allen, 1991).

Motivation, satisfaction, involvement and retention, being interrelated, have been the subject of many studies and approaches all over the world. For a better understanding of the correlation among these terms, in what follows definitions and perceptions from articles worldwide have been discussed.

- *Motivation:*

Grant and Shin (Grant & Shin, 2011) described motivation as being the phenomenon that inspired Thomas Edison to create the first light, Nelson Mandela to be the president of South Africa, Michael Angelo to paint the Sistine Chapel and others. Work motivation cannot be discussed without detailing those accomplishments that couldn't be achieved without this state of feeling such as landing on the moon, inventing the telephone and the computers and many others. Behind all these accomplishments is the inspiration to take action called "motivation".

Campbell and Pritchard (1976) defined motivation as being a psychological state that guide, boost, inspire and sustain action toward achieving a project, a goal or a job. As well, Kanfer

defined motivation as being a state of mind that stimulates and guides individuals to achieve a task, a role or a job (Kanfer, 1990; Kanfer et al., 2008).

Ryan and Deci (2000) stated that motivation is the fact that one is inspired to do something. An individual who doesn't feel activated or energized to do something is known as unmotivated while an individual who feels inspired and stimulated to reach an end is known as motivated. Motivation level varies from little to great and motivation types are many.

Johnson and Gill (1993) explained motivation in work as being the methods by which individuals are allowed to and encouraged to prefer to act in certain ways. Therefore, motivation is joined to an exploration of the behaviors by which individuals' job achievements and productivity may be improved or retained.

Mitchell and Daniels (2003) proposed that motivation refers to ways of acting formed to attain a certain objective. It works on to drawing the attention of individuals to focus on specific tasks, to inspire them to make efforts to achieve these tasks and to prevent them from moving away from the initial behavior of objective-achieving.

When talking about motivation, it is obvious to mention the Self-Determination Theory which differentiates between different types of motivation based on the different reasons that are behind this state of feeling. The most basic differentiation is between two types of motivation: intrinsic motivation and extrinsic motivation (Deci & Ryan, 1985).

Oudeyer and Kaplan (2007) defined intrinsic motivation as being a vital instrument for unlimited cognitive improvement since it is a mechanism of natural exploration and interest. Researchers have suggested that intrinsic motivation may permit the acquirement of many abilities (Barto et al., 2004), increase the effectiveness of learning (Thrun, 1995), channel and arrange discovery in many areas (Oudeyer et al., 2007).

Hackman and Oldham (1980) in their job design literatures viewed intrinsic motivation as the desire to achieve a task based on the concern and the interest in the job itself as well as the joy and happiness felt in this job.

Employees tend to be intrinsically motivated when the three following psychological needs are fulfilled: Autonomy, Competence and Relatedness (Ryan & Deci, 2000). Autonomy refers to the

feeling of power. Competence refers to the feeling of capability and efficiency and relatedness refers to the feeling that one is connected with others and belongs to a certain society (*ibid.*).

Wilson and Lassiter (1982) defined extrinsic motivation as being the achievement of a goal in order to reach an outcome independently from intrinsic motivation. It comes from outside of the human being and is mainly characterized by rewards. These rewards could be financial like pay and benefits and it could be grades or others. Competition is also considered as an extrinsic motivator because it pushes the individual to succeed and not simply to get pleasure from the intrinsic rewards of the task. Besides, they proposed that some extrinsic constraints such as the fear of being punished are deemed to increase the intrinsic concern in achieving a task.

Many Research studies (Deci et al., 1989, 1999; Kramer, 1999) argued that if extrinsic motivators (rewards and incentives) are presented in a way that makes pressure on the autonomy, competence and relatedness feelings, then employees will have a tendency toward reacting negatively. This usually happens when the clarification of a reward system is done in a controlling instead of encouraging way.

Bénabou and Tirole (2003) stated that extrinsic motivation can sometimes conflict with intrinsic motivation. Field evidence proved that people under no-reward motivators reported a greater interest in a task than those who were promised to get rewards.

Discussing this area of study cannot be totally covered unless it includes the various theories that attempted to explain employee motivation. These theories are divided into different categories such as need based theories, cognitive process theories, behavioral approaches and others and are detailed in the theoretical models part of the literature review. These theories examine the relationship between motivation and job satisfaction which are often used interchangeably and the relationship between motivation and job satisfaction and retention. Studying these theories aim to value the concept of motivation and job satisfaction as an important predictor of employee retention.

Brayfield and Coeckett (1955) were the first to study the link between motivation and job satisfaction. They concluded that a satisfied individual with his or her position in an organization doesn't mean that he or she is highly motivated. However, Herzberg (1966) has found a relationship between motivation and job satisfaction in his two-factor theory (discussed in the theoretical model part of the literature review). Drake and Mitchell (1977) studied the effects of

power on both motivation and satisfaction and found that it has a significant influence on both. Phillips and Freedman (1984) conducted a study to examine the influence of situational limitations on motivation and satisfaction and they found that there is a significant influence on both. Lambert (1991) examined the influence of job characteristics and family on intrinsic motivation and found a significant correlation between motivation and satisfaction besides a higher intrinsic motivation effect on women than men in the same job. Kinicki et al., (2002) in their meta-analysis of the relationship between motivation and satisfaction concluded that satisfaction positively fairly correlated to motivation. Wegge et al. (2006) conducted a study to test the correlation between job satisfaction and work motivation and found that the two are significantly positively related to each other.

- *Job Satisfaction:*

Although job satisfaction is widely used in research studies and in daily life, scientists still didn't agree to set one final definition for it. Throughout the years, many scientists proposed their own definitions for job satisfaction and in what follows some of these definitions are illustrated.

Of these research studies, it is obvious to begin with Hoppock who was one of the first to define job satisfaction. He considered job satisfaction as any mixture of psychological, physiological and environmental circumstances that make an individual declare satisfaction with his job (Hoppock, 1935). According to him, despite the influence of many external factors on job satisfaction, this latter one remains an internal feeling. This makes job satisfaction as being a set of factors that lead to a feeling of satisfaction.

In his definition, Vroom (1964) highlighted the importance of the job the employee holds at work. Thus he considered job satisfaction as being individuals' affective orientation toward the tasks they are currently doing. As well, Smith et al. (1969) explained job satisfaction as being the feeling an individual has for his or her job. Locke (1969) considered Job satisfaction as being a pleasing and agreeable response that results from the assessment of one's own job know-how and achievements. Schultz (1982) suggested that job satisfaction is the psychological feeling of individuals towards their jobs and Wexley and Yukl (1984), in their definition, highlighted the importance of many personal and job characteristics factors that affect job satisfaction. Siegal and Lane (1982) defined job satisfaction as being simply that affecting reaction which defines how much individuals like their jobs. Davis and Nestrom (1985) presented job satisfaction as

being a mixture of different feelings that one has for his or her job and as being the degree of how much one's expectations match with the real job conditions. Expectations are determined usually by one's needs, desires and experiences.

One of the most used definitions was suggested by Spector (1997) which he stated that job satisfaction is related to how people consider their job and every aspect of it. It is related to how much people like or dislike their current job which results in a feeling of job satisfaction or dissatisfaction in every work condition. Spector highlighted the importance of three characteristics of job satisfaction. The first one is the human values' importance that should channel organizations. It is mainly explained by the respect and fair treatment of employees. High levels of job satisfaction might be an indication of a good emotional and psychological state of employees. The second one is the positive behavior of employees which creates job satisfaction while job dissatisfaction and negative behaviors are correlated. The third one is that job satisfaction provides a sign of organizational activities. When assessing job satisfaction levels in an organization, various satisfaction levels appear in various units of the organization and this provides information to know which unit should experience changes in order to increase performance and job satisfaction (ibid.).

Okoth (2003) considers job satisfaction as a positive and encouraging feeling that comes from the assessment and the evaluation of people's job experiences. It is a mixture of happy feelings that results from good pay, job security, fair treatment and others. Gumato (2003) viewed job satisfaction as being the degree to which individuals consider positively their jobs. The higher the correlation among individuals' expectations, jobs' current rewards and received ones, the bigger the job satisfaction. People who show a positive feeling of satisfaction in their jobs are highly motivated while dissatisfied ones will end up with low production qualities, high absenteeism and turnover rates. High levels of productivity are mainly related to high satisfaction levels.

Statt (2004) stated that job satisfaction is the degree of how much an individual is satisfied with the rewards he or she is getting from his or her job.

Mullins (2005), in his definition differentiated between satisfaction and motivation and considered job satisfaction as being a many-sided approach which has various meanings to various individuals and can be linked to different feelings such as accomplishment. Armstrong

(2006) defined job satisfaction as being the positive and encouraging attitude one has for his or her job.

Kaliski (2007) described job satisfaction as being the feeling of achievement and happiness that one has toward his job. He linked this feeling to productivity and to personal well being. He also suggested that the feeling of job satisfaction is a major factor that leads to promotion, to recognition and to a complete sense of accomplishment.

George and Jones (2008) pointed that job satisfaction is the combination of emotions and trust that individuals experience with not only their present job but with every aspect of it such as the work category, the relation with coworkers and supervisors and the financial rewards. Satisfaction level may vary between the broad range of being extremely satisfied and extremely dissatisfied.

- *Work Effectiveness:*

Work effectiveness includes both the quality and the quantity of the goods or services produced (Hackman & Oldham, 1980). Employee work effectiveness is expected to be high with rich work designs. Indeed, with rich job designs people tend to experience positive psychological states when they perform well and performing well means offering a high quality of work. Thus errors are minimized in enriched jobs; employees are proud of their achievements and more helpful and caring with clients. Besides, work effectiveness is also related to the efficiency in the use of time and often requires additional coordination, supervision and quality control for the work to move smoothly (*ibid.*). Finally, when the motivational constitution of a job is enhanced through work design, enhancements in work effectiveness are expected (*ibid.*).

- *Involvement:*

Research studies conducted on Employee involvement showed a clear significant relationship between employee involvement and employee retention (Adi, 2012; Chiu & Tsai, 2006; Kanungo, 1979; Kinicki & Kreitner, 2003). Employee involvement has also proved to be a major attribute of employee motivation, job satisfaction and employee retention and to be positively correlated to productivity (Hashemi et al., 2013; Jones & Kato, 2005; Khattak et al, 2012; Kuye & Sulaimon, 2011). A big importance has been attributed to employee involvement in the work organization area of study. Research studies concerning employee involvement and work

organization stated that employee involvement and monetary rewards are very important factors influencing personnel management (Delery & Doty, 1996; Godard, 2004). Employee involvement proved to have different effects on different organizations' sizes (Addison et al., 2000). Jones et al. concluded in their study that the more the employee involvement the more the trust that he or she has the will to cooperate with opinion differences (Jones et al., 2003).

Furthermore, research studies concerning employee involvement and participation reveal that involvement affects participation and the degree of affection depends on the type of participation. Productivity increases when employees are being involved directly in how work is to be done and are given the authority to decide (Eaton & Voos, 1992; Levine & Tyson, 1990). Many research studies considered that employee involvement denotes that employers suppose employees to achieve higher than expected, to feel more committed and to perform efficiently (Godard & Delaney, 2000; Huselid, 1995; Ichniowski et al., 1997).

Lodahl and Kejner (1965) defined employee involvement as the degree of importance of the job in the individual's self-esteem (Chiu & Tsai, 2006). Weissenberg and Gruenfeld (1968) examined the relationship between employee involvement and job satisfaction and concluded that employee involvement is positively significantly correlated with job satisfaction and motivators such as accountability and performance.

Brown (1996) examined the relationship between employee involvement and work satisfaction and job satisfaction (job satisfaction includes satisfaction of work, pay, supervisors and co-workers and others) and found that employee involvement and work satisfaction are highly correlated while employee involvement and job satisfaction are moderately correlated. Kinicki et al. (2002) investigated the relationship between employee involvement and job satisfaction and found that the correlation between the two varies from moderate to strong. The Society for Human Re-Source Management (SHRM) stated that middle management and executive level employees are more involved in their work than lower level employees and are more determined to accomplish their organizations' goals (SHRM, 2011). This involvement was explained by a higher job retention meaning that there is a significant positive correlation between the two. Harmon et al. (2003) and Griffin et al. (2010) shared the same point of view and agreed on the fact that the high the involvement to work level, the more the employment retention.

2.6 Research Gaps

Fresh graduates, suffering from a complexity of work and labor market integration and a lack of motivation and satisfaction are being obliged to accept available opportunities though they are not matching their qualifications. This issue is very complex and needs a great attention. However, a variety of factors have shown a significant effect on increasing the motivation, satisfaction and retention of these fresh graduates in such challenging labor markets and thus helping the permanent growth of businesses. These factors as discussed by different researchers were fully examined throughout this study as well as the theories that observed and studied this issue. On the other hand, there remain many factors that can be considered in relation with fresh graduates' satisfaction and retention. These factors may be mainly related to the job itself, to its internal and external environment as well as the fresh graduates' psychological states (Serhan and Tsangari, 2016a, 2017). In this issue, Need Based Theories and Cognitive Process Based Theories should be mentioned since the first ones are founded on the idea that motivation comes up from the individual's desire to satisfy a need (Jex & Britt, 2008) and the second ones study the "process" of motivation and are interested mainly in knowing how motivation takes place (Mohr, 1982). Notwithstanding the aforementioned theories and definitions concerning job satisfaction and its relation to retention there is a significant body of literature showing the various and sometimes contradictory point of views concerning the relationship of various factors and retention. Despite these contradictions, the research studies devoted to tracing the linkages between these factors and job satisfaction and retention has grown significantly in recent years. These factors are mainly related to the personal characteristics of the workers and to their core job dimensions. The relationship between different personal characteristics (e.g., gender, education, marital status and age) and job satisfaction has been positive in some studies and negative in others depending on the type of job, the geographical location and the level of expectation (Olorunsola, 2012 and Lai & Chen 2012) while most research studies (Feyzi et al., 2012 and Hsu & Chen 2012) conducted to study the relationship between core job dimensions (e.g., participation, growth prospects, interpersonal relationships, working conditions, job security, authority, financial rewards, promotion, work load, physical effort, technology use, social environment of the job and feedback from the job) and job satisfaction and retention have concluded that the relationship between the two showed to be significantly strong in most of the times regardless of the type of job itself.

Furthermore, the cultural factor and its effect on job satisfaction and retention should be considered as well; especially that human behavior at work has shown to be affected by the diversity of values throughout national cultures (Hofstede, 2010).

Additionally, it is obvious from the review undertaken in the current study that labor market conditions affect to a great extent the fresh graduates' personal and work outcomes and thus have a big effect on their willingness to stay within an organization.

To this end, the creation of a comprehensive model concerning job satisfaction and retention is of a big importance either to study internal organizational issues or to analyze national issues. Theoretical gaps have been found to exist in the development of such models. For example, given that the personal and work outcomes can be purely considered as intrinsic or internal to the job itself, many theories studied only intrinsic motivation and did not emphasize on the importance of extrinsic motivation which comes mainly as a result of extrinsic rewards and the social environment of the job. Besides they did not take into consideration simultaneously the effect of the labor market conditions and the effect of various job dimensions that have been found to have an effect on worker satisfaction and motivation, such as social relationships outside the organization and participation in the setting of goals and work load. In this issue, Hackman and Oldham's Job Characteristics Model (JCM) (Hackman and Oldham, 1976, 1980) which has been widely used in literature (e.g., Cleave, 1993; Rungtusanatham & Anderson, 1996; Shirazi et.al, 2012), given its importance as being one of the most important theories that studied organizational behavior (Behson, 2010) should be mentioned. It focuses on the relationship among the psychological states of employees, the core job dimensions that affect these psychological states and the personal and work outcomes that are the result of these psychological states.

The job characteristics are seen as affecting three psychological states (experienced meaningfulness, experienced responsibility and knowledge of results) that, in turn, lead to many valuable personal and work outcomes. The theory suggests that employees who experience high levels of these states are likely to feel good about themselves and respond positively to their job (Hackman & Oldham, 1976, 1980). Moreover, it proposes that these states can be seen as influenced by five core job dimensions (skill variety, task significance, task identity, autonomy and feedback). The three psychological states, all together, are seen as a determinant of the

following different personal and work outcomes: high internal work motivation, high growth satisfaction, high general job satisfaction, and high work effectiveness. Moreover, this model observes that differences among people moderate how they react to their work and for this three moderating variables (skill and knowledge, context satisfactions and growth need strength) have been created. In order to test this theory and to assess its constructs, Hackman and Oldham developed JDS which has been widely used in related studies (Cleave, 1993; Idaszak & Drasgow, 1987; Idaszak et al., 1988; Lee-Ross, 1998; Rungtusanatham & Anderson, 1996; Vorster et.al., 2005).

However, through examining JCM and JDS, one can notice various theoretical gaps:

First, the core job dimensions considered in JCM and JDS are mainly recognized as internal to the job itself. Thus, the model doesn't take into consideration the importance of extrinsic motivation which comes mainly as a result of extrinsic rewards and the social environment of the job (ERG Theory or McClelland's Theory of Needs) in addition to various job dimensions that have been found to have an effect on job satisfaction and retention, such as participation in the setting of goals (Goal Setting Theory), growth prospects (Rast & Tourani, 2012), working conditions (Bakotié & Babié, 2013), job security (Sehgal, 2012), financial rewards (Card et al., 2012), promotion (Dizgah et al., 2012; Ghaziani et al., 2012), work load (Hytter, 2008; Zeytinoglu & Denton, 2005), physical effort (Barr-Anderson et.al., 2011; Noorbakhsh & Ghambari, 2013) and technology use (Limbu et.al., 2014). These core job dimensions are often considered as factors predicting job satisfaction and the relationship between the two showed to be significantly strong in most research studies regardless of the type of job itself (Dugguh & Dennis 2014; Sommer & Kulkarni 2012). Besides, the model limits psychological states to experienced meaningfulness of the work, experienced responsibility for the outcomes of the work and knowledge of the actual results of the work activities and didn't emphasize on the importance of the self-confidence and the prestige inside-outside that an employee might feel as a result of various core job dimensions (Nurullah, 2010; Ahmed, 2012). Based on these facts, modifications to this model to include additional core job dimensions and psychological states have been proved to be necessary knowing that this gap was argued by Johson et al. (2012) who declared a great need for expanding available theories to compensate the existent lacks.

Second, JCM and JDS do not take into consideration the effect of the labor market conditions (Theory of Labor Market Segmentation) on job satisfaction and employment retention. Many factors can be explored in this area of study. These factors are mainly related to the labor market like unionization, labor status, geographical location of the job, nature of the job such as formal or informal, related to private or public sector and many others (Serhan et al., 2016; Serhan & Tsangari, 2016c).

Third, in regards to individual differences, JCM and JDS don't take into consideration the cultural factor, though human behavior at work has shown to be affected by the differences of values and ethics across national cultures (Hofstede et al., 2010).

Fourth, the model limits the work outcomes and doesn't take into consideration the commitment to the job which may also come as a result of the critical psychological states (Babin, 1996). If this be the case, it may result in labor market outcomes too that will be a chain of events where labor market embraces satisfied employees who are motivated, who show high commitment and thus are retained (Serhan & Tsangari, 2015, 2016b).

Fifth, JCM focuses only on employees and doesn't take into consideration the key difference between a fresh graduate's attitude and an employee's attitude (Jackson & Chapman, 2012). Studies in various countries has shown that fresh graduates mainly suffer from a complexity of work integration and expects a lot from the job they suppose it should be the reward for all this long time spent in studying. Their expectation levels are relatively high in comparison to employees (Tektas et al., 2010). Besides, fresh graduates proved that they are notoriously disloyal and, unlike earlier generations, are always ready to move between jobs until their expectations are met which makes it harder for employers to retain them (Jackson & Chapman, 2012).

Sixth, the model doesn't take into consideration the Educational curriculum of studies that is not matching with most of the local labor market requirements but instead is focusing more on the international labor market requirements where most fresh graduates end up working as a result of globalization and technological progress (Serhan & Tsangari, 2016c).

Finally, various studies tested and validated JCM and JDS in western countries while many scholars and practitioners stressed on the big need to test and validate the model in other regions and different countries of the world (Abu Elanain, 2009). In this issue, it should be mentioned

that Lebanese fresh graduates, suffering from outdated labor policies, complexity of work integration and lack of motivation and satisfaction, are being obliged to accept available opportunities though they might not be matching their qualifications (The World Bank, 2013). Besides, in Lebanon, there do not exist many research studies in the field of employment satisfaction and retention because of the limited funds for such research.

In light of the aforementioned gaps, it has become obvious that fresh graduates' retention appears to be affected by five groups of factors: core job dimensions and related psychological states, labor market conditions, individual differences and personal/work outcomes. Therefore, JCM and JDS should be extended and modified in order to fill these gaps.

No comprehensive framework has yet been created where labor market conditions have been considered together with job dimensions and personal characteristics and where fresh graduates have been considered particularly knowing that there is a great difference between a fresh graduate's attitude and an employee's attitude (Jackson & Chapman, 2012). Therefore, the development of a framework that integrates and synthesizes factors affecting fresh graduates' retention in a comprehensive model is proposed, thus combining individual differences, core job dimensions and labor market conditions affecting fresh graduates' retention. Future work under this comprehensive modeling framework which aims to fill the existing theoretical gaps will provide practical recommendations for the retention of fresh graduates and for national employment retention strategies through theorizing how different combinations of the various factors may yield significant outcomes depending upon (1) the extent to which core job dimensions, individual differences and labor market conditions are tied to fresh graduates personal and work outcomes and (2) the nature of the relation between personal and work outcomes and fresh graduates' retention. In doing so, an articulation of which core job dimensions, individual differences and labor market conditions are likely mandatory, and which can be viewed as optional is achieved.

The current research aims to fill the aforementioned gaps, with the creation of a new, comprehensive modeling framework.

2.7 Conclusion

This chapter began with a thorough analysis of the fresh graduates' retention, and, following, tried to shed a light on how various factors namely core job dimensions, individual differences,

psychological states and labor market conditions affect this retention, by drawing insights from the JCM theory as well as from the related extant literature. Then through appraising relationships in the sparse fresh graduates' retention literature, research gaps were identified and based on the discovered gaps, a critical narrative review was developed.

Chapter 3

Research Philosophy, Research Methodology and Modeling Framework

3.1 Introduction

The present chapter describes the research philosophy, research methodology and modeling framework applied for carrying out this research study. It begins with a discussion of the adopted philosophical stand that guides this research. Then, based on the philosophical foundations, an inclusive description of the chosen research process is conducted, followed by a discussion of research design and data collection process, description of the modeling framework, along with quality issues and ethical considerations.

3.2 The Research Philosophy

Understanding the different research philosophical stands is a major part in carrying out any research study. This allows researchers and practitioners to value the various research approaches and to select their own choices of research activity; and provides an ultimate basis for dealing with the research philosophy. Many scholars (e.g., Dobson, 2002) emphasize the significance and the need of identifying and describing the researchers' philosophical position when writing up a research as this allows the development and accomplishment of a more precise research process. The subsequent subsections tackle the ontology and epistemology characteristics, and then provide a detailed analysis and justification of selecting Critical Realism (CR) as a philosophical foundation for this study.

3.2.1 Ontology and Epistemology

Ontology is the foundation of the research design (Blaikie, 2000; Camilleri, 2012). It is defined as a concept that relates to the nature of existence and as a variety of approaches that tries to understand the nature of the world view (Saunders et al., 2009). Therefore, the ontological arguments concern the state of being and existing, the degree to which one's values represent his or her social reality (McMullen & Shepherd, 2006). Equally, the ontological argument of every one of us reflects our vision on the nature of reality (Blaikie, 2000; Camilleri, 2012).

In this meaning, the ontological arguments are strongly associated to the arguments about how knowledge can be obtained, referred to as epistemology. Additionally, epistemology is related to

the nature and theory of knowledge, and how human beings understand and interpret the world around them (Bernard, 2000; Saunders et al., 2009; Borland & Lindgreen, 2013). Besides, there's a possibility that one can add to the existing knowledge. Moreover, there exist further concepts which are related to epistemology. For example, according to Rawwas et al. (2013), epistemology is considered as the philosophical part that assesses various views of the origin, standards, and meaning of knowledge. Blaikie (2000) defined epistemology as being the knowledge concerning reality and he described diverse ways of acquiring knowledge of social reality, whatsoever it is. With time, old knowledge views change. Thus, it is important to gain knowledge about extant and old realities (Bryman & Bell, 2007). Finally, epistemology reflects on the research methods, as it describes how knowledge can be promoted and discussed (Eriksson & Kovalainen, 2008).

One cannot discuss the ontological and epistemological philosophies without mentioning the various research paradigms (Blaikie, 2000) which are defined as the views and philosophies that set the procedures and the guiding principles for conducting research (Hussey & Hussey, 1997; MacDonald, 2010). Scholars (e.g., Sarantakos, 1998; Babbie, 2004) argue three main research paradigms: Positivism, Constructivism or Interpretivism and Critical Realism (CR). Next, this study will illustrate the Critical Realism paradigm.

3.2.2 Critical Realism

Critical Realism is a paradigm in the philosophy of science which first began with the British philosopher Bhaskar (1978, 1979). It has afterward been developed by Bhaskar (1989) and many others (e.g., Sayer, 1992; Collier, 1994; Archer, 2000) and adopted in social theory. The philosophical approach of CR has been an object of growing interest (Dobson, 2002; Mingers, 2000; Spasser, 2002) in various areas of study such as economics, sociology and management as it reflects and argue the complications of the real world context (Syed et al., 2009; Easton, 2010).

CR enhances many interconnected ontological and methodological approaches that differentiate it from Positivism and Interpretivism or Constructivism (Reed, 2005).

Sayer (1992) stated that CR aims to explain and describe phenomena in relation to mechanisms not causes and effects. It analyzes these mechanisms and how they combine together to produce events (*ibid.*). In this perspective, CR implies that phenomena produce sensation which could result in misleading interpretations and attempts to find an explanation within a defined

framework (Saunders et al., 2009). Hence, the outcomes have to be assessed and understood and not simply counted or measured; in other words, CR acknowledges the fact that knowledge varies according to cultural, historical and social values.

Furthermore, CR states that social theories cannot simply describe but should also evaluate and assess in order not to create a rupture between values and facts (Syed et al., 2009).

In conclusion, two main characteristics can summarize the above mentioned arguments in regards to the epistemological assumptions of CR. First, CR social systems are bounded by interaction; that's why testing them is complicated. Therefore they cannot be predicted, rather they should be explained (Mingers, 2000). Second, observable facts cannot be easily measured or compared; rather they can be described knowing that measurement methods are very limited (*ibid.*).

3.2.3 Applying Critical Realism

According to the literature review related to the different research paradigms, it is agreed that researchers, while pertaining research methodologies, are urged to draw out various results and to differently interpret and focus on these results (Plessis & Frederick, 2010). In this perspective, knowing that planning the research problem and choosing the methodology and methods are both related to the selected ontology and epistemology, it is essential to describe the philosophical views of this research study. As it is known by now, this research study mirrors the ontological stand of CR. Therefore, this part studies the logical process that the Critical Realist researcher applies in his research and how the ontological and epistemological stands of CR mirror the subject being studied in this research.

As aforementioned, the basic ontological and epistemological perspectives of this research study meet with the philosophical paradigm of CR. This assumption can be explained by the following various justifications and explanations.

To begin, the research questions that are drawn from the aim and objectives of this research relate strongly to the way of comprehending the key assumptions of CR: the significance of comprehending ways, methods and procedures and the system that links factors (Edwards, 2005; Lee, 2014). In this meaning, this study answers questions about *how* various job dimensions,

individual differences and labor market conditions affect fresh graduates' retention and *how* are these factors interrelated.

Also, CR grants perceptions that are opened to various mechanisms (Ehret, 2013). In fact, the many gaps and limitations relative to the empirical research on fresh graduates' job satisfaction and employment retention leaves undiscovered hidden causal mechanisms and unnoticed circumstances. For this, through applying CR, new perspectives are opened by identifying and exploring the correlation between the reality we seek to understand and the theories we build consequently.

Besides, various researchers (e.g., Danermark, 2002; Syed et al., 2009) have used CR to provide the basis for synthesizing multidisciplinary research. Indeed, this research illustrates multiple disciplines, such as management, psychology economics and cultural studies, to provide theoretical clarifications and justifications and resulting models. For example, the proposed conceptual framework of fresh graduates' retention relies on review of literature from management, psychology, economics and culture to clarify, understand and justify why job dimensions, psychological states and labor market conditions affect the personal and work outcomes and by this increase the stay of fresh graduates in their local labor market.

Furthermore, CR is known by its view of causality that respects hierarchy by examining and exploring circumstances within a local context that produce causal systems(Syed et al., 2009). These might be at multiple external levels, as various organizations, cultures, and geographical regions, or internal levels as relations and interactions among individuals, organizations and others (*ibid.*). Indeed, this study seeks to clarify, explore and describe the subject of study according to an external level context, by empirically exploring circumstances that produce causal systems and outcomes leading to the retention of fresh graduates.

Moreover, CR is likely to promote business theory and research advancement (Ehret 2013). Through reinterpreting the mechanisms which allows a better explanation of the previous research, CR offers many benefits (Befani, 2005). In doing so, CR plays a key role in the development of socio economical and managerial theory by highlighting the limitations of empirical observations in order to understand reality. To this extend, reinterpreting the business theory and research as well as practice can offer an answer for some previous contradictions in research and practice (Syed et al., 2009). To this extent, the job dimensions, individual

differences, psychological states, labor market conditions as well as personal and work outcomes for investigation in this research, reveals the presence of many contradictions in the existing literature, as shown in Chapter 2. Hence, this research allows reinterpreting existing literature on these components via the proposed theoretical framework that can help to understand and identify the fundamental mechanisms behind the retention of fresh graduates.

Finally, it is important to mention that from an ontological point of view, critical realists believe that one can never fully grasp reality with his or her senses so one needs to find out what is the mechanism that creates reality. The epistemology of critical realism lies on the idea that there is a reality (unobservable structure) which is independent of what one may think but perceptions of this reality change according to one's situation (Mkhansi & Acheampong, 2012). Critical realists believe that these unobservable structures bring in observable circumstances. Therefore, society can be understood only if one can understand the structures that cause circumstances (Easton, 2010). Being a critical realist should help covering all the aspects of this research study through combining different methodologies. By adopting critical realism, factors behind fresh graduates' retention will be identified, analyzed and then validated. Knowing that rules change from one society to another and from one culture to another, critical realism, associated with a deep understanding of the sample culture is expected to help this research goes beyond the observable and to examine the causes of the circumstance. Furthermore, it should help build the comprehensive framework.

Having explained and justified the reason of applying the CR paradigm, it is also important to clarify the rationale for not applying the Interpretivism or Constructivism paradigm and the Positivism paradigm.

Interpretivism or Constructivism is an approach which considers that social reality is subjective (*ibid.*), and that knowledge is built through time based on experience and various interpretations (Peters et al., 2013). This approach is more related to induction and building theories and stress on exploring social reality through discovering their respondents' standpoints and interpreting them in their own context (*ibid.*). Moreover, it limits the world's ontology to what the researcher has experienced in this world (*ibid.*). Besides, Positivism is an experimental, pure quantitative approach where hypotheses that are developed from extant theory are being tested and where theoretical models that are developed from the positivist perspective can explain cause and effect

relationships and are generalizable to the whole population (Camilleri, 2012). Moreover, this approach prevents from going beyond statistical probability to ask why things happen as they do. On the contrary, CR allows both (transforming data into measurable items, developing hypotheses and conducting statistical testing, in addition to questioning why facts happen this way).

3.3 Research Purpose

Many researchers (e.g., Saunders et al., 2007; Babbie, 2012) deduced that research purposes are mainly descriptive, exploratory, and explanatory in nature. In this perspective, research studies frequently have two or more research purposes (*ibid.*).

Exploratory research concerns discovering and exploring topics that have not earlier been considered or there is insufficient knowledge about it (Babbie, 2012) and seeks to find out new knowledge, approaches, models, mechanisms, and perspectives, and to investigate factors that affect these topics under examination (Sefiani, 2013). The objective is to create the best idea and the most possible understanding and exploration of the topic under investigation (Hair et al. 2010, 2011).

Descriptive research sketches and describes a circumstance, an individual or occurrence in natural contexts (Sefiani, 2013). Its objective is to provide the standpoints and the point of views of the respondents about the topic under examination (*ibid.*).

Explanatory research is about testing and understanding causal relations (Sefiani, 2013). Its objective is to explore and to discover the relations among various facets of the topic under examination and more precisely the cause and effect relations (Babbie, 2012). Furthermore, explanatory research goes further than describing to explaining the models and samples observed (Sefiani, 2013).

For this purpose, this research study is mainly characterized as being a combination of exploratory and descriptive. First, it is important to mention that the research question type is an indicator of the research purpose (Öner, 2010). Explanatory research raises “why” types of questions while descriptive research raises “What”, “Where”, “When” and “How” types of questions (Babbie, 2012). Knowing that the aim of this research is to develop a new comprehensive model which examines the combined effect of labor market conditions, core job

dimensions and psychological states on personal and work outcomes, together with the moderating role of individual differences and that systematic review of existing literature did not show any proof of academic or practical research that studied this topic, it was decided to concentrate on the descriptive exploration to know what are the factors that influence the retention of fresh graduates and how are these factors interrelated. The reasoning behind this decision is based on the fact that through concentrating on this insufficiently researched topic, new approaches related to the fresh graduates' retention could be reached. Exploring this undiscovered topic provides ways to assess to what degree existing theories are relevant and most possibly develop new theories and models to explain the outcomes. Along the same line, as core job dimensions' and labor market conditions' effect on fresh graduates' retention have not yet been studied in the same framework by the researcher's community, it was also decided to concentrate on an exploratory path for many reasons. Primary, an in-depth investigation of these factors may lead to the development of new theories to explain the fresh graduates' behaviors in a specific cultural context. Furthermore, it may possibly be discovered that the concepts behind these factors shall not apply to this particular cultural context. Accordingly, there is a necessity for an exploratory and framework development research. Such an approach allows for the development of a more comprehensive framework for fresh graduates' retention. Furthermore, the insufficient previous research has resulted in undertaking the decision of conducting a research to discover theories and models, grounded in the real world contexts (Van Der Maas, 2008).

3.4 Research Approach

As mentioned earlier, this study follows the critical realism philosophy. This part provides an overview of the various research approaches that can be used in business research studies, and justify the choice of the selected approach which best fits this study.

3.4.1 Quantitative and Qualitative Research Approach

There are two main research approaches for data collection: the quantitative and the qualitative (Jean Lee, 1992; Larsson, 1993; Malhotra, 2007).

The quantitative approach helps to express the relationship between variables using effect statistics and to provide findings that can be generalized for bigger populations (Malhotra, 2007). Many research studies (e.g., Burns & Bush, 2003; Chang, 2009) define quantitative approach as

an approach that relies on the use of structured questions in which the answers have been preset in a variety of options and a big sample size of respondents has been chosen so as to provide a representative sample of the population under investigation. Quantitative approach highlights the quantification of data and clarifies the relation between theory and research where the main focus is on testing the theory (ibid.).

On the other hand, The qualitative approach helps to gain a qualitative understanding of the subject of study in a more comprehensive way where questions are usually unstructured and non-statistical (Malhotra, 2007). It seeks to collect, analyze, and interpret data through the observation of people's speeches and acts (Chang, 2009). Many research studies (e.g., Janse van Rensburg & Roodt, 2009) define qualitative approach as an approach that reaches outcomes that are not obtained via statistical methods and techniques or other quantification measures. Qualitative approach analyzes the relation between the theory and research and most likely helps to build the theory and not to test it (Chang, 2009).

3.4.2 Selecting both Quantitative and Qualitative Research Approaches

The Critical Realism philosophy and the general approach of this study as well as the type of the proposed research questions directed towards both the quantitative and qualitative approaches of investigation which are believed to allow the gathering of more profound perceptions of the subject of study, the exploration of various constructs within cultural contexts (Amir, 2010) and the analysis of the relationship between variables using effect statistics so as to provide outcomes that can be generalized for bigger populations (Malhotra, 2007). In particular, this research chose both quantitative and qualitative methodology approaches namely mixed method approach for several reasons:

Most research (e.g., Khan, 2012; Rast & Tourani, 2012; Olorunsola, 2012) conducted to examine the relationship between job dimensions and employment retention applied quantitative approach. Besides, labor market studies, especially those related to employment retention, are mostly tested using quantitative approach (ibid.). Scholars' rationale behind this choice is that quantitative approach helps to quantify the relationship between variables, to express the relationship between these variables using statistical analysis and to arrange data in the form of tables, charts, figures and others. It is the best tool to be used when the phenomena being tested

are well explained by large quantities of numerical and categorical data and provides findings that can be generalized for bigger populations (*ibid.*).

However, many other scholars (e.g., Blake, 1989; Creswell & Plano Clark, 2007) preferred the usage of both quantitative and qualitative approaches in the same study and considered this procedure as a way to enlarge the scope of the study to counterbalance the weakness of each approach apart. It is important to mention that the use of both approaches in a single study first originated in 1959 with Campbell and Fiske (Rossman & Wilson, 1991). They believed that through examining multiple approaches of data collection, better comprehension and support are given to the results of the study. With time, researchers recognized the importance of Campbell and Fiske standpoint since each method apart has limitations. Through the combination of both methods, researchers felt that the biases in each method is neutralized or cancelled by the biases in the other method. Triangulating data sources was then born. Triangulation by itself is an additional reason for using both approaches.

Based on all of the above and for a better coverage of the subject of this study, both approaches are then to be used. Quantitative approach is to be applied on fresh graduates of Lebanon because of their big numbers. Through using this approach, the study is able to target a representative sample of this big population and to test the present study's hypotheses and get results through statistical processes. Then, qualitative approach is to be applied on employers in order to take into consideration their perceptions of the quantitative approach results and thus examine the topic from a different point of view. Through using this qualitative approach a more in person contact with the respondents is allowed and this should give more understanding of this study's results. Besides, this study's research questions are not expressed as closed-ended yes or no propositions, but are of more exploratory nature which are related with human perceptions and psychological states, and require both rich and in-depth information for a better understanding of the study's outcomes especially those related to the relationships among factors and their effects on fresh graduates' behaviors and attitudes. Thus, qualitative research aims to complement and give more support to the outcomes of the quantitative research, with the examination of matched opinions.

Besides, this study follows a critical realism philosophy, so it is obvious that both approaches are to be used in order to have a global view of the phenomena under investigation. Collecting and analyzing both forms of data in a single study is then a point of strength for this study.

The quantitative approach targeted to fresh graduates is to be applied at a first stage in this study in order to determine to what degree is the dependent variable (retention) affected by one or more of the independent variables (job dimensions, psychological states, labor conditions, individual differences, personal and work outcomes and others...). This approach is chosen to be the first step because it helps to cover the biggest number of respondents (fresh graduates) and by this allows the generalization from the sample to the whole population. This quantitative approach is then to be followed by a qualitative approach which involves detailed exploration of the results of the first approach with few numbers of respondents that are meant to represent the labor market, educational sector and government in order to explore their perceptions of the subject of study so as to create a better understanding of the subject of study.

Furthermore, knowing that the goal of applying the mixed method approach is to create an in-depth learning concerning a certain phenomenon (Creswell, 2007), this helps to enrich the findings and the consequent conclusions of the research. Various methods can either be applied simultaneously or sequentially (*ibid.*). Sequentially means that various methods are applied one after another, so as to allow various learning facets and validate previous findings with various methods (Tashakkori & Teddlie, 1998).

In conclusion, this study being of an exploratory – descriptive type that seeks to identify key issues and variables, is planned to be undertaken in two phases going from deductive to inductive reasoning (quantitative to qualitative) thus following a sequential mixed method approach and is planned to meet the research aim and main objectives of this study and to enable theory development in several phases and from different perspectives.

3.5 Empirical Setting of the Research

Having extensively accomplished this study's theoretical considerations, this section identifies an empirical setting where the aforementioned research questions and hypotheses can be further explored and empirically validated in real world contexts. It, first, explores the study's requirements of an appropriate empirical setting and then explains the reasons and the particularities behind the selection of the empirical setting finally adopted.

3.5.1 Requirements of an Appropriate Empirical Setting

To accept or reject hypotheses and to offer suitable answers to the research questions of the study, the research context should perfectly satisfy some requirements.

First, since the studies testing JCM were mostly conducted in western countries and many researchers emphasized the need to test the model in other regions (Abu Elanain, 2009), it is necessary to have an empirical context that satisfies this requirement. Thus, the first key requirement includes:

- That the country (society) to which the fresh graduates belong, is an Eastern country

Second, since one of the main interests of this research is to investigate the effect of labor market conditions on the personal/work outcomes and labor market outcomes, it is interesting to select a labor market where there is a real need to reevaluate extant policies and labor laws so that research outcomes and recommendations could be of a great interest to the Government and the related authorities. Thus, the second basic requirement is:

- That the labor market to be selected lacks sufficient studies and strategies to retain fresh graduates

Third, as it is also revealed in the preceding chapter, human behavior at work is affected by the differences of values across national cultures (Hofstede et al., 2010). Thus, since the fresh graduates' culture play a crucial role for the empirical setting of the subject of study, the following basic requirement emerges:

- That the labor market to be selected has fresh graduates of various cultures.

3.5.2 Lebanon an Ideal Ground

Given the aforementioned requirements, this subsection describes the selected empirical setting that is considered to meet these requirements. Lebanon was chosen as the field for this study because it offers fruitful arena for fresh graduates' research for many reasons:

First, Lebanon is a sovereign state in Western Asia. It is surrounded by Syria to the north and east and by Occupied Palestine to the south. Lebanon is considered as an Eastern country as being part of the Middle East countries. A systematic review of existing literature did not show any proof of academic or practical research studies that focus on fresh graduates' retention in any

eastern country. Therefore, this research aims at partially filling up this research and practical gap. More particularly, it is important to mention that factors affecting fresh graduates' retention are under researched factors in the Lebanese context because there are no sufficient funds to finance such studies. This represents an incentive to go for further studies to provide the foundation for more empirical exploration.

Second, the Lebanese labor policies which date back to 1943 (Government of Lebanon, 1996) don't match with the minimum requirements of a decent life even though many amendments were achieved since then. The Lebanese government lacks sufficient funds to finance research studies with regard to fresh graduates and fails to create investment policies and to provide employment retention strategies (The World Bank, 2013). In addition, the educational Lebanese curriculum of studies is mainly focusing on the Arab labor market requirements where most fresh graduates end up working and neglecting the Lebanese labor market needs (Chakrani, 2012). Thus, it is interesting to study the needs of the Lebanese fresh graduates in their local labor market for there is a real need to reevaluate extant policies and labor laws and research outcomes and recommendations should be of a great help to the Lebanese government and the related authorities.

One cannot have a full understanding of these Lebanese labor market issues without being well informed about the Lebanese labor law that regulates this market. This labor law was first set on the 23rd of September, 1946 and then was amended slightly through years (Government of Lebanon, 1996; The World Bank, 2013). It concerns workers and employees working in Lebanon where workers refer to those employed to do manual and non office work while employees refer to those who are employed and engaged in office and non manual work (from administrative employees to senior managers). However, it doesn't mainly concern domestic servants employed in private houses, family businesses employing only family members, corporations in the agricultural sector that doesn't deal in trade and industry and few others. When employees or workers are first employed, they are given a period of probation for three months. Once probation period is finished, they shall not receive monthly less than the minimum wage stated by the Lebanese government. The basic characteristic of the Lebanese labor law is that it doesn't differentiate between men and women employment in terms of pay, work nature, employment opportunities, training and promotions (Article 26 of the Lebanese labor law). However, according to this law it is forbidden to employ women in mines, in casting and cooling

of glass, in extracting silver and others for her safety (Article 27 of the Lebanese labor law). Maternity leave was set to be for a period of seven weeks. This duration includes the period before and after delivery taking into consideration that the duration after delivery shall not be less than 30 days (Article 28 of the Lebanese labor law). Maternity leave doesn't affect salaries and annual leave meaning that a woman in maternity leave shall get paid as usual and profit from her annual leave without any deductions (Article 29 of the Lebanese labor law). Any violation of these labor codes concerning women employment are subject to penalty (Article 30 of the Lebanese labor law). Annual, sickness and family related (bereavement) leaves are the right for every woman and man according to the Lebanese labor laws and with equal rights. Annual leave is set for a period of 15 days paid fully for every year of employment. Employees can accumulate two annual leaves but need an approval from their supervisors before they can profit from their leave. Sickness leave is set for a maximum period of half a month yearly. If the illness of the employee needs a rest that exceeds this period, then the employer has the right to deduct the extra days from the annual leave of this employee. Bereavement leave is set to be for a period of two days to be given when there is a close family member death (including grandparents). A normal working day should not exceed eight hours with the respect of a minimum of nine hours of rest between each two working days. In exceptional cases, the eight hours working day might reach a maximum of 12 hours but this requires a permit from the Ministry of Labor. During working hours, there shall be a break of one hour for every five hours for women while it is one hour for every six hours for men. Concerning the public sector working hours, they are from 8:00 am in the morning till 2:00 pm in the afternoon; while for the private sector, working hours are different and they go from 8:00 am in the morning and till 5:00 pm in the afternoon. Both sectors' working days are from Monday till Saturday where Saturday working hours are from 8:00 am to 1:00 pm. A working week should not exceed 48 hours excluding overtime (Article 34 of the Lebanese labor law).

Concerning dismissal, women and men are treated equally in Lebanon. However, dismissal is not allowed for a pregnant woman who exceeds five months of pregnancy or a woman in her maternity leave or any wage earner who is in a sick leave (Article 52 of the Lebanese labor law). Once an employee or worker feel as unfairly treated, he or she shall submit a complaint with the ministry's work force department or go to the general labor union. In case the employer breaks the work contract, the employee seeking compensation can file a court case within one month of

the violation of the contract. The labor court is the only one who has the right to decide whether compensations should be paid or not. Firing employees for unfair or personal reasons is not allowed in Lebanon and is subject to penalties for the employer and compensations for the employee. A written notice period should be given in case the employer wants to fire an employee or in case the employee wants to quit his or her job. For example, a one month notice period corresponds to up to three years contract duration. Compensation should be given on the basis of the work nature, the length of time in work, the health situation of the employee and the amount of damage. Compensation shall not be less than two months salary and shall not exceed 12 months' salary. Foreigners wishing to work in Lebanon need a permit from the Ministry of Labor. According to the Lebanese law, foreigners who have a work permit benefit from full social rights. Concerning health coverage (Law 13955 dated 26 September 1963 and its amendments), every Lebanese worker or employee (except the government civil servants and military servants) shall enjoy a health insurance plan. 80% of medication expenses and 90% of hospitalization costs are to be paid by the National Social Security Fund (NSSF) for these employees and workers and their dependents in accordance with the provisions of "Medical & Maternity Care Branch" of the Lebanese National Social Security Law (Government of Lebanon, 1996; The World Bank, 2013). Furthermore, every worker or employee shall receive from the NSSF family allowances as follows: an amount of 60 000 Lebanese Pound (LBP) which is equivalent to 40 United States Dollars (USD) is to be given to the housewife (only one housewife) of the employer or worker who doesn't work outside home and an amount of 33 000 LBP which is equivalent to around 22 USD is to be given to every child (maximum 5 children) until they reach the age of 25 if they are males and until they get married if they are females unless they work outside home. However, chronically ill children shall receive their 33 000 LBP (equivalent to 22 USD) no matter what their age. In addition the health coverage and family allowance, every worker or employee shall receive an end of service pension that can be collected when the employee or worker reaches age 64 or has worked more than 20 years or suffers from disability that prohibits them him or her from accomplishing their job besides females employees who quits their job within 12 months of getting married. The amount of end of service pension is the amount of higher salary received by the employer multiplied by the years of service. In order to receive all these benefits the employer or worker shall pay monthly to the NSSF only 2% of his or her monthly salary (salary not exceeding 5 times the minimum

wage in Lebanon) while the employer pays the rest as follows: 6% of every worker or employer salary for family allowance (salary not exceeding 5 times the minimum wage in Lebanon), 7% of every worker or employer salary for health insurance (salary not exceeding 5 times the minimum wage in Lebanon) and 8.5% of every worker or employer salary for end of service benefits. In case of work related accidents, the NSSF should cover every accident expenses that occur from accidents during work, on the way to work or because of work or during business trips. Concerning salaries in Lebanon (The World Bank, 2013), it is important to mention that in 2011 and due to various unions' pressures (teachers union, general workers union and others) the minimum wages in Lebanon were increased by 40% to reach around 700 000 LBP (Lebanese pound) which is equivalent to 466 USD. Furthermore, salaries between minimal wage and 800 USD were increased by 133 USD while salaries more than 800 USD and up to 1 200 USD were increased by 200 USD. However, salaries more than 1 200 USD were not increased. For a better understanding of these salaries, it is important to mention that an individual who earns the minimal wage of 466 USD per month in Lebanon is a person who is slightly above the poverty line. Furthermore around 28% of the Lebanese population is under the poverty line while only 4% lives in the highest upper class. The last five years shows a decrease in the upper middle class by 19% which was almost compensated by an increase in the moderate middle class which reached 54% as of 2013 world bank analysis (The World Bank, 2013).

However having a look in the neighborhood and mostly in Europe, one can notice major differences in relation to the labor laws and rights. For example, if we consider the European labor law for example, one can notice that in Europe the working week cannot exceed 48 hours including overtime while in Lebanon it can. The minimum daily rest is 11 hours in Europe instead of nine hours in Lebanon. Annual paid holiday is one month in Europe while it is only 15 days in Lebanon (Honeyball, 2008), add to this the difference in maternity leave as well where in Lebanon, it cannot exceed the period of seven weeks while in most European countries it can reach 6 months. This explains the real need to reevaluate the extant policies.

Third, recently an increasing number of incidences have been witnessed with regard to unethical managerial practices, which, in most of the cases, violated employment rights. Thus, the need for effective labor unions is of increasing significance within the Lebanese business cycles.

Fourth, Lebanon's location at the crossroads of the Mediterranean Sea and the Arabian neighborhood enriched its history and created a diversified cultural identity of various religious and ethical groups. The culture of Lebanon reveals the inheritance of a variety of civilizations that goes back to thousands of years. Lebanon being anciently home to the Canaanite-Phoenicians, and then consequently occupied by the Assyrians, the Persians, the Greeks, the Romans, the Arabs, the Fatimids, the Crusaders, the Ottoman Turks and most recently the French, has different cultures that evolved with time by taking from all of these groups. The country's population formed of various religious groups, speaking different languages and having diverse values, customs and mentalities has affected the country's educational system, labor market, literature, cuisine and others though cities do not have significant distances among each other. A thorough review of existing literature did not reveal any evidence of academic or practical studies focusing on the effect of cultural issues on fresh graduates' retention in Lebanon. Thus, it would be very interesting to investigate an empirical context where the cultural value dimension has not yet been profoundly tested, and thus filling up this research gap.

Indeed, Lebanon has a population of around four million of whom 95% are Arabs (United Nations, 2011). It has a cultural and linguistic heritage that is a mixture of both native and overseas cultures that have dominated the Lebanese territories and the people over the ancient years. Lebanon is well known for its clearly differentiated communities that have their own religions, customs and traditions. The majority of the population of Lebanon is divided among various Muslim sects and Christian denominations. The most dominant cultural backgrounds and heritages in Lebanon are the Aramaean (Ancient Syria), the Canaanite (Phoenician), and the Greek (Byzantine). Lebanese people are largely genetically similar to the people of Cyprus and Malta and to the people of Syria and Palestine. Religious groups have replaced in some respects ethnic ones. State power is divided between the religious groups. The Maronite Christians have their own Liturgical language (The Syriac – Aramic language) while the Greek Orthodox have another one (Greek language). Knowing that religious balance is a very sensitive issue in Lebanon's politics, the only national survey with regard to religion's statistics comes back to 1932 and the recent statistics are based on private organizations' surveys only. Nowadays, Lebanon has eighteen religious groups that can handle family law with regard to their courts, cultures and traditions. The Lebanese official language is Arabic and French.

Having analyzed the country where the empirical examination of the proposed conceptual framework will take place, it is important to explore the economic and labor market setting of the current study, so as to fully satisfy the basic requirements mentioned in the first section of this chapter.

The economy of Lebanon is largely characterized as a service-based economy relying mainly on a well reputed banking sector and tourism, and, despite its geographical position, it is not a gas or oil producer (Vlaardingerbroek et al., 2007). It is considered as a developing economy where most demand is supported by the private sector and mostly by the banking sector and is characterized by its competitive and free market regime where foreign exchange and capital movements are allowed with no restrictions (The World Bank, 2012). Lebanon is currently facing considerable fiscal and current account deficits (The World Bank, 2013). Therefore, it needs to rebuild its fragmented economy. The process of economic recovery is not an easy task especially when accompanied by political instability and the Arab Spring revolutions across almost every country in the region. Despite this, history has demonstrated that the country has remarkable resilience (Harvie & Saleh, 2008). The Lebanese economy was harmfully injured by a civil war (1975 – 1990) that decreased largely the national output (Stinson, 2006) and distorted the image and the position of Lebanon in the Middle East. Since then, Lebanon is trying to regain its lost image and to recover its damaged economy. The Lebanese government strengthened its position by controlling its key ports and government facilities, by collecting its taxes and by rebuilding its physical and financial infrastructure. The economic recovery wouldn't be possible without the help of the Lebanese banking system, the small and medium enterprises and the international aids which were mainly from Saudi Arabia, European Union and other Gulf countries (Ain-Al-Yaqeen, 2006). Furthermore, the Lebanese government was obliged to increase its borrowings in order to complete its reconstruction plans. The burden of these borrowings gathered with governmental budget deficit constitutes a serious challenge for the Lebanese economy. Another challenge is the Lebanese government plans to implement administrative reforms, to make fiscal adjustment programs, to study privatization possibilities and to improve debt management. The best effort achieved was its firm commitment to the Lebanese pound which has been pegged to the American dollar since September 1999 (IMF, 2010). Civil War had affected also leadership and management. Along with religious commitments, connections have become the most important criteria for recruiting and promoting

employees. It is important to mention that the Lebanese economy is also characterized by the predominance of family business ownership (Fahed-Sreih et al., 2010) and relies heavily on foreign workers (Syrian laborers and Palestinian refugees) to fill unskilled labor vacancies (El-Ghali, 2011). The financial crisis of 2007 didn't affect negatively the Lebanese economy due to the strict regulations set by the Central Bank of Lebanon that was initially put to keep safe the Lebanese economy in unstable political situations in addition to strict banking secrecy and money laundry laws. The result was an increase in Beirut stock market (Cooper, 2008).

Above and beyond, Lebanon is rated as the most emigration suffering country in the Middle East and North Africa (Akl et al., 2007) and this is mainly due to an increasingly high unemployment rate especially among fresh graduates (Sakr, 2013). An excess of fresh graduates accompanied with a shortage of job availability contributes mainly to this problem (Sakr, 2013; Vlaardingerbroek et al., 2007). As a result of emigration, money transfers from Lebanese abroad to their family members in Lebanon accounted over the time to almost one fifth of the country's economy (Ghobril, 2011).

Concerning the Lebanese labor market size and segments, the latest statistics as declared by the Lebanese government in 2011 through its Central Administration of Statistics show that almost half of the working age population (fifteen years old and above) in Lebanon doesn't belong to any employment, are not looking for a job and are not considered unemployed; these are mainly individuals who are below thirty years old still studying, above thirty years old but economically satisfied, retired or unable to work. These individuals are considered out of the labor market and are called inactive individuals (Yaacoub & Badre, 2011). Based on this, the Lebanese population is divided into two main parts: the first one is composed of employed (employed individuals who are fifteen years old and above) and unemployed (unemployed individuals who are between fifteen and sixty four years old) individuals who are economically active and the second one is composed of inactive individuals.

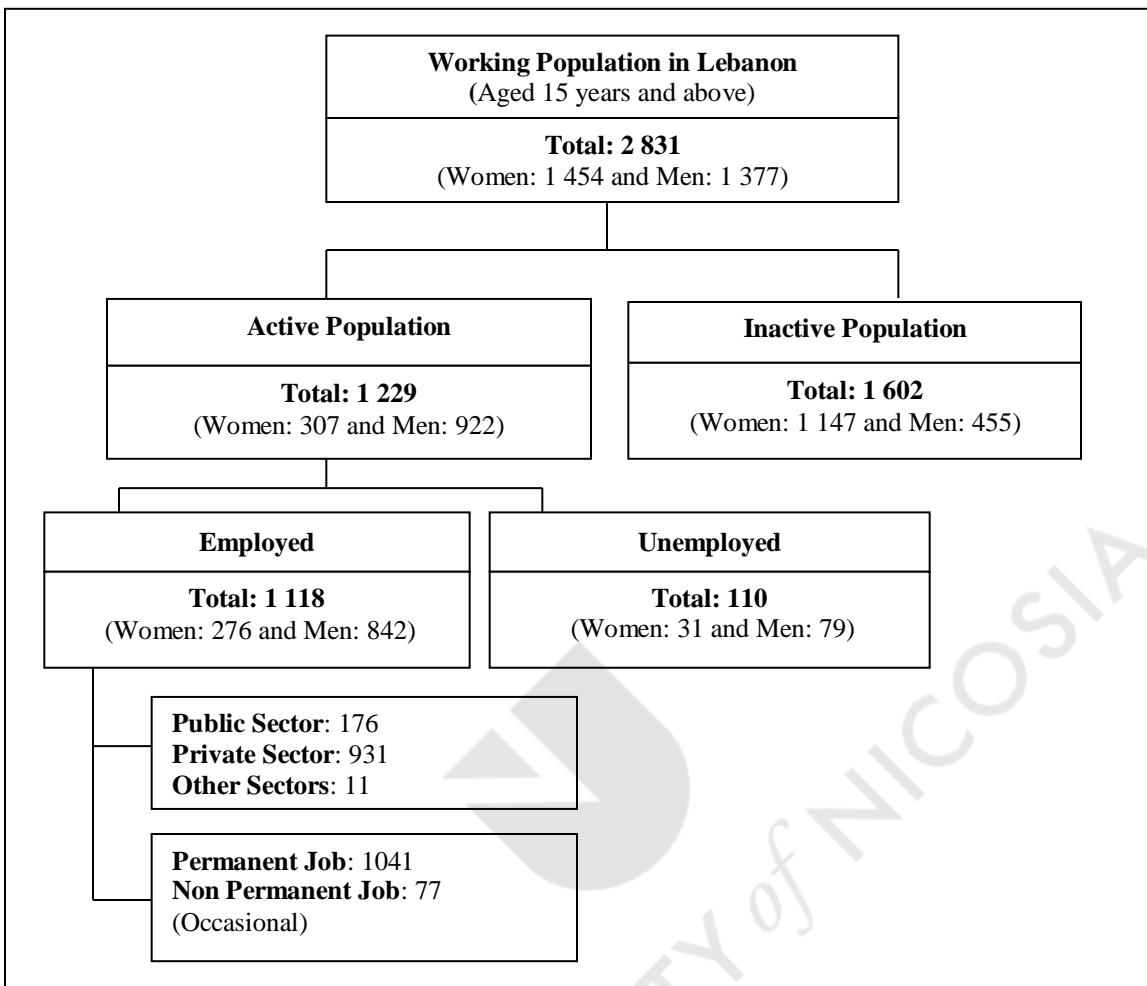


Figure 3.1 Lebanese Labor Market Structure in Thousands

Figure 3.1 shows clearly the Lebanese labor market structure as declared by the Lebanese government through its Central Administration of Statistics (Yaacoub & Badre, 2011). Based on this, the Lebanese labor market constitutes almost 40% of the total Lebanese working population. Although women in Lebanon represent almost half of the total working population of the country, it is important to mention that only 21% of them are economically active. This is mainly due to the fact that women might be engaged in bearing children and household duties. However, 66% of men are economically active. Around 91% of the Lebanese labor market is employed of which 25% are women. In other words, 75% of the employment in Lebanon is made up of men. Regarding private and public sector segmentation, almost 83% of the employed individuals are holding jobs in the private sector while only 16% of employment corresponds to public sector and 1% to other sectors such as nongovernmental organizations, international

agencies, political parties and others. Furthermore, around 93% of employed individuals hold permanent jobs while 7% hold non-permanent jobs. Unemployment rate in Lebanon is 9% of which 72% are men. Women in Lebanon most probably don't look for a job although they are actually ready to work if the job is proposed. Furthermore, unemployed people are mainly composed of individuals with high education levels.

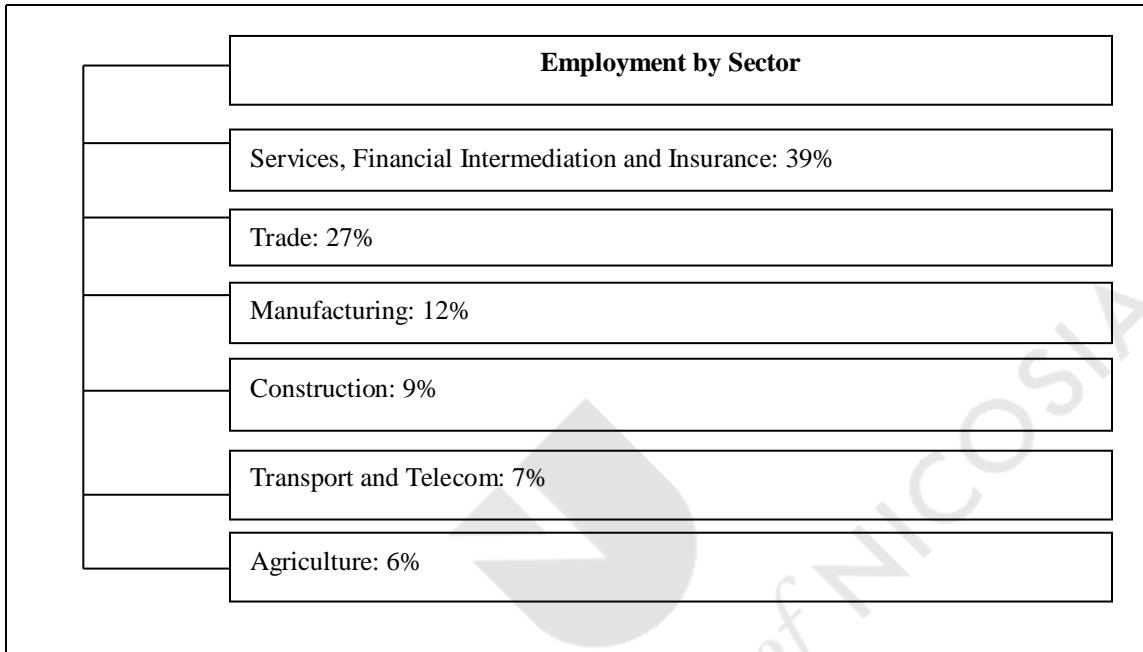


Figure 3.2: Employment by Sector

Based on figure 3.2, it is well clear that the Lebanese economy relies mainly on services sector which has the largest share followed by trade and manufacturing. It is important to mention that around 63% of the employed women in Lebanon work at the services sector, 22% at the trade sector and the rest works at the other sectors (Tutelian, 2011). Concerning men's repartition, percentages are different. 32% of employed men works at the services sector, 29% at the trade sector, 13% at the manufacturing sector, 12% at the construction sector and the rest works at the other sectors (*ibid.*).

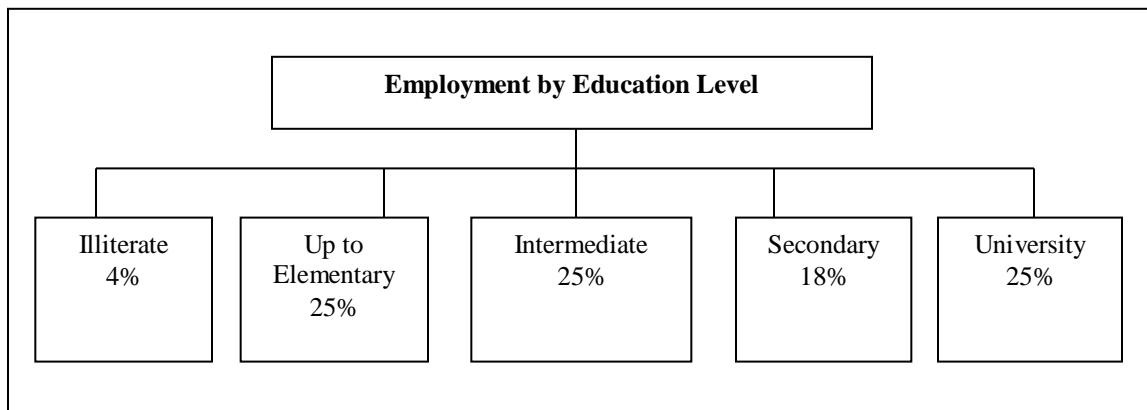


Figure 3.3: Employment by Education Level

Figure 3.3 shows that 29% of the employed individuals in Lebanon are not educated (illiterate or up to elementary classes) while 43% of the employed individuals hold secondary or university degrees. Furthermore, it is important to mention that regarding women and men repartition, 43% of the employed women in Lebanon hold a university degree while 20% of the employed men hold a university degree (Tutelian, 2011). No available statistics concerning employment repartition by region in Lebanon is available but it is stated that Beirut and north governorates scores the highest rates of unemployment.

Moreover, when it comes to fresh graduates, statistics show that it takes them time to find a job. As of 2011, 33% of fresh graduates had waited more than one year to find a job while almost 20% of them found a job in less than 3 months (*ibid.*). Being a part of the university degree holders, fresh graduates suffer from unemployment as well. They are mostly attracted by foreign job vacancies, mainly in Gulf countries, America and Europe. Around 48% of emigrants for the period 2008 – 2011 reported to have no work before they decided to leave Lebanon and almost 44% of them held university degrees (*ibid.*). The World Bank recently published a study concerning the Lebanese labor market problems beginning with the low rate of job creation which should be six times higher in order to absorb the new graduates and ending with the need for better job quality where statistics showed that employment in the higher productivity sectors is decreasing especially in the insurance, information technology and finance sectors (Atallah, 2013).

According to the Lebanese Ministry of Labor, work permits delivered to non-Lebanese to enable them to work in Lebanon amounted to 11% of the Lebanese labor force in 2009. These permits

are mostly for African and Asiatic individuals who are low skilled (CAS Statistical Yearbook 2009). Furthermore, it is important to mention that due to the Syrian crisis there was clear increase in labor supply. The fact that Syrian refugees are competing with Lebanese affected wages and job opportunities especially for low skilled jobs in the following sectors: agriculture, construction and services. Syrians do not sign contracts, work for very long hours without break, do not benefit from social security and can be replaced by others at anytime while most Lebanese follow the Lebanese labor law (UNDP, 2012).

In Lebanon, it is commonly known that employment is the most evident way to avoid poverty (MICS3, 2009). This is manifested by the fact that individuals are to accept any available job opportunity though it might not be matching with their educational level. This is mainly due to high unemployment rates and low job opportunities.

Unemployment rate in Lebanon is higher for women than men. Statistics (Yaacoub & Badre, 2011) show that individuals with high qualifications are the most who suffer from unemployment in respect to others with low level of skills and half of the Lebanese emigrants couldn't find a job before they left Lebanon meaning that the major reason behind their emigration was to find a job.

Research (Yaacoub & Badre, 2011) reveal that Lebanese labor market shows mismatches between education level and many job requirements meaning that one can find some individuals with high university degrees who are holding jobs that need no skill at all. Furthermore, the Lebanese labor market is highly characterized by being private sector oriented meaning that the private sector gathers the highest rates of employment. Regarding salaries, one can notice that in practice, women in average are less paid than men in Lebanon and jobs at Beirut (Lebanon's capital) offer higher salaries in general than other regions.

The last reason for selecting Lebanon as a ground for this research is of a practical nature. Arab and other multinational companies willing to do business or invest in Lebanon can profit from any information about the Lebanese labor market and culture and how to design personalized job descriptions or introduce customized products to fit with the characteristics of such a labor market. Although this great need, a detailed review of extant literature reveals that there exists only one study which was conducted by Hofstede, focusing on cultural issues in Lebanon but it dates back to 1980 and didn't show any evidence of academic or practical research related to

updated labor market studies. Therefore, this research seeks to partially filling up this research and practical gap also.

Given the before mentioned justifications, Lebanon provides an appropriate and suitable setting for the research.

3.6 Research Design

There are various research designs in quantitative and qualitative methodologies, such as survey, experiment, etc. for quantitative approach and ethnography, phenomenology, case study, etc. for qualitative approach (Goulding, 2005; McNabb, 2013; Rainey et al., 2002). The current research adopted the survey method for the quantitative approach and the case study method for the qualitative approach and the reasons for selecting this research design are explicitly justified and analyzed below.

3.6.1 The Survey Method for the Quantitative Analysis

In order to answer research questions in an exploratory and descriptive approach, survey method is often used in business and management research (Saunders et. al, 2009). The Survey is a very efficient method allowing gathering big amounts of data from a large population through using mostly questionnaires, and conducting quantitative analysis in order to deduce inferences. This method is extremely structured and gives extensive importance for the selection of a random and representative sample allowing generalizing findings to the whole population (Gray, 2009). Furthermore, the survey method is appealing to several researchers for its simplicity and its ability to produce comprehensible quantitative and qualitative data which can be analyzed by standardized techniques (Robson, 2002). Nevertheless, the eminence and know-how of the researcher is highly important in order to guarantee the validity and reliability of the data collected from surveys (*ibid.*).

The quantitative approach used for this study is to follow the survey method. This method was chosen for the following reasons.

First, the survey method helps to discover how a variable that one has no control over affects another variable (Gray, 2009). Thus through applying this method this quantitative research study is expected to help discover how the independent variables (individual differences, job dimensions, psychological states, labor market conditions and resulting personal/work outcomes)

are affecting fresh graduates' employment retention which is the dependent variable in this study.

Second, this method gives a comprehensive view of the subject of study (Saunders et al., 2009). Thus, it is expected to help create an all-inclusive vision of fresh graduates' perceptions and their retention in the labor market.

Third, it is the most appropriate method to be employed when the population is large (*ibid.*), which is the case for the quantitative research of this study tackling fresh graduates.

Finally, with a survey this study is allowed to use a representative sample of respondents to collect the needed information about fresh graduates and by this will allow generalizing findings. This wouldn't have been accomplished with an observational or an experimental technique since the first one allows only the observation of the subject of study without giving the possibility to generalize while the second one is about treatments and comparing subjects to treatments which doesn't fit for this subject of study (Robson, 2002).

Through the examination of various management disciplines, one can notice that many scholars (e.g., Pinsonneault & Kraemer, 1993; Salant & Dillman, 1994; Isaac & Michael, 1997) have tried to create a process to be followed when conducting survey method. The present study uses elements from these aforementioned scholars' survey processes. The final version of the survey process to be applied in this study, which comes from the aforementioned combination, is explicitly detailed in Table 3.1.

Table 3.1: Adopted Survey Process

Case Study Process Steps	Action used	Activity to be done
Linking theory to empirical data	Purpose of the research	Transparency of the purpose of research being exploratory and descriptive Rationale for testing the comprehensive preliminary model
Selecting and justifying the research method	The survey	Choosing to apply the survey method so as to collect data from fresh graduates This selection is related to the purpose of the research
Setting up survey boundaries	Identifying the survey (unit/s of analysis, temporary scope)	The design of the unit of analysis: Cross-sectional design
Choosing the appropriate sources of information	Phenomena source	Exploratory structured questionnaire with closed ended questions
Creating a sampling frame and determining the method of sample selection	Number of main respondents	Selecting the number of main respondents to fill the questionnaire
	Sampling strategy	probability sampling through using the stratified random sampling technique where respondents are to be chosen randomly through using : the selection of respondents guarantees the equal probability of selection for the different entities of the total population and fits the setting of the study (fresh graduates)
Creating and testing the survey instrument	The questionnaire development and testing through pilot study conduction	Creating the questionnaire in which each question fits into the overall plan of the research Choosing the response mode: telephone Conducting an early pre-test of the survey (pilot study) Using the results of the pilot study to refine the instrument and work out any mistakes in the survey procedures
Guarantying the data quality	Verification method	Construct validity, content validity, internal consistency and reliability
Executing the survey in the field	Data collection and process and method for analyzing data	Contacting respondents to fill the questionnaire Editing and processing the data: make data machine readable, minimize errors Using SPSS software (Statistical Package for the Social Sciences) version 21.0 to conduct the following tests: Exploratory Factor Analysis, Descriptive Statistics, Zero-order Correlations, Partial Correlations, Simple Regression Analysis, Multiple Regression Analysis, Hierarchical Regression analysis, Fisher's Z Test, and Binary Logistic Regression
Evaluating results and data reduction /Presenting empirical evidence	Results' presentation	Developing the findings or conclusions Writing up a summary of what have been found Analysis of results

3.6.2 The Case Study Method for the Qualitative Analysis

Beginning 1990, the methodological literature concerning the case study method has witnessed a fast development especially in the management field. As per Piekkari et al. (2010), two leaders guide the case study methodology in this field: Eisenhardt (1989) and Yin (2003). As stated by Yin (2003), the case study is an empirical investigation that studies a precise topic of interest in its real world setting, particularly when the limitations between the setting and the topic of interest are not clear. According to Eisenhardt (1989), the case study method focuses on understanding the dynamics related to single contexts. For the purposes of this study, a qualitative case study is defined as an approach to research that makes possible the examination of an issue in its setting through relying on various data sources. This guarantee that the issue is not examined from one point of view, but instead a variety of standpoints are investigated which allows for various sides of the issue under examination to be discovered and comprehended.

To begin with, the case study method is the common research method suitable for examining unusual phenomena allowing very remarkable outcomes (Easton, 2010). It is perfectly compatible with the CR philosophical paradigm as mentioned by various scholars (e.g., Easton, 2010; Dubois & Gibbert, 2010; Wynn & Williams, 2012; Williams & Karahanna, 2013). In particular, the case study method based on CR approach is very useful in management research (Ryan et al., 2012). Thus, based on the above statements, the case study method matches perfectly with the CR philosophical paradigm.

Second, case study is the best research method choice when following qualitative methodologies for it provides the most important research opportunities (Piekkari et al., 2010). More specifically, it has been the best choice for qualitative methodologies in the field of management (*ibid.*). Scholars use case studies mostly because the intrinsic elasticity of the method best matches with the examination and discovery of multifaceted phenomena (*ibid.*). In this meaning, the case study method is ideally associated with exploratory purposes (Parry et al., 2014). Knowing that the purpose of this study is primarily exploratory and uses the qualitative method of investigation as well, case study is then the best matching method to be applied.

Third, according to many scholars (e.g., Dubois & Gibbert, 2010; Ryan et al., 2012) inductive reasoning is typically appropriate for case study methods. Likewise, knowing that this study follows the inductive research reasoning then the case study method is obviously appropriate.

Fourth, the case study method is known for best answering the questions of what, why, and how taking into consideration the complications of the issue under examination. Likewise, by taking into account the aim and type of this study's research questions, the case study method is most suitable.

Finally, the case study method helps in creating an in-depth understanding of the results received from the quantitative research. In this meaning, Robert K. Yin (2010) stressed on the importance of using a case study method since it is the basis for any investigation about a contemporary situation for a better understanding of the situation itself and the perceptions of the respondents toward this situation. In fact, this is indeed the need of this study. Once the outcomes of the quantitative study are analyzed, there's a great need to investigate the perceptions of different Lebanese employers toward the retention issue and the results of the quantitative study. Thus, case study method best fits this work.

Through the examination of various management disciplines, one can notice that many scholars (e.g., Eisenhardt, 1989; Stuart et al., 2002; Yin, 2003; Eisenhardt & Graebner, 2007; Bitektine, 2008; Piekkari et al., 2010; Vissak, 2010) have tried to create a process to be followed when conducting case study method. The present study uses elements from Eisenhardt's (1989), Eisenhardt and Graebner (2007) and Piekkari et al. (2010) case study processes. The final version of the case study process to be applied in this study, which comes from the aforementioned combination, is explicitly detailed in Table 3.2.

Table 3.2: Adopted Case Study Process

Case Study Process Steps	Action used	Activity to be done
Linking theory to empirical data	Purpose of the research	Transparency of the purpose of research being exploratory and descriptive Rationale for theory improvement and building
Selecting and justifying empirical cases	Case studies' number	Choosing to apply one single case study subsequent to the quantitative data collection This selection is related to the purpose of the research
Setting up case study limitations	Identifying the case study (unit/s of analysis, temporary scope)	The design of the unit of analysis: Cross-sectional design
Choosing the appropriate sources of information	Phenomena source	Semi-structured interviews
Choosing main respondents (interviewed ones)	Number of main respondents	Selecting the number of main respondents to be interviewed in the case study
	Sampling strategy	non- probability sampling technique where respondents are to be chosen based on the judgment of the researcher that fits in to certain criteria of the respondents: the selection of interview respondents guarantees that data collection will offer significant information for the examined issue and fits the setting of the study (Employers)
Exploring and Evaluating results and data reduction	The process and method for analyzing data	Using the template analysis technique Using the research questions to guide suitable analytical strategy
Guarantying the data quality	Verification method	Construct validity\ and reliability
Presenting empirical evidence	Results' presentation	Thematic results' presentation Case description that consists of wealthy narration and direct quotes from respondents
Formulating emergent theory	Results' discussion	Combination of various methods in theory formulation Embracing with literature: Comparing with contradictory/ similar literature

Yin (2003) suggests various types of case studies' design. These are: single holistic, single embedded, multiple holistic and multiple embedded.

The holistic case study concerns one unit of analysis, and is usually used when applying the qualitative approach as a single research approach (ibid.).It is mainly based on narrative descriptions (Scholz & Tietje, 2002).

On the contrary, the embedded case studies concern more than one unit of analysis, and are frequently not limited to qualitative analysis alone but to quantitative analysis as well (Scholz & Tietje, 2002; Yin, 2003). Its methodology offers a way of joining together the quantitative and qualitative methods into a single research study (Scholz & Tietje, 2002; Yin 2003). Besides, the detection of sub-units provides a more comprehensive investigation level. It is an empirical form of examination suitable for descriptive studies that seeks to explain the phenomenon's features, setting, and process. Furthermore, it counts on various sources of evidence to offer a robust data collection, to help create a better understanding of data through triangulation, and to add to the validity of the research (Yin, 2003).

Concerning the difference between single and multiple case study designs, a single case study method is most suitable for in-depth exploration of a phenomenon within one real-life setting (Yin, 2003) while a multiple case study method allows the comparisons between various settings (Bryman, 2004; Eisenhardt & Graebner, 2007).

This study concerns more than one sub-unit of analysis that is incorporated into the design. These are fresh graduates and employers where fresh graduates require a different data collection instrument than the others.

Thus, based on the characteristics of each one of the case study designs, and given that this research study aims: a) to explore a particular phenomenon within one real life context which is the Lebanese labor market, and b) it explores a variety of unit of analysis by quantitative and qualitative means and uses various sampling techniques, an embedded single case study design seems the most suitable for this research study.

3.6.3 Unit of Analysis

The unit of analysis refers to the fundamental entity that is to be analyzed in a research study. As per Yin (2003), the unit of analysis is an individual, a group, a community, a society or a phenomenon dependent of the researcher's choice in the research study (Gu, 2013). The aim of this research is to explore and to discuss the factors affecting the retention of fresh graduates in order to create a framework for retaining fresh graduates.

Thus, the unit of analysis in this research study is the 'fresh graduates' for the survey method and the 'employers' for the case study method. Thus, the unit of analysis for the survey method is the

fresh graduates working in the Lebanese labor market and the units of analysis for the case study method are employers working and investing in the Lebanese labor market.

3.6.4 Time Scope of Research

Research studies differ in how they deal with time. This difference is typically shown between cross-sectional and longitudinal research studies (Gray, 2009; Bajpai, 2011).

Longitudinal studies correspond to a series of observations related to same variables over extended periods of time. It is mostly used in psychology and in sociology, to examine emotions and life actions for a long period of time (Goodwin, 2010; Hair et al., 2011). Therefore, they are more suitable when research questions and hypotheses are related to events that change with time (ibid.).

In contrast, cross-sectional studies are popularly applied in business research (ibid.). They collect data from a sample of respondents at only one point in time (ibid.) and have a descriptive nature. The majority of research studies are cross-sectional, mostly as a consequence of the limited resources and time (Gray, 2009).

This study is classified as cross-sectional for many reasons. First, as the aim of this study is not to examine how fresh graduates' responses vary with time in response to the various factors that affect their retention, a longitudinal study would not fit. Second, the research questions and the hypotheses of this work do not examine the variation over time for the subject of study and have a cross-sectional nature. Finally, knowing that this work is a thesis that should be achieved in a limited period of time in addition to the researcher's funding limitations; a cross-sectional study seems to be the most suitable.

3.6.5 Selection and Justification of Main Respondents

The selected respondents were chosen based on the following criteria.

First, fresh graduates are considered for the purpose of the study as those who have graduated and completed the requirements to fulfill a University degree (Bachelor, Masters, PhD or other) in the past three years and whose work experience doesn't exceed the period of two years. These fresh graduates must be Lebanese, and graduating from a Lebanese university for the purpose of the study as well. The choice of two years as a maximum acceptable experience for the fresh graduate to be considered as eligible for the study has been stated as a result of various scholars'

definitions of a fresh graduate (Di Matteo, 2010). According to them, the years of experience should range from zero to two years after graduation so that an individual is still considered as a fresh graduate.

Through analyzing the data collected, an identification of how labor market conditions, core job dimensions and psychological states influence personal and work outcomes and labor market outcomes, together with the moderating role of individual differences, is then to be achieved in addition to an exploration of how strong is this relationship.

Then employers are to be interviewed in order to explore their perceptions and interpretations of constraints and opportunities facing fresh graduates for a more in-depth investigation about the field of study and about the outcomes of the quantitative research and by this for validating or rejecting the preliminary framework.

The employers should belong to different groupings of economic activity (e.g., food industries, health services, hospitality and tourism services and banking and financial services) for a better understanding of the field of study.

In conclusion, the names of all the key respondents are substituted by numbers (i.e., respondent 1) due to the informed consent form which protects the confidentiality of the respondents and was signed by the chosen participants and the researcher.

3.6.6 Sampling Method, Sample Size and Procedures

Based on existing theories, two basic sampling categories are perceived: probability and non-probability sampling (Bernard, 2000; Saunders et al., 2009).

The probability sampling is any method of sampling (e.g., simple random and stratified sampling) that uses some kind of forms for random selection. So as to apply a random selection, one should arrange a certain procedure in order to guarantee the equal probability of selection for the different entities of the total population. Procedures that have been extensively applied are for example choosing a name out of a hat or selecting the short straw. Nowadays, the most utilized procedure is the use of computers for selecting random numbers as the foundation for random selection (*ibid.*). This category of sampling allows statistical inferences and is usually practical for quantitative research (*ibid.*).

The non-probability sampling (e.g., judgmental and purposive sampling) does not involve random selection but instead the probability of each entity being picked from the total population is not known (*ibid.*). Thus, the choice of the respondents to participate in the sample is related to the subjective arguments of the researcher. This technique is practical for case study research (*ibid.*).

The current research followed stratified random sampling technique during the procedure of choosing the main respondents for the quantitative research part of the study. This technique belongs to the probability category and takes into consideration the characteristics of the population of the study (Malhotra, 2007). Stratified random sampling requires the splitting up of a population into small groups named strata. In this technique, the small groups are created with regards to the population common aspects or characteristics. A random sample is selected from every small group in a number proportional to the small group's size in respect to the population. These subsets of the small groups are then joined to shape the random sample. The key advantage of this technique is the way it captures key population attributes in the sample. Stratified random sampling best fits when the populations have various characteristics which is the case for this study (*ibid.*). Indeed, this sampling technique best fits the quantitative research part of this study since it helps to capture a representative sample of the respondents allowing collecting the needed information about Lebanese fresh graduates taking into consideration their various characteristics and by this enabling the generalization of findings. Definitely, applying this technique allows making sure that the unique Lebanese Public University which is known for its different curriculum of studies and its French language and system of study is part of the sample. The importance lies in the fact that this university is a French language university where the majority of the Lebanese universities are English language besides its French curriculum of studies and grading system mainly differ from the other Lebanese universities operating in Lebanon which follow the English grading system regardless of their language of study. Thus, the presence of fresh graduates graduating from this university is a must in order to have a representative sample and to reduce sampling errors.

Furthermore, the current research adopted purposive sampling technique during the procedure of choosing the main respondents for the qualitative research part of the study. This technique belongs to the non probability technique where respondents are to be chosen based on the

judgment of the researcher that fits in to certain criteria of the respondents (Cooper and Schindler, 2001).

Many scholars (e.g., Suri, 2011; Pouli et al., 2013) considered purposeful sampling as the best choice for qualitative research for it serves the aim, the theoretical objectives and the research questions of the study (Patton, 1990; Silverman, 2000). When choosing cases with regards to the purposive sampling technique, more in-depth overview and understanding of the subject of study is offered, rather than empirical generalization (Dubois & Araujo, 2007).

This sampling technique best fits this study since it helps to obtain a representative sample through targeting directly the respondents suitable for the study. Besides, it is the most used one for qualitative studies when qualitative comes after quantitative research which is the case of this study (*ibid.*).

The determination of the appropriate sample size for this research requires the identification of the accurate number of main respondents for each of the quantitative and qualitative research studies that form this work.

First, concerning the quantitative research study, Sekaran (2003) stated that the identification of the appropriate sample size for any survey is primordial in order to allow the finding of answers to research questions and the testing of hypotheses through the collection of data and its subsequent analysis. Surveys can make more damage than good if the population is not correctly sized or examined. Nevertheless, a sample that is very big will cause the waste of valuable resources such as money and time and a sample that is very small will not permit the gathering of trustworthy insights (*ibid.*). In order to calculate the sample size, there is a need to determine the accurate population size, the margin of error and the confidence level. The most common used margin of error is 5% allowing a 5% negative or positive deviation on the survey results for the sample. In addition, the most common used confidence level is 95% meaning that 95% of the population lies within the boundaries of the margin of error. These percentages are pretty much the standard in quantitative research (Singh & Masuku, 2014).

The sampling for this quantitative research was all about finding the accurate group size to survey, which is adequate enough to allow valid generalizations from the population on the basis of the sample. Indeed, as per the aforementioned standards for the confidence interval and level, the sample size was decided on six hundred thirty respondents as it is a statistically significant

representation of the sample size of the Lebanese fresh graduates from the thirty two Lebanese universities being 35 000 fresh graduates per year thus a total of 105 000 fresh graduates for the last three years (three years from graduation is the maximum duration allowed for fresh graduates to be eligible to participate in this research study) (Hemming et al., 2011). This statistically significant sample size was determined using G*Power which is one of the leading sample size software used for sample size calculation in various fields (*ibid.*). More particularly, the population size was then inserted in the software as 105 000 fresh graduates, the confidence level as 95% and the margin error as 5% and the statistically significant sample size was then determined automatically by the software as 630 fresh graduates. Thus, the sample size of 630 fresh graduates is adequate enough to allow valid generalizations from the Lebanese fresh graduates' population.

Second, concerning the number of main respondents for a case study, many scholars (e.g., Patton, 2002; Daymon & Holloway, 2010; Marshall et al., 2013) propose that there is no specific rule to determine the sample size of main respondents in a qualitative research study. However, it is usually known that qualitative sampling does not require a big number of main respondents, since this might affect negatively the creation of a thorough perception of data (*ibid.*). A bunch of different scholars (e.g., De Ruyter & Scholl, 1998; Marshall et al., 2013) give more accurate details concerning the sample size number of respondents related to qualitative research and propose that the number of respondents rarely attains sixty and most samples are between fifteen and forty respondents. In the same meaning, Creswell (2007) stated that the sample size should range between twenty to thirty respondents and that the number of cases should not exceed five cases with a maximum of five interviews per case since the focus is on the quality of the data and not the size of the sample. However, in this study, the qualitative research being complementary for the quantitative one, thus the focus is not on the number of respondents but on the quality of the respondents as being the best to confirm, reject and explain the results of the quantitative research. Therefore, based on the aforementioned arguments and the directions given by the various scholars already stated above, the current study performed five interviews with the respondents that were chosen according to the purposive sampling technique as stated in the preceding section.

Knowing that the sampling frame of the study is fresh graduates from Lebanese universities operating in Lebanon, a list of the thirty two Lebanese universities were compiled. Taking into

consideration that a very big sample size is a waste of time and money and a very small one does not give reliable results, the correct sample size should represent the big group from which they were selected so that inferences can be generalized to the population. For this, a representative sample of six Lebanese universities were chosen for this study as determined by G*Power and following the same criteria already detailed in the sampling size section. This sample should consist of the only public university and five other private universities chosen randomly as an application to the stratified random sampling technique for large population. Indeed, and through using random.org, randomly chosen universities in addition to the Lebanese University were University of Balamand, Holy Spirit University of Kaslik, Saint Josph University, Lebanese American University and Saint Family University. These universities accept students from every gender, marital status, religion, region, major of study and level of education. The language of education for the Lebanese University, Saint Joseph University and Saint Family University is mainly the French language, the language of study for the University of Balamand and the Lebanese American University is mainly the English language while the Holy Spirit University offers studies in both French and English languages. Besides, these randomly chosen universities are of different levels of reputation (where reputation is measured in terms of research, accreditations, curriculum of studies and history which allows diversity in fresh graduates' educational standards and levels). In addition, these universities are of different scholar fees' ranges, where the Lebanese University requires the lowest fees and the Lebanese American University requires the highest fees allowing for a more diversified sample where fresh graduates are of various social classes ranging from low to middle and high social classes. Thus, overall we have a diversified sample in terms of gender, marital status, region, religion, social class, major of study, level of education, language of education and type of institution (private or public).

One hundred seventeen fresh graduates are then chosen randomly from each of these six Lebanese universities according to the random sampling technique once the lists of fresh graduates for the past three years (year 2014, 2015 and 2016) and their telephone numbers from the concerned universities were received.

It is important to mention that the ministry of higher education in Lebanon does not publish and prohibits any public access to its private data including fresh graduates' names, addresses and ways of contact for political and safety reasons. It publishes only numbers and statistics. That's why universities were contacted in order to play the role of an intermediary helping to contact

fresh graduates. Possible respondents were contacted through phone and asked to participate in the survey. An informed consent was sent to those who accepted and were eligible to take part (refer to Appendix D). Through this informed consent, detailed information about the following issues were shared with respondents: the research purpose, confidentiality issues and the conservation of respondents' anonymity, the researcher's identity, the way the data collected will be used, the type of the respondents' participation, the key topics to be tackled, and the duration of the interview in case participants decided to take part.

Furthermore, based on the purposive sampling technique for the qualitative research and the abovementioned selection conditions, a group of five potential respondents was selected by the researcher's professional set of connections for the qualitative research. Possible respondents were contacted and an invitation letter in the form of an informed consent with the aforementioned details was sent to them (refer to Appendix E).

Respondents were divided as follows: five employers chosen from the most productive public and private sectors in the Lebanese economy on the basis of their (1) professionalism, (2) experience in retaining fresh graduates, (3) willingness to discuss freely, (4) deep knowledge about the Lebanese labor market's problems, challenges and requirements.

An overview of the main characteristics of the key respondents for the quantitative and qualitative research studies is revealed in table 3.3and 3.4 respectively.

Table 3.3: Main Characteristics of Key Respondents for Quantitative Research

Ethnicity	Lebanese
Number of key respondents	630
Area of Residence	Lebanon
Educational background	University degree (Bachelor, Masters, PhD or other)
Years of experience	More than 0 - up to 2 years
Graduation date	0 – 3 years

Table 3.4: Main Characteristics of Key Respondents for Qualitative Research

	Employers
Ethnicity	Lebanese
Number of main respondents	5
Area of Residence	Lebanon
Works in / having a profound idea of	The Lebanese labor market
Sector of work	The various Lebanese productive (private and public) sectors : food industries, health services, hospitality and tourism services and banking and financial services

Seeing that it is proved by the characteristics of the respondents as shown in Table 3.6 and Table 3.7 above, this study was able to reach considerable differences within the sample. Respondents were divided among fresh graduates and employers who are expected to be of different gender, age, educational level, experience and working at various Lebanese sectors allowing gathering rich and in-depth information with various insights about the subject of study.

3.7 Data Collection Technique

Having defined the units of analysis, the main respondents and the sampling techniques applied for both the quantitative and qualitative research, it is obvious to describe and examine the used data collection techniques. As for the survey and case studies method, there are various data gathering techniques to be utilized. This includes questionnaires, interviews, archival data, observations, records, ethnographies and others. To know which method to choose mainly relies on the research objectives, and the advantages and disadvantages of each technique (Li, 2014). This research uses the exploratory structured questionnaire with closed ended questions as the quantitative study's data gathering technique and the semi-structured interview as the qualitative study's data gathering technique. In what follows, the reasons behind these choices as well as their suitability and advantages in comparison to other data gathering techniques, the questionnaire development and response rate, the interview agenda-protocol, the processes involved in conducting the interviews, as well as the necessity and advantages of carrying out a pilot study are described in details in addition to some reflections from the pilot study outcomes.

3.7.1 The Questionnaire

A questionnaire is defined as a research instrument that consists of a set of questions which aims to gather information from key respondents enabling data comparison, statistical analysis and

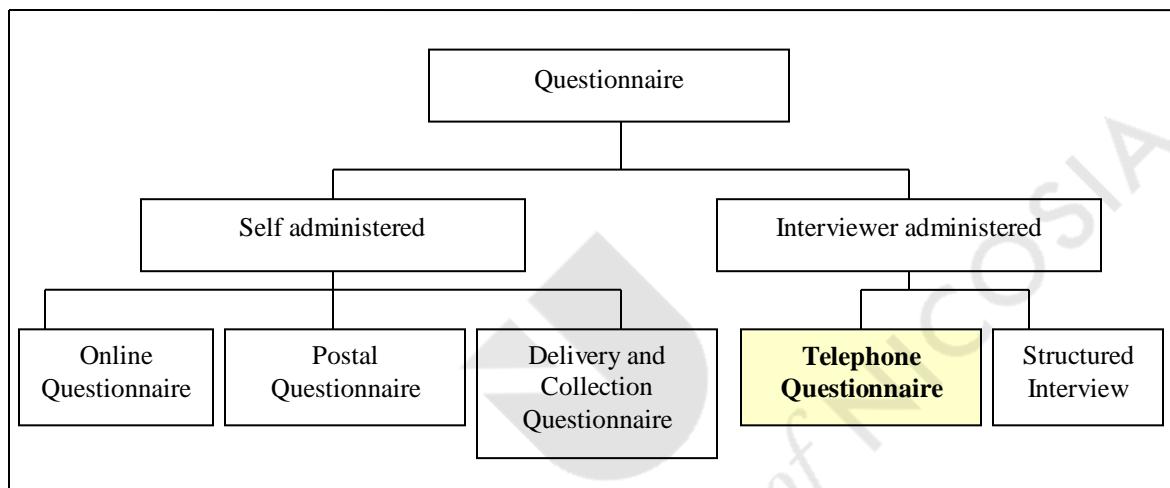
bias minimization (Saris & Gallhofer, 2014). It has many advantages over other survey categories such as verbal surveys: it is cheap; it has standardized answers which make it easy to gather and analyze data; and requires less effort for both the researcher and the respondent (*ibid.*). Questions can be open-ended or closed-ended. Open-ended questions allow the respondents to generate their own answers while closed-ended questions ask the respondents to select an answer from the preset options. Closed-ended questions allow many different types of response scales ranging from two options to allowing more than two ordered or unordered options and others while answers to open-ended questions are coded into response scales later on (*ibid.*). When building questionnaires, an order for the flow of questions should be respected. Indeed, most frequently, questions go from the least to the most sensitive, from the behavioral to the attitudinal and from the most to the least general. Demographic questions usually are left for the end of the questionnaire since they are mostly considered as personal questions and may cause the unwillingness of the respondent to continue (Saunders et al., 2009).

Looking worldwide, almost all researchers who conducted studies related to the satisfaction and retention of employees used the questionnaire technique and results over time proved the adequacy of such technique in job and market related studies (Mokaya et al., 2013; Lee & Lee, 2012; Hsu & Chen, 2012). Knowing that open ended questions are used in surveys that target small numbers of respondents where there is no need for statistical analysis and where each answer is a unique response and results cannot be generalized on the overall population, this study is then to use close ended questions. Indeed, closed ended questions are the most used when the number of respondents is big since they are designed in a way that makes data easy to quantify. The fact that closed ended questions are easily codified makes them extremely convenient when examining the statistical significance of the questionnaire's results. Furthermore, this will allow the classification of respondents into groups according to the answers they have chosen. Looking worldwide, most demographic and labor market studies use closed ended questions especially to gather information concerning gender, age, marital status, employment status and others (Ahmed, 2012; Feyzi et al., 2012).

In order to get the best results with this type of questions, there should be a clear assimilation of the subject of study and well-built questions that are linked to the all-inclusive research problem. In case the assimilation is not enough, this will result in insufficient options in the questions set for the respondents and by this the research objective will not be reflected in these questions. For

this, in order to deeply understand the topic of this study, an all-inclusive comprehensive literature review is done.

The questions are then to be built in many forms that take into consideration all the explicit options for respondents to pick out. This will allow to classify fresh graduates into groups according to the answers they gave in relation to their personal characteristics, to their perceptions toward job characteristics and market labor characteristics and to analyze statistically these responses so that an all-inclusive exploration of these characteristics and their effect on the retention of Lebanese fresh graduates will be realized.



Source: Saunders et al. (2009, p. 282)

Figure 3.4: Types of Questionnaire

As figure 3.4 reveals, there are different questionnaire types: self administered or interviewer administered (*ibid.*). Self administered questionnaires are those where the respondents answer the questions on their own whether through online, postal or delivery and collection method. Interviewer administered questionnaires are those where the interviewer presents the questions whether on the phone or in the form of a face to face structured interview (*ibid.*). In brief, questionnaires are not expensive, quick to fill and simple to analyze. Besides, interviewer administered questionnaires are the best tool to be used since the presence of the interviewer guarantees that respondents understand correctly the questions and the answer options and more specifically the telephone questionnaire produces a higher return rate than postal, mail or online questionnaires; a fact that aligns with the need of this research study. Accordingly, this study uses interviewer administered telephone structured questionnaire with closed-ended questions as the data collection technique for the quantitative research allowing an easy data collection from a

significant sample size of fresh graduates and enabling an easy data analysis process with high return rates.

3.7.1.1 Developing the Questionnaire

Knowing that this research study is mainly based on Hackman and Oldham Job Characteristics Model (JCM) (Hackman and Oldham, 1976, 1980) which has been widely used in literature (e.g., Cleave, 1993; Idaszak & Drasgow, 1987; Rungtusanatham & Anderson, 1996; Shirazi et al., 2012), given its importance as being one of the most important theories that studied organizational behavior (Behson, 2010) as already detailed in the Literature Review Chapter of this study, a graphical presentation of this model is shown in Figure 3.5 below.

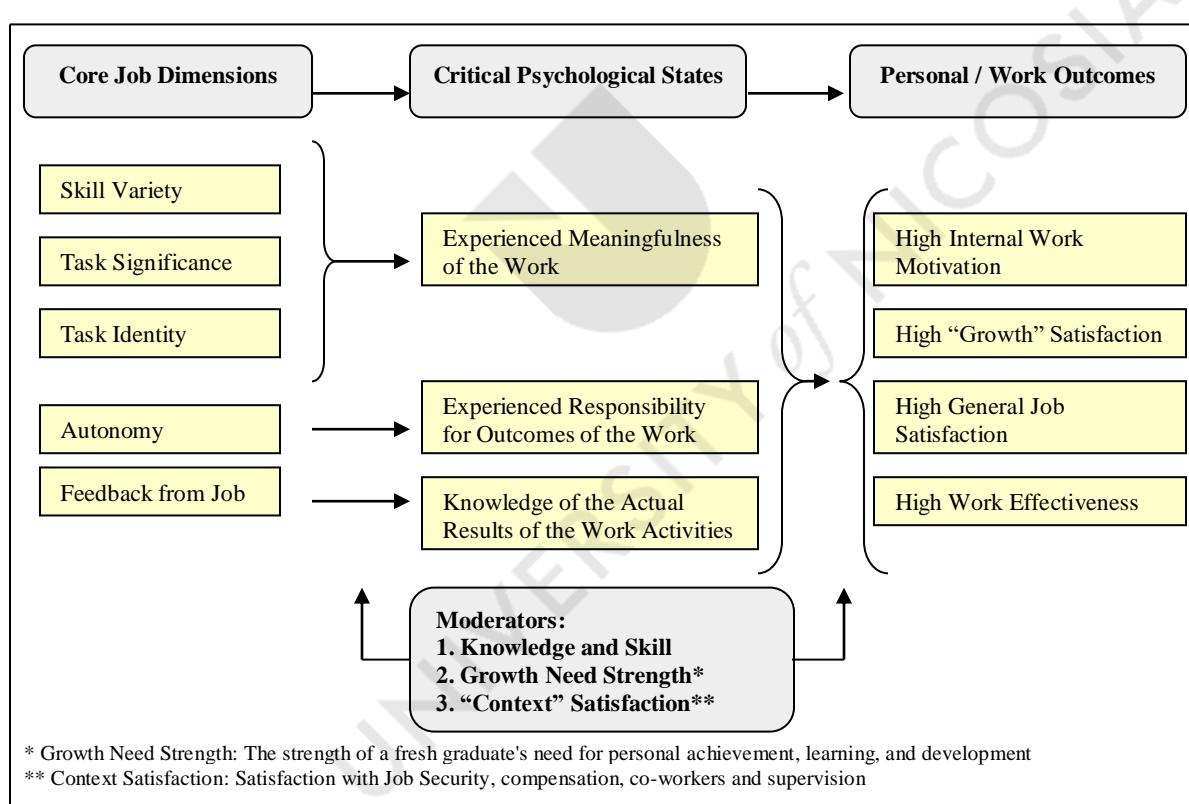


Figure 3.5: Hackman and Oldham Job Characteristics Model (JCM) (Hackman and Oldham, 1980)

As shown in Figure 3.5, JCM focuses on the linkages among three main parts: the core job dimensions, the psychological states of employees that are affected by these core job dimensions, and the resulting personal and work outcomes. Moreover, this model observes that differences

among people moderate how they react to their work and for this three moderating variables have been created (Hackman & Oldham, 1980, 2005).

However, As a result of the aforementioned discussion related to the various theoretical gaps and in order to develop the conceptual model of this research, it is proposed that JCM is customized 1) by redefining core job dimensions as skill variety, task significance, task identity, autonomy, feedback from job, participation, work load, working conditions, physical effort, technology use, promotion and social environment 2) by redefining critical psychological states as experienced meaningfulness of the work, experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities, self-esteem and prestige inside outside, 3) by identifying personal/work outcomes as high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high involvement, 4) by inserting labor market conditions (geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs, educational and labor market gap), 5) by extending the outcomes related to retention of fresh graduates and also 6) by integrating additional moderating variables, such as age, gender, education, social rank, culture and commitment.

For the purpose of the current research, all the above modifications will be incorporated in a newly developed comprehensive framework, hereby called “Modified Job Characteristics Model- for retention” (“MJCM-for retention”). “MJCM-for retention” is shown in Figure 3.6.

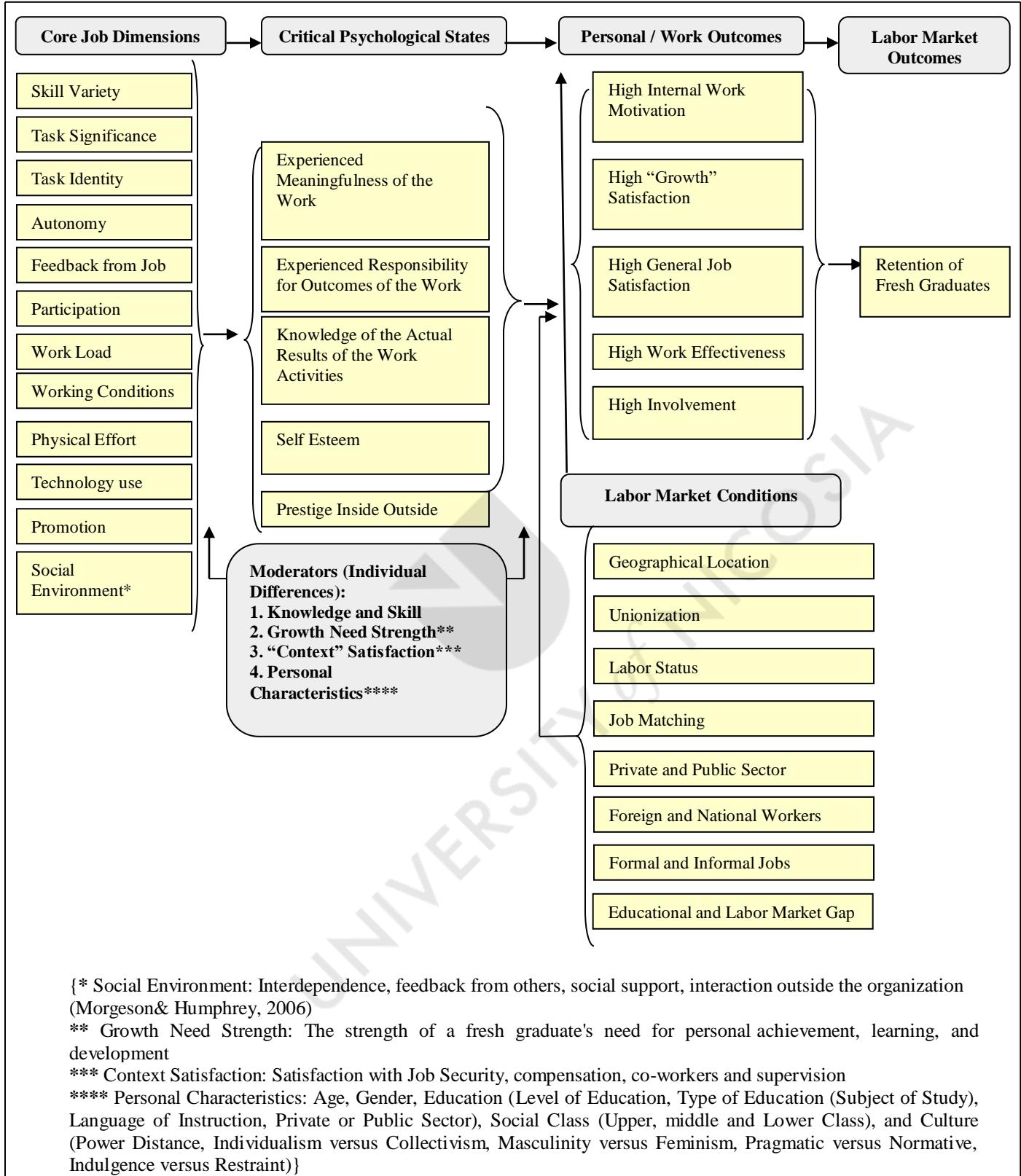


Figure 3.6: Modified Job Characteristics Model- for Retention” aka “MJCM - for Retention

Figure 3.6 shows the basic constructs of the suggested model based on core job dimensions, individual differences, psychological states, labor market conditions, personal/work outcomes and the final resultant as retention. The set of core job dimensions are intrinsic and extrinsic and includes skill variety, task significance, task identity, autonomy, feedback from job, participation, work load, working conditions, physical effort, technology use, promotion and social environment. The set of individual differences are extended to include the cultural factor (Power Distance, Individualism versus Collectivism, Masculinity versus Feminism, Pragmatic versus Normative, Indulgence versus Restraint). The set of psychological states include high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high involvement. The set of labor market conditions are divided into geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap. In all, these factors collectively contribute to the retention of fresh graduates in challenging labor markets. The question is how much do these factors actually contribute to retention.

Based on multiple job satisfaction and labor market theories, “MJCM-for retention” (MJCM-R) will simultaneously test the role of all the aforementioned groups of factors, namely core job dimensions, individual differences and labor market conditions on the retention of fresh graduates. To test MJCM-R, a newly amended version of the revised JDS which was created by Idaszak and Drasgow in 1987 has been created named hereafter the “Modified Job Diagnostic Survey – for Retention” (MJDS-R). In this issue, it should be mentioned that Idaszak and Drasgow revised JDS was used as a basis since many authors have demonstrated that the original JDS is not sufficiently validated in empirical data (Idaszak & Drasgow, 1987, Idaszak et.al., 1988; Morgeson & Humphrey, 2006). The language of the questionnaire is the English language. An amended format of the revised version of JDS was used, restructured in parallel to the revision of the Job Characteristics Model; thus, embodying corrections and deletions in light of the research gaps of this study and in accordance with empirical evidence as discussed in the literature review chapter of this study.

The major problems faced when various scholars (e.g., Booanzaier & Booanzier, 1994; Cordery & Sevastos, 1993; Idaszak & Drasgow, 1987) have administered the original version of JDS were: (1) an uncertainty in the interpretation of questions by respondents was reported due to the reverse score items of the questionnaire and (2) an impersonal probe was detected when the

questionnaire was addressed to groups of more than fifty respondents. Hackman and Oldham recommended the addressing of this questionnaire to groups of two or three (Hackman & Oldham, 1980). In order to overcome these problems in this investigation, the revised version of the JDS as suggested by Idaszak and Drasgow (1987) was used as a basis, minimizing by this the reverse score items; and the questionnaire was administered on a one-to-one basis through phone calls.

This revised version of JDS was then customized by (1) adding questions in relation to participation, work load, working conditions, physical effort, technology use, promotion and social environment, (2) adding questions in relation to the additional critical psychological states which are self-confidence and prestige inside outside, (3) inserting questions in relation to the additional personal/work outcomes that is “high commitment with work”, (4) inserting statements in relation to labor market conditions (geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs, educational and labor market gap), (5) extending statements related to retention of fresh graduates and finally (6) integrating additional moderating variables mainly related to individual differences, such as age, gender, education, social rank and culture. All the above modifications were incorporated in the newly developed JDS, hereby called the “Modified Job Diagnostic Survey – for Retention” (MJDS-R) (refer to Appendix A).

MJDS-R was administered to measure the independent, dependent, moderator and mediator variables as illustrated in the Modified Job Characteristics Model-for retention (MJCM – for retention), Figure 3.6.

MJDS-R consists of 135 items classified into five scales: core job dimensions, experienced psychological states, labor market conditions, individual differences and personal/work outcomes. These 135 items were a combination of the 83 items of the original JDS (Hackman & Oldham, 1974) (taking into consideration the five modified items of the revised JDS, (Idaszak & Drasgow, 1987, Idaszak et al., 1988)) and 52 new items incorporated in the integrated modeling framework (refer to Appendix B for the link between JDS and MJDS-R).

Respondents were asked to score their perceptions to each item on a 7-point Likert-type scale ranging from Extremely Unsatisfied (1) to Extremely Satisfied (7) and from Disagree Strongly (1) to Agree Strongly (7). Also socio-demographic data such as gender, age, sex, marital status,

social class, institution type, level and language of education, area and type of employment, years of experience and salary were collected (refer to Appendix C for MJDS-R answer key).

The following sections focus on the specific independent, dependent, moderator, mediator and demographic variables measured in this study.

- *Independent Variables: Job Dimensions and Labor Market Conditions:*

Core job dimensions refer to the five core job characteristics in JCM (skill variety, task identity, task significance, autonomy, and feedback from job) in addition to seven other independent variables (participation, work load, working conditions, physical effort, technology use, promotion and social environment) as defined in Section 2.5 of Chapter 2. Labor market conditions refer to geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap as defined in Section 2.5 of Chapter 2 as well.

The amended version of the revised JDS included forty two items presented in the form of statements and divided into two sections (section one and section seven) where section one includes twenty six statements that ask about the respondents' perceptions with regards to their own jobs and section seven includes sixteen statements that ask about their perceptions with regards to their labor market. Seven-point response scales are used all throughout these two sections.

Items measuring each of the core job dimensions appear randomly in the first section and items measuring each of the labor market conditions appear randomly in section seven. Each core job dimension and each labor market condition are scored as the average of two specific items of the questionnaire. Refer to Appendices A and B for the amended format of the revised version of JDS and the related scoring key showing the items and their format in measuring the core job dimensions and labor market conditions. Various scholars (e.g., Spector & Jex, 1991; Renn & Vandenberg, 1995; Xie & Johns, 1995; Yeh & Cho, 1996) tested the original version of JDS, and showed acceptable reliability coefficients for the job dimensions scales. Besides Fried (1991) reported sufficiently high reliability estimates of JDS scales while conducting a review of two hundred research studies.

- *Dependent and Independent Variables: Personal and Work Outcomes:*

Personal and work outcomes refer to the four personal and work outcomes of JCM (high internal work motivation, high growth satisfaction, high general job satisfaction and high work effectiveness) in addition to high involvement as set out and defined in Section 2.5 of Chapter 2. The amended version of the revised JDS includes twenty five items presented in the form of statements which ask respondents about their feelings about their jobs. Seven-point responses scales are used in measuring these items which appear in Sections two, three and four of the questionnaire. High internal work motivation is scored as the average response on six specific items of the questionnaire; high growth satisfaction is scored as the average response on four specific items of the questionnaire while the remaining variables (high general job satisfaction, high work effectiveness and high involvement) are scored each as the average response on five specific items of the questionnaire. Refer to Appendices A and B for the amended format of the revised version of JDS and the related scoring key showing the items and their format in measuring the personal and work outcomes. Fried (1991) reported also sufficiently high reliability estimates of the personal and work outcomes of the original JDS scales in addition to other scholars (e.g., Renn& Vandenberg, 1995) who deduced the same results. As a result, the following hypotheses and their corresponding subhypotheses were set:

H1. Personal/work outcomes are influenced by core job dimensions.

SH1.1. There is a significant and positive relationship between core job dimensions and personal/work outcomes.

SH1.2. There is a significant and positive relationship between core job dimensions and critical psychological states.

SH1.3. There is a significant and positive relationship between critical psychological states and personal/work outcomes.

SH1.4. In the presence of all five psychological states, personal/work outcomes maximize.

H2. Personal/work outcomes are influenced by labor market conditions.

SH2.1. There is a significant and positive relationship between labor market conditions and personal/work outcomes.

SH2.2. In the presence of labor market conditions, personal/work outcomes maximize.

- *Moderator Variables - Individual Differences:*

Individual differences refer to knowledge and skill, growth need strength and context satisfaction as set out and defined by the original JDS (Refer to Section 2.5 of Chapter 2) in addition to personal characteristics which according to Gerhart (2000) are important determinants of job satisfaction. Additionally, Fried and Ferris (1986) proved that personal characteristics influence the ability to differentiate among job characteristics and thus are moderators affecting the strength of the relationships among core job dimensions, experienced psychological states and personal/work outcomes. The following personal characteristics were thus included: age, gender, education (level of education, type of education (subject of study), language of instruction, private or public Sector), social class (upper, middle and lower class) in addition to culture (power distance, individualism versus collectivism, uncertainty avoidance, pragmatic versus normative, indulgence versus restraint) as defined and set out by Hofstede et al. (2010).

Skill and Knowledge is scored as the average response on three specific items which appear in Section three of the questionnaire; Context satisfaction is divided into four variables (satisfaction with job security, satisfaction with compensation, satisfaction with co-workers and satisfaction with supervision) where the first two variables are scored each as the average response on two specific items which appear in Section three of the questionnaire and the second two variables are scored each as the average response on three specific items which appear in Section three of the questionnaire. Seven-point responses scales are used in measuring these items. As for growth need strength, JDS yields two separate measures: one from Section five (in “would like” format) and one from Section six (in “job choice” format). The “Would like” format items are scored as the average response of six items from Section five. Before averaging, there is a need to subtract 3 from each item score; this will result in a summary scale ranging from one to seven. The “Job Choice” format items are scored as the average response of the twelve items of Section six where five-point responses scales are used but the job choice summary score are then to be transformed from a 5-point scale to a 7-point scale through using this formula: $Y = 1.5X - .5$. At the end to obtain an overall estimate of growth need strength based on both “would like” and “job choice” data, an average of the “would like” and the transformed “job choice” summary scores is calculated. Regarding culture, it is scored as the average response of the five items of Section

nine where dichotomous responses scales (yes or no answers) are used. Refer to Appendices A and B for the amended format of the revised version of JDS and the related scoring key showing the items and their format in measuring individual differences. As a result the following hypothesis and its two subhypotheses were set:

H3. Individual differences are moderators affecting the relationships among core job dimensions, critical psychological states and personal/work outcomes.

SH3.1. Individual differences moderate the relationship between core job dimensions and critical psychological states.

SH3.2. Individual differences moderate the relationship between critical psychological states and personal/work outcomes.

- *Mediator Variables - Critical Psychological States:*

Critical psychological states refer to the three psychological states of JCM (experienced meaningfulness of the work, experienced responsibility for the work and knowledge of results) in addition to self-esteem and prestige inside-outside as set out and defined in Section 2.5 of Chapter 2. The amended version of the revised JDS includes twenty two items presented in the form of statements which ask respondents about how their psychological states resulting from their own job dimensions affect their feelings about their jobs. Seven-point responses scales are used in measuring these items which appear in Sections two and four of the questionnaire. Experienced responsibility of the work is scored as the average response on six specific items of the questionnaire while the remaining variables (experienced meaningfulness of the work, knowledge of results, self-esteem and prestige inside-outside) are scored each as the average response on four specific items of the questionnaire. Refer to Appendices A and B for the amended format of the revised version of JDS and the related scoring key showing the items and their format in measuring the critical psychological states. Experienced psychological states being mediators helping to clarify the relationship between core job dimensions and personal/work outcomes, the following hypothesis was set:

H4. Psychological states have a mediating role between core job dimensions and personal/work outcomes.

- *Dependent Variables: Labor Market Outcomes:*

Labor market outcomes refer to the retention of fresh graduates as set out and defined in Section 2.5 of Chapter 2. The amended version of the revised JDS includes five items presented in the form of statements which ask respondents about the personal and work outcomes which are the most important for them to increase their stay in their labor markets. Dichotomous responses scales (yes or no answers) are used in measuring these items which appear in Sections eight of the questionnaire. As mentioned before, refer to Appendices A and C for the amended format of the revised version of JDS and the related scoring key showing the items and their format in measuring the labor market outcomes. As a result the following hypothesis was set:

H5. Personal/work outcomes are a good predictor of labor market outcomes (Retention of fresh graduates).

3.7.1.2 Ethical Considerations

Following ethical guidelines, written permission was obtained by the authors (Hackman and Oldham) of the original JDS instrument to proceed with the modifications of the instrument for research purposes and by the authors (Idaszak and Drasgow) of the revised JDS to use the five modified items (items 1.2, 1.4, 1.6, 1.8 and 1.10) of core job dimensions to avoid reverse-scored items which have caused difficulties in factoring the original JDS (Idaszak & Drasgow, 1987, 1988) and an ethical approval to conduct the study was obtained from the Ethics Committee of the University of Nicosia. Permission to contact the fresh graduates was obtained from the University Management Board of the participating universities. An informed consent was signed by those who agreed to participate in the study. Phone interviews were conducted from June to September 2016.

3.7.1.3 Data Analysis

As aforementioned, out of the six contacted universities, six hundred thirty fresh graduates accepted and were eligible to participate in the survey. The analysis of the data collected should help identify how labor market conditions, core job dimensions and psychological states influence personal and work outcomes and labor market outcomes, together with the moderating role of individual differences, and explore how strong is this relationship. In order to do so, the SPSS (Statistical Package for the Social Sciences) was used to describe and analyze the data for

testing the research hypotheses since it is one of the most accepted and extensively available statistical analysis packages (Pallant, 2007).

First, the validity and reliability of the new instrument MJDS-R were tested. This was examined through (a) demographic data and scale items, (b) descriptive statistics including frequencies, percentages, means and standard deviations in addition to skewness and kurtosis,(c) the internal consistency of the instrument and each dimension with Cronbach's alpha coefficients, (d) item analysis, using item-to-total correlations and Cronbach's alpha if the item was deleted from the scale, (e) Exploratory factor analysis (EFA) with Promax rotation to evaluate the construct validity of the instrument through using principal components analysis (PCA) as the extraction method where the appropriateness of the data for factor analysis was checked for each of the five scales with regards to Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity and the conditions for selecting subscales consist of *eigenvalues* being higher than 1 as well as the percentage of variance explained by the factors (Hair et al., 2010; Papastavrou et al., 2011, 2016), and finally (f) content validity by a panel of experts through reviewing the content of each new item in the modified version. All the results regarding the validity and reliability of the new instrument are described in Chapter 4.

Second, the research hypotheses of interest were tested. This was performed through eleven separate groups of analyses, which are detailed below:

- (1) Descriptive statistics for each scale and subscale, aiming to summarize the data collected in a meaningful way so that patterns may emerge, including mean, standard deviation, skewness and kurtosis as well as Shapiro Wilk p-values, to test for normality (section 5.3);
- (2) Simple analysis (by zero-order correlation) of the relationships among the various subscales of each of the five scales. A Pearson correlation is considered statistically significant if the $p\text{-value} < \alpha$, the level of significance (section 5.4);
- (3) Simple analysis (by zero-order correlation) of the relationships among the various scales including the relationships of the core job dimensions and experienced psychological states with personal/work outcomes, the relationships of core job dimensions with experienced psychological states, the relationships of labor market conditions with personal/work outcomes, and the relationships of individual differences with core job

dimensions, experienced psychological states and personal/work outcomes. A Pearson correlation is considered statistically significant if the p-value< α , the level of significance (section 5.5);

- (4) Analysis (by simple and multiple regression) to determine if personal/work outcomes maximize in the presence of all five experienced psychological states (section 5.6). This was performed through examining a set of regressions predicting the personal/work outcome subscales (a) from each of the five psychological states taken alone, (b) from the ten possible pairs of the psychological states, and (c) from the ten possible combinations of three psychological states, (d) from the five possible combinations of four psychological states, and (e) from all five psychological states taken together and to check if when additional psychological states are further added to the regression equations, the amount of outcome subscale variance explained increases. A variable is considered significant if the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017). The average % of variance explained in regressions (R^2) predicting personal/work outcome subscales from one, two, three, four and five experienced psychological states was then calculated to check if an increment in the amount of subscale variance explained is noticed when predictors are added to the regression with a significant F-change (p-values smaller than 5%), implying that adding the additional psychological states to the regression significantly improved the prediction.
- (5) Analysis (by multiple and hierarchical regression) to determine which specific core job dimensions relate to which experienced psychological state; the various core job dimensions being the independent variables and each experienced psychological state being the dependent variable (section 5.7). First, multiple regression analysis using stepwise method (based on the significant p-values being smaller than 5% and beta values) was used to determine which specific core job dimensions relate to which experienced psychological state. In addition, to test these results, hierarchical regressions were computed for each of the psychological states, in which the predictors in the first step were the job dimensions selected from regression as directly causal of that psychological state. Next, the remaining job dimensions (that is those not expected to directly influence the psychological state) were introduced into each regression equation

as additional predictors. If the predictions are correct, the selected job dimensions should account for substantial variance in the psychological states, and the introduction of the remaining job dimensions should not substantially increase the amount of variance controlled. knowing that this study suggests 11 core job dimensions (independent variables) affecting each experienced psychological state (dependent variable), then the model would be of the form:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} + \beta_{10} X_{10i} + \beta_{11} X_{11i} + \varepsilon$$

Where $i = 1, 2, \dots, n$ ($n = 630$; sample size) and where X_1 is Skill Variety, X_2 is Task Identity, X_3 is Job Significance & Feedback, X_4 is Decision Making & Autonomy, X_5 is Work Load, X_6 is Work Benefits, X_7 is Physical Effort, X_8 is Technology Use, X_9 is Promotion, X_{10} is Social Environment, X_{11} is Working Conditions, Y is for the experienced psychological state and ε is the error of the model. The independent variable will be considered significant if the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017).

The parameters $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}$ and β_{11} are unknown and should be estimated with stepwise regression, using $b_0, b_1, b_2, b_3, b_4, b_5, b_6, b_7, b_8, b_9, b_{10}$ and b_{11} . The estimated regression equation is:

$$\hat{Y} = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + b_9 X_9 + b_{10} X_{10} + b_{11} X_{11}$$

- (6) Analysis (by partial correlation and multiple regression) of the degree to which experienced psychological states mediate core job dimensions and personal/work outcomes (section 5.8). First, the relationships between each core job dimension and the various personal/work outcomes' subscales were examined before and after the predicted mediating psychological states are statistically controlled for (by partial correlation); and second, for each of the personal/work outcomes' subscales, the five psychological states were introduced into a multiple regression equation to serve as primary predictors. Then, the core job dimensions were added to the regression as secondary predictors. The various core job dimensions and experienced psychological states being independent variables and each personal/work outcomes' subscale being the dependent variable, the model would be of the form:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \beta_3 X_{3i} + \beta_4 X_{4i} + \beta_5 X_{5i} + \beta_6 X_{6i} + \beta_7 X_{7i} + \beta_8 X_{8i} + \beta_9 X_{9i} + \beta_{10} X_{10i} + \beta_{11} X_{11i} + \beta_{12} Z_{1i} + \beta_{13} Z_{2i} + \beta_{14} Z_{3i} + \beta_{15} Z_{4i} + \beta_{16} Z_{5i} + \epsilon$$

Where $i = 1, 2, \dots, n$ ($n = 630$; sample size) and where X_1 is Skill Variety, X_2 is Task Identity, X_3 is Job Significance & Feedback, X_4 is Decision Making & Autonomy, X_5 is Work Load, X_6 is Work Benefits, X_7 is Physical Effort, X_8 is Technology Use, X_9 is Promotion, X_{10} is Social Environment, X_{11} is Working Conditions, Z_1 is Experienced Meaningfulness of the Work, Z_2 is Experienced Responsibility for Outcomes of the Work, Z_3 is Knowledge of the Actual Results of the Work Activities, Z_4 is Self-confidence, Z_5 is Prestige Inside Outside, Y is for the personal/work outcome subscale and ϵ is the error of the model. The independent variable will be considered significant if the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017). The parameters $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7, \beta_8, \beta_9, \beta_{10}, \beta_{11}, \beta_{12}, \beta_{13}, \beta_{14}, \beta_{15}$ and β_{16} are unknown and should be estimated with stepwise regression, using $b_0, b_1, b_2, b_3, b_4, b_5, b_6, b_7, b_8, b_9, b_{10}, b_{11}, b_{12}, b_{13}, b_{14}, b_{15}$ and b_{16} . The estimated regression equation is:

$$\hat{Y} = b_0 + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + b_5 X_5 + b_6 X_6 + b_7 X_7 + b_8 X_8 + b_9 X_9 + b_{10} X_{10} + b_{11} X_{11} + b_{12} Z_1 + b_{13} Z_2 + b_{14} Z_3 + b_{15} Z_4 + b_{16} Z_5$$

- (7) Analysis (by zero-order correlation) of MMPS as a summary subscale for core job dimensions; a Pearson correlation is considered statistically significant if the p-value < α , the level of significance (section 5.9);
- (8) Analysis (by multiple and hierarchical regression) to determine which specific labor market condition relates to which personal/work outcome, the various labor market conditions being the independent variables and each personal/work outcome being the dependent variable (section 5.10). First, multiple regression analysis using stepwise method (based on the significant p-values being smaller than 5% and beta values) was used to determine which specific labor market conditions relate to which personal/work outcome. In addition, to test these results, hierarchical regressions were computed for each of the personal/work outcomes, in which the predictors in the first step were the labor market conditions selected from regression as directly causal of that personal/work outcome. Next, the remaining labor market conditions (that is those not expected to directly influence the personal/work outcome) were introduced into each regression equation as additional predictors. If the predictions are correct, the selected labor market

conditions should account for substantial variance in the personal/work outcomes, and the introduction of the remaining labor market conditions should not substantially increase the amount of variance controlled. Knowing that this study suggests eight labor market conditions (independent variables) affecting each personal/work outcome (dependent variable), then the model would be of the form:

$$Y_i = \beta_0 + \beta_1 L_{1i} + \beta_2 L_{2i} + \beta_3 L_{3i} + \beta_4 L_{4i} + \beta_5 L_{5i} + \beta_6 L_{6i} + \beta_7 L_{7i} + \beta_8 L_{8i} + \varepsilon$$

Where $i = 1, 2, \dots, n$ ($n = 630$; sample size) and where L_1 is Geographical Location, L_2 is Unionization, L_3 is Labor Status, L_4 is Job Matching, L_5 is Private & Public Sector, L_6 is Foreign and National Workers, L_7 is Formal and Informal Jobs, L_8 is Educational and Labor Market Gap, Y is for the personal/work outcome and ε is the error of the model. The independent variable will be considered significant if the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017).

The parameters $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ and β_8 are unknown and should be estimated with stepwise regression, using $b_0, b_1, b_2, b_3, b_4, b_5, b_6, b_7$ and b_8 . The estimated regression equation is:

$$\hat{Y} = b_0 + b_1 L_1 + b_2 L_2 + b_3 L_3 + b_4 L_4 + b_5 L_5 + b_6 L_6 + b_7 L_7 + b_8 L_8$$

- (9) Analysis (by simple and multiple regression) to determine if personal/work outcomes maximize in the presence of labor market conditions (section 5.11). This was performed through examining a set of regressions predicting the personal/work outcome subscales (a) from each of the eight labor market conditions taken alone, (b) from the seventy possible combinations of four labor market conditions, (c) from the fifty six possible combinations of five labor market conditions, (d) from the twenty eight possible combinations of six labor market conditions, (e) from the eight possible combinations of seven labor market conditions and (d) from all eight labor market conditions taken together and to check if when additional labor market conditions are further added to the regression equations, the amount of outcome subscale variance explained increases. A variable is considered significant if the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017). The average % of variance explained in regressions (R^2) predicting personal/work outcome subscales from one, four, five, six, seven or eight labor market conditions was then calculated to check if an increment in the amount of

subscale variance explained is noticed when predictors are added to the regression with a significant F-change (p-values smaller than 5%), implying that adding the additional labor market conditions to the regression significantly improved the prediction.

- (10) Analysis (by zero-order correlation and Fisher's Z test) of the degree to which individual differences moderate the relationships between core job dimensions and experienced psychological states and between experienced psychological states and personal/work outcomes (section 5.12). More particularly, groups were created for each individual difference subscale. Comparisons were made between the correlations in the groups of each subscale at the following potential sites: core job dimensions with experienced psychological states, experienced psychological states with personal/work outcomes and core job dimensions with personal/work outcomes. Fisher's Z was then used to test the significance of the differences between corresponding correlations in the groups of each individual difference subscale (Fisher, 1925; Mosteller & Bush, 1954, p. 329);
- (11) Analysis (by binary logistic regression) of the effect of personal/work outcomes on the labor market outcome (fresh graduates' retention) (section 5.13), the various personal/work outcomes being the independent variables and fresh graduates' retention being the dependent variable (binary variable, 0 = intent to stay, 1 = not intention to stay). Knowing that this study suggests five personal/work outcomes (independent variables) affecting the labor market outcome (dependent variable), then through using the logit regression equation:

$\text{Logit}(p(x)) = \text{Log} \{p(x) / 1 - p(x)\} = b_0 + b_1P_{1i} + b_2P_{2i} + b_3P_{3i} + b_4P_{4i} + b_5P_{5i}$ which looks just like a linear regression and although logistic regression finds a 'best fitting' equation, just as linear regression does, the principles on which it does so are quite different. Instead of using a *least-squared deviations* criterion for the best fit, it uses a *maximum likelihood* method, which maximizes the probability of getting the observed results given the fitted regression coefficients (Hosmer, Lemeshow & Sturdivant, 2013). A consequence of this is that the goodness of fit and overall significance statistics used in logistic regression are different from those used in linear regression. p can be calculated with the following formula:

$$p = e^{b_0 + b_1P_{1i} + b_2P_{2i} + b_3P_{3i} + b_4P_{4i} + b_5P_{5i}} / (1 + e^{b_0 + b_1P_{1i} + b_2P_{2i} + b_3P_{3i} + b_4P_{4i} + b_5P_{5i}})$$

Where:

p = the probability that a case is in a particular category (p can only range from 0 to 1),

e = the base of natural logarithms (approx 2.72),

b_0 = the constant of the equation and,

$b_1 \dots b_5$ = the coefficients of the predictor variables

Thus, the model would be of the form:

$$Y_i = 1/(1 + e^{-(\beta_0 + \beta_1 P_{1i} + \beta_2 P_{2i} + \beta_3 P_{3i} + \beta_4 P_{4i} + \beta_5 P_{5i} + \epsilon)})$$

Where $i = 1, 2, \dots, n$ ($n = 630$; sample size) and where P_1 is High Internal Work Motivation, P_2 is High Growth Satisfaction, P_3 is High General Job Satisfaction, P_4 is High Work Effectiveness, P_5 is High Commitment, Y is for the labor market outcome being fresh graduates' retention and ϵ is the error of the model. The independent variable will be considered significant if the corresponding p-value is less than the level of significance, α , 5%, using Wald's test statistic (ibid.).

The parameters $\beta_0, \beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are unknown and should be estimated with stepwise regression, using b_0, b_1, b_2, b_3, b_4 and b_5 . The estimated regression equation is:

$$\hat{Y} = 1/(1 + e^{-(b_0 + b_1 P_{1i} + b_2 P_{2i} + b_3 P_{3i} + b_4 P_{4i} + b_5 P_{5i})})$$

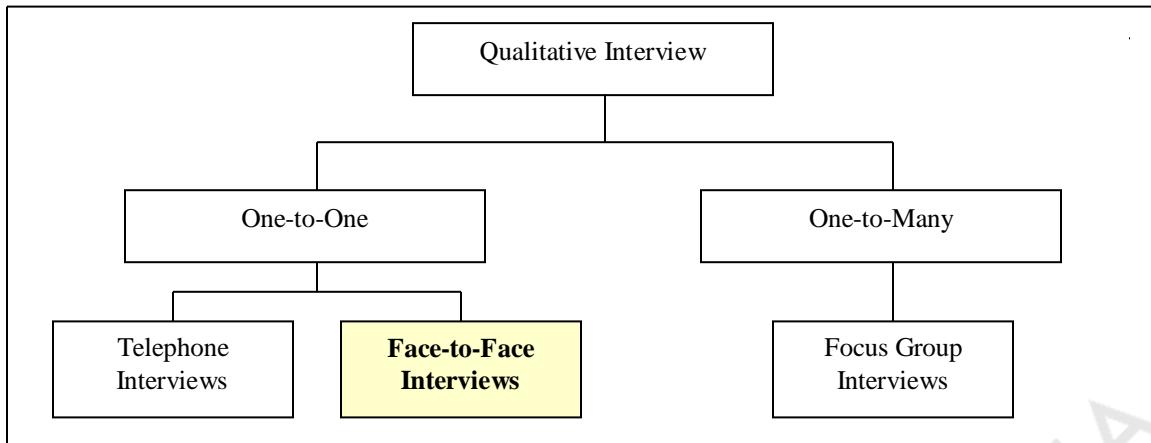
Besides, Nagelkerke's R^2 is calculated to indicate how strong the relationship between prediction and grouping is.

All the results from the above data analyses are detailed in chapter 5. Based on the outcomes of all the statistical tests and analyses, a final version of the equations will be set. Through running these tests, the aforementioned hypotheses and secondary hypotheses (refer to Table 1.1) will be verified or rejected.

3.7.2 The Semi-structured Interviews

Interviews are defined as the act of questioning the respondents who can offer knowledge about the subject of study under exploration (Snow & Thomas, 1994). Interviews used in qualitative research, as opposed to questionnaires, allow more freedom in the structure and are more opened to listen to what the interviewee supposes more significant and related to the subject of study (Alvesson, 2003). Thus, the act of interviewing respondents frequently requires less interaction with the circumstances than observations, allowing by this a strong objectivity and a high efficiency in gathering empirical data with the widest knowledge possible (ibid.).

Interviews in qualitative research are characterized by various special criteria: semi-structured, unstructured, and structured interviews (Sarantakos, 2005). Besides, they can be classified into two forms: one-to-one or one-to-many interviews as illustrated in figure 3.7.



Source: Saunders et al. (2009, p. 247)

Figure 3.7: Types of Qualitative Interview

To begin with, unstructured interviews allow the interviewer to manage and organize the dialogue format and subject (Li, 2014) and enable the interviewees to better identify the research issues, and to provide more open and free answers (*ibid.*). However, in doing so, respondents can discuss non related and insignificant topics and issues. Besides, each interview will be extremely dissimilar, thus it will very hard to code and analyze the data collected (Corbetta, 2003; Li, 2014).

Quite the reverse, structured interviews have standard similar questions which are to be questioned to the totality of respondents using the same order and wording, so as to guarantee a consistency and similarity of interview themes (*ibid.*). In doing so, interviewees might lack the opportunity to have further clarifications, especially when respondents are not very sure of a question comprehension or answer. However, structured interviews allow relatively easy coding, analysis and comparison due to their similarity and consistency (*ibid.*).

To end with, semi-structured interviews are the most frequently used data collection method in qualitative case studies (Easton, 2010). They usually include a list of previously set open-ended questions which cover the research topics and themes (Corbetta, 2003; Li, 2014). Besides, the order of the questions can be modified at some point in the interview and the interviewer is allowed to raise other queries which might result from the conversation (*Ibid.*). Consequently,

various advantages are linked with semi-structured interviews: first, the supervision management of the interviewer that allows addressing precise topics and questions; second, the flexibility of the interviewer to develop the conversation with the main respondents (Patton, 2002; Li, 2014); third, the ability to do more in-depth search of the situation of a respondent for additional clarification (*ibid.*). Thus, the interviewer has the freedom to move away from the preset agenda, has the right to go for more in-depth questions so as to obtain deeper and clearer insights and perceptions related to the subject of study. Besides, semi-structured interviews are the best tool to be used as a follow up to questionnaires for a further investigation of the quantitative research results; a fact that aligns with the focus of this research study. Accordingly, this study uses face-to-face, in-depth, semi-structured interviews as the data collection technique.

3.7.2.1 Developing the Interview Agenda

This research study follows Eisenhardt (1989) protocol for the semi-structured interviews. Precise questions for gathering data were formulated in the interview guide, along with additional probes and prompts which aimed to begin the discussion about subject of study, go more into details at a later stage, and, at last, extract further significant information (Weerawardena & Mort, 2012). As suggested by Yin (2003) and Chang (2009), an interview agenda or guide was created to perform focused discussions with the respondents. This helps to guide the interviewer while discussing specific topics and questions and to keep up the reliability level of each interview (Saunders et al., 2009). Knowing that open-ended questions enable respondents to offer details crucial to comprehend the deepness of the subject of study (*ibid.*), questions were selected and developed with the option of adding extra questions if necessary depending on the answers of the respondents. Deviations from the interview agenda were permitted especially that this research study has an exploratory nature. This protocol helped to create a better understanding of the different resulting themes that were deduced from the quantitative research study. The interview guide and its relation with this research questions and objectives are presented in table 3.5 below.

Table 3.5: Research Questions, Research Objectives and Interview Questions

Research Objectives (ROs)	Research Questions (RQs)	Interview Questions (IQs)	
Not Any (NA)	“Ice Breaking Questions”	1	Please, can you describe your personal profile; e.g. age, marital status, educational qualifications, professional background?
		2	How long have you been at your current job? What role do you play or what position do you hold at your organization?
RO1 + RO2 + RO5: (RO1): To examine the existing literature in relation to the theories related to the retention of fresh graduates. (RO2): To explore the core job dimensions, the psychological states, the labor market conditions and the resulting personal/work outcomes that influence fresh graduates' retention. (RO5): To provide practical recommendations for the retention of fresh graduates and practical recommendations for the Lebanese government employment retention strategies.	RQ1: Which factors influence the retention of fresh graduates and how are they interrelated?	3	What do you think about fresh graduates' personal/work outcomes; e.g. motivation, growth and job satisfaction, work effectiveness and commitment?
		4	Which factors do you think help in building up these personal/work outcomes? (Elaborate the discussion by asking about how much importance does the organization give for this issue)
		5	If you were alone to decide about the Human Resource Department policies at your organization, what would be the various techniques you would apply to develop fresh graduates' personal/work outcomes?
		6	How do you visualize the core job dimensions in the Lebanese organizations in general and in your organization in particular?
		7	What is your opinion regarding the labor market conditions in Lebanon? Do they help in developing fresh graduates' personal/work outcomes?
		8	How much importance does your organization give for the psychological state of the fresh graduates? (Elaborate the discussion by asking about their opinion regarding the mediating role of the psychological state between core job dimensions and personal/work outcomes)
		9	Do you think fresh graduates' personal characteristics, culture, growth need strength and knowledge and skills affect the relationship between core job dimensions and personal work outcomes? Please explain (Elaborate the discussion by asking about how they feel and think about the personal characteristics of the fresh graduates, his or her culture, growth need strength and knowledge and skills as moderators affecting this relationship)

differences, core job dimensions and labor market conditions affecting the fresh graduates' retention. (R05): To provide practical recommendations for the retention of fresh graduates and practical recommendations for the Lebanese government employment retention strategies.		10	What do you think fresh graduates expect from work?
		11	What needs to be in place and which steps need to be taken for fresh graduates to be retained within your organization for an additional amount of years?
N/A	“Concluding Question”	12	Before we conclude this interview, do you have any additional comments you would like to add or any questions you would like to ask? (If no, thank you very much for your openness and willingness to share your time, knowledge and experiences with me).

3.7.2.2 The Process of Conducting Semi-Structured Interviews

Following the choice of semi-structured interviews to be conducted through face to face meetings as the data collection technique for this research study, in addition to the creation of the interview protocol and the pilot study, the data gathering procedure is evaluated in this section. The interviews were carried out with main respondents after their approval on the written invitation letter in the form of consent before conducting the interview. Nevertheless, when starting every interview, respondents were requested again to give their approval on recording the conversations (Miles & Huberman 1994).

The interview protocol was used as a guiding instrument for leading the discussion during the interview. The questions were easily understood as simple terminology was used (Patton, 1990) and clarifications were provided in case respondents faced any complexity in the comprehension of any query. The length of the interview was about 60 minutes. This duration is considered as the perfect time for an interview as states Jarrat (1996). Interviews were recorded using two digital recorders working in parallel in order to minimize the risk of disruption of any of the recorders. Then, interviews were transcribed. Transcriptions were applied in the 24 hours following the interview and remarks about the discussions were drafted immediately after the

end of each interview (Miles & Huberman, 1994). The interviews began with informal discussions with the respondents about their professions as well as their education in order to create a comforting ambiance enhancing trust and easy communication.

The interviews were conducted in English language as the respondents were fluent in practicing this language.

Finally, all main respondents were asked again for the permission to use their comments in the writing of this research study knowing that their personal details were strictly kept private. As a result, the data analysis phase detailed in the upcoming chapter, all respondents were referred to by a number for each one (i.e. respondent 1, respondent 2, etc.) so as to guarantee interviewees' anonymity and confidentiality.

3.7.2.3 Ethical Considerations

Knowing that ethics is one of the most important issues that are deemed as primordial when carrying out a research study (Sefiani, 2013), various ethical considerations were taken into account while asking respondents for permission, collecting data and analyzing and reporting results (*ibid.*). These considerations mainly concerned (1) the right for confidentiality, (2) the right for privacy, (3) the informed consent, and (4) the protection from harm (Alcadipani & Hodgson, 2009). Thus, in order to reduce ethical risks, all respondents were informed about the research subject prior to carrying out the interviews. In addition, a written informed consent was delivered before, including all the necessary information about the research subject (refer to Appendix E). Then, during and after conducting the research study, the respondents' right for confidentiality and privacy was ensured through keeping confidential all the respondents' identities and protecting the privacy of the research settings. It was made clear for all respondents that the data will be kept private and that the anonymity will be ensured especially about their identities which were not provided at any point in the research study. Interview transcripts were coded, data collection was conducted with strict confidence and all information was stored in a password protected file on the computer where the researcher only had access. Finally and in order to protect the respondents from any physical or psychological damage, they were informed that they can stop the interview at any time and for any reason and they can request to withdraw from the study whenever they wish to. In this context, an ethical approval to conduct the study was obtained from the Ethics Committee of the University of Nicosia.

3.7.2.4 Data analysis

Once the quantitative research is accomplished and the verification or the rejection of the hypotheses is done, the qualitative approach is then to be applied including the formulation of the research detailed questions.

The qualitative data analysis provided in this research aims to give a support in accordance with the quantitative data analysis adopted.

Knowing that the technique of in-depth, semi-structured interviews is to be adopted, all interviews were coded and quality checks were applied so as to improve the reliability and quality of the coding process. Indeed, a sample of the data was coded separately by the researcher and an independent researcher and then dissimilarities were resolved, thus amending the initial template consequently in addition to a continuous supervisory team control at all stages of the codification process, the template development and the data analysis. Finally, based on the outcomes of this research quantitative and qualitative data analysis, a final version of framework is then developed and practical recommendations are provided.

3.8 Chapter Summary

This chapter described the philosophical stand adopted in this research study and then provided a detailed analysis of the related ontology and epistemology and justification of the selection of Critical Realism (CR) as the study philosophical foundation. Then, it illustrated the research purpose and justified the reason of adopting quantitative and qualitative research approaches. Subsequently, the research design was detailed and the reason behind choosing the survey method as the research design for the quantitative methodology and the case study method as a research design for the qualitative methodology was explained. In addition, this chapter gave detailed information about the main respondents and illustrated the sample size, and procedures applied. Furthermore, the adoption of closed ended questions as the data gathering technique for the quantitative study was justified as well as the selection of semi-structured interviews as the data gathering technique for the qualitative study. Finally, data analysis was detailed followed describing the ethical guidelines applied throughout this research ensuring the anonymity and confidentiality of the respondents, protecting them from harm, and making sure they signed the informed consent.

Chapter 4

Testing the Validity and Reliability of the New Model

4.1 Introduction

This chapter first describes the pilot study conducted before the main data gathering for the quantitative research so as to test the content validity of the data gathering instrument before carrying out the actual study. Furthermore, the construct validity, internal consistency and reliability-Item Analysis are tested along with a presentation of the data collection, the questionnaire response rate and sample nature. In addition, this chapter illustrates the pilot study carried out before the main qualitative research data collection. In this context, the construct validity and reliability of this study are tested.

4.2 The Pilot Study for the Quantitative Research

Before the main data gathering for the quantitative research, a pilot study was conducted. The objective of this pilot study was to test the content validity of the data gathering instrument before carrying out the actual study so as to minimize the number of unexpected problems (Gliem & Gliem, 2003).

According to Tsanis (2013), a pilot study is the best way to improve the data gathering process in a research study. It is usually conducted for many reasons: (1) to verify if the questionnaire directives are being understood without any difficulty, (2) to determine the questions which might be misinterpreted or weakly structured, (3) to make sure that rating scales were correctly applied, (4) to identify the time needed for a questionnaire to be completely filled, (5) to get the respondents' feedback regarding the survey in general, (6) to conduct a preliminary reliability evaluation of measurements scales etc. (Merriam, 2009). In brief, a pilot study has many advantages which can be of great benefit for a research study (*ibid.*). These advantages are: (1) to provide early warning indications about where the big research study could probably not succeed (Merriam, 2009; Tsanis, 2013), (2) to help determine the full cost of the main research study (Bernstein, 2014), (3) to make sure that the chosen methods or techniques are suitable for the study and that research protocols can be followed (Breen, 2006).

Concerning the sample of the pilot study, various scholars (e.g., Robinson & Callan, 2001; Connelly, 2008) declare that a pilot study sample should be close to 10% of the main research

study sample while others (e.g., Leon et al., 2012) consider that a pilot sample size is instead based on the rationale of the researcher and the necessities for examining feasibility. Based on this latter point of view, the researcher contacted 252 fresh graduates chosen randomly to fill the pilot questionnaires for this research.

Besides, the respondents of the pilot study must have the same characteristics as the main respondents of the actual sample of the research study (Robinson & Callan, 2001). Thus, based on the aforementioned rationale, 227 fresh graduates were considered as eligible respondents and filled the questionnaire, before conducting the main study. After the completion of the questionnaire, each respondent in this pilot study provided feedback to the researcher about the clarity of the questionnaire.

4.2.1 Characteristics of Completed Questionnaires

The characteristics of the sample as shown in Table 4.1 show briefly that the mean age of the respondents was 26.96 years (SD 0.018) and ranged from 18 to 50 years old. The final sample included 227 respondents. The majority of these respondents were females (61.7%), in their twenties (80%) and single (76.2%).

Table 4.1: Characteristics of the Sample (n=227)

Demographic Variable	F	%	Mean	SD
Age (in years)			26.96	0.018
Age (grouped data)				
18 – 23	94	41.4		
24 – 29	90	39.6		
30 – 35	27	11.9		
36 – 40	11	4.8		
Over 40	5	2.2		
Gender				
Male	87	38.3		
Female	140	61.7		
Marital Status				
Single	173	76.2		
Married	44	19.4		
Other	10	4.4		
Number of Children				
No Children	193	85		
One	14	6.2		
Two	12	5.3		
Three or more	8	3.5		
Level of Education				
Bachelor's Degree	140	61.7		
Master's Degree	63	27.8		

PhD	15	6.6		
Other	9	4.0		
Type of Education				
Business Studies	95	41.9		
Medical Studies	18	7.9		
Engineering Studies	31	13.7		
Sciences Studies	26	11.5		
Technology Studies	16	7.0		
Arts and Social Sciences	31	13.7		
Others	10	4.4		
Language of Education				
Arabic	5	2.2		
French	87	38.3		
English	132	58.1		
Others	3	1.3		
Type of the Institution from which the fresh graduate graduated				
Private	187	82.4		
Public	40	17.6		
Time since graduation (in months)			19.9	1.15
Time since graduation (grouped data)				
Less than 6 months	46	20.3		
6 months – 12 months	30	13.2		
13 months – 18 months	19	8.4		
19 months – 24 months	29	12.8		
25 months – 30 months	15	6.6		
31 months – 36 months	88	38.8		
Social Class				
Lower Class	27	11.9		
Middle Class	182	80.2		
Upper Class	18	7.9		
Current Job position				
Worker	13	5.7		
Clerk/office administrator	81	35.7		
Supervisor/manager	57	25.1		
Teacher/ Academic	39	17.2		
Other	37	16.3		
First Job after Graduation				
Yes	121	53.3		
No	106	46.7		
Area of Employment				
Business Sector	86	37.9		
Medical Sector	23	10.1		
Engineering Sector	26	11.5		
Sciences Sector	10	4.4		
Technology Sector	17	7.5		
Arts and Social Sciences Sector	12	5.3		
Teacher/ Academia Sector	40	17.6		
Others	13	5.7		
Sector of Employment				
Public sector	34	15.0		
Private sector	193	85.0		
Employment at present position (in months)			12.68	0.024
Employment at present position (grouped data)				
Less than 6 months	72	31.7		
6 months – 12 months	44	19.4		
13 months – 18 months	20	8.8		

19 months – 24 months	91	40.1
Monthly Income		
Less than 500 USD	49	21.6
500 USD – 1 000 USD	80	35.2
1 000 USD – 2 000 USD	50	22.0
More than 2 000 USD	48	21.1

F, Frequency; %, Percentage; SD, Standard Deviation

Respondents were allowed to skip questions, however no missing data were yielded; therefore, the data always sum to 227. 61.7% of the respondents held a Bachelor degree. Concerning their major of education, the major distribution was to Business major degrees (41.9%) while as for the language of the study, there were considerably 58.1% of the respondents who completed their highest degrees in English language while 38.3% in French language. It is obvious to mention that respondents from the Lebanese public university represented 17.62% of the total sample size. Time since graduation ranged from less than 6 months up to three years (mean = 19.9 months, SD= 1.15) where 38.8% of the respondents have graduated three years ago and 33.5% less than one year ago. The respondents' work experience ranged from less than 6 months up to two years (mean = 19.9 months, SD= 1.15) where the majority had a work experience that doesn't exceed one year (51.1%). In consideration to the social class to which respondents belong, the majority of the respondents belong to the middle class (80.2%).

With regard to job position, there were considerably 35.7% of the respondents reporting clerk/office administration positions and 17.2% working as instructors while 25.1% holding supervisor/manager positions. 85% of the work positions belong to the private sector while only 15% belong to the public sector and these positions are distributed on different area of employment. These distributions are as follows: 37.9% of the work positions belong to the business sector while 17.6% belong to the educational sector, 11.5% belong to the engineering sector, 10.1% belong to the medical sector, and the remaining is distributed among sciences sector, technology sector and arts and social sciences sector. The majority of the respondents described their jobs as being the first job experience after graduation (53.3%). With regard to job related salaries, there were considerably more respondents reporting salaries that ranges between 500 USD and 1000 USD (35.2%) than respondents that reports salaries that range between 1000 USD and 2000 USD (22%) and more than 2000 USD (21.1%) while salaries that are less than 500 USD constitute only 21.6%.

4.2.2 Reflections from the Pilot Study Outcomes

This pilot study proved to be very useful and of a great value in various ways. The respondents were chosen according to the set of criteria (see section 3.6.6) for choosing the main respondents, in order to make sure that they are suitable for this research study in terms of enabling a valuable collection of information (Poulis et al., 2013).

As a result of the feedback received from the respondents, expert opinion and reliability check, the researcher noticed that respondents showed a great interest in the subject of study and no one mentioned the length of the questionnaire since from the beginning they were told that the phone call might take between fifteen and twenty minutes so that the questionnaire can be filled. Many respondents asked if there is a possibility to know the final results of the study and they all understood easily the questions and answered freely in English though many of them studied their highest degree in French. However, the pilot study revealed some few difficulties in relation to the data gathering procedure in terms of scheduling the time of the phone call for filling the questionnaire. For example, twenty five already set phone calls were not accomplished on time upon the request of the respondents and were rescheduled for a later time. This experience allowed the researcher to reflect on the appropriate time to be allocated for each interview and the best timing for conducting the phone calls (Corbetta, 2003; Li, 2014). In doing so, it was evident that a phone call approach was very useful for collecting as much information as possible, instead of other alternatives.

Furthermore, the researcher noticed that in Section 10 of the questionnaire, Question 11 related to the respondents' current position needed an additional option of "instructor" since many respondents were working as instructors and it would be inefficient to put their choice under "others" option. The same thing goes to Section 10; Question 13 for the area of employment, an option of "Academia" was missing and needed to be added.

Finally, the pilot study assisted in formulating the initial outline of the data analysis process.

Besides, knowing that the content validity of the original JDS has been examined and assessed by many scholars (Cleave, 1993; Lee-Ross, 1998; Morgeson & Campion, 2003; Morgeson et al., 2006; Morgeson & Humphrey, 2006; Rungtusanatham & Anderson, 1996; Vorster et.al., 2005) and knowing that JDS was hereby extended and modified, the questions were examined and reviewed by four experts. The panel of experts consented and agreed that MJDS-R reflected the

situation in the fresh graduates' labor market, meaning that the items were convenient, relevant and suitable to be examined on fresh graduates and it was of acceptable face validity.

4.3 Data Collection, Response Rates and Descriptive Statistics of the Sample

The target population of the study includes all the "fresh graduates" of Lebanon. For the purpose of the study "fresh" graduates are considered to be those who have graduated and completed the requirements to fulfill a University degree (Bachelor, Masters, PhD or other) in the past three years and whose work experience doesn't exceed the period of two years. Thirty one Lebanese universities were contacted and lists of graduated students for the last three years and their telephone numbers were fully retrieved. The data gathering followed a stratified random sampling technique which is a method that takes into consideration the characteristics of the population of the study (Malhotra, 2007). A representative sample of six Lebanese Universities was chosen: one public university and five other private universities chosen randomly, making sure that the unique Lebanese Public University which is known for its different curriculum of studies and its French language of study is part of the sample. 117 respondents were chosen randomly from each of these six Lebanese universities according to the random sampling technique. Using this stratified sampling technique, a well-diversified sample of fresh graduates was created, in terms of socio-demographic characteristics.

A total of 702 fresh graduates were contacted for survey participation, of whom 630 participants subsequently completed the survey, thus the actual response rate for the sample was 89.74%. The sample size of 630 was evaluated to be large enough, both considering the target population of fresh graduates from the thirty two Lebanese universities as well as through determination with G*Power, a sample size software, widely used for sample size calculation in various fields (Hemming et al., 2011).

These six hundred thirty students were distributed as follows:

- Lebanese University: One hundred thirteen respondents out of one hundred seventeen filled the questionnaire (three refused to answer and one still doesn't have any work experience).
- University of Balamand: One hundred ten respondents out of one hundred seventeen filled the questionnaire (five refused to answer and two still don't have any work experience).

- Holy Spirit University of Kaslik: One hundred three respondents out of one hundred seventeen filled the questionnaire (three work abroad, four still don't have any work experience and seven had an experience of more than two years which exceeded the limit to still be eligible to be considered as a fresh graduate).
- Saint Jospeh University: Ninety eight respondents out of one hundred seventeen filled the questionnaire (four refused to answer, six work abroad, five still don't have any work experience and four had an experience of more than two years which exceeded the limit to still be eligible to be considered as a fresh graduate).
- Lebanese American University: One hundred respondents out of one hundred seventeen filled the questionnaire (four refused to answer, four work abroad, five still don't have any work experience and four had an experience of more than two years which exceeded the limit to still be eligible to be considered as a fresh graduate).
- Saint Family University: One hundred six respondents out of one hundred seventeen filled the questionnaire (two refused to answer and nine still don't have any work experience).

As illustrated in Table 4.2, the highest response rate of 96.58% was achieved in the Lebanese University where one hundred thirteen filled completely their questionnaires. The next highest response rate was at the University of Balamand; this was 94.01%. Then come the Saint Family University with a response rate of 90.59% and the Holy Spirit University of Kaslik with a response rate of 88.03%. The Lebanese American University showed a response rate of 85.47%. The response rate of 83.76% at Saint Joseph University was the lowest as here only ninety eight questionnaires were fully filled.

Table 4.2: Rate of Respondents

University	Population	Sample	Percentage
The Lebanese University	117	113	96.58%
The University of Balamand	117	110	94.01%
The Holy Spirit University of Kaslik	117	103	88.03%
Saint Joseph University	117	98	83.76%
Lebanese American University	117	100	85.47%
Saint Family University	117	106	90.59%
Total	702	630	89.74%

With a view to better understand the sample structure, frequencies were calculated for demographic variables, namely gender, age, marital status, number of children, level of education, type of education, language of education, type of the institution from which fresh graduates graduated, time since graduation, social class, current job position and whether it is the first job after graduation, area of employment, sector of employment, years of current job experience and monthly income. Each of these variables was presented to the respondents in categorical ranges to guarantee anonymity. Refer to Table 4.3 for the categorical ranges of the respective demographic variables.

Table 4.3: Characteristics of the Sample (n= 630)

Demographic Variable	F	%	Mean	SD
Age (in years)			25.11	5.73
Age (grouped data)				
18 – 23	304	48.3		
24 – 29	217	34.4		
30 – 35	70	11.1		
36 – 40	27	4.3		
Over 40	12	1.9		
Gender				
Male	257	40.8		
Female	373	59.2		
Marital Status				
Single	488	77.5		
Married	118	18.7		
Other	24	3.8		
Number of Children				
No Children	545	86.5		
One	43	5.4		
Two	31	4.9		
Three or more	20	3.2		
Level of Education				
Bachelor's Degree	400	63.5		
Master's Degree	168	26.7		
PhD	36	5.7		
Other	26	4.1		
Type of Education				
Business Studies	264	41.9		
Medical Studies	58	9.2		
Engineering Studies	86	13.7		
Sciences Studies	69	11.0		
Technology Studies	45	7.1		
Arts and Social Sciences	76	12.1		
Others	32	5.1		
Language of Education				
Arabic	16	2.5		
French	230	36.5		
English	378	60.0		

Others	6	1.0		
Type of the Institution from which the fresh graduate graduated				
Private	517	82.1		
Public	113	17.9		
Time since graduation (in months)			20.9	8.14
Time since graduation (grouped data)				
Less than 6 months	115	18.3		
6 months – 12 months	79	12.5		
13 months – 18 months	66	10.5		
19 months – 24 months	74	11.7		
25 months – 30 months	69	11.0		
31 months – 36 months	227	36.0		
Social Class				
Lower Class	76	12.1		
Middle Class	493	78.3		
Upper Class	61	9.7		
Current Job position				
Worker	41	6.5		
Clerk/office administrator	214	34.0		
Supervisor/manager	142	22.5		
Teacher/ Academic	126	20.0		
Other	107	17.0		
First Job after Graduation				
Yes	360	57.1		
No	270	42.9		
Area of Employment				
Business Sector	234	37.1		
Medical Sector	70	11.1		
Engineering Sector	74	11.7		
Sciences Sector	30	4.8		
Technology Sector	45	7.1		
Arts and Social Sciences Sector	31	4.9		
Teacher/ Academia Sector	113	17.9		
Others	33	5.2		
Sector of Employment				
Public sector	127	20.2		
Private sector	503	79.8		
Employment at present position (in months)			11.83	6.38
Employment at present position (grouped data)				
Less than 6 months	206	32.7		
6 months – 12 months	142	22.5		
13 months – 18 months	84	13.3		
19 months – 24 months	198	31.4		
Monthly Income				
Less than 500 USD	98	15.6		
500 USD – 1 000 USD	266	42.2		
1 000 USD – 2 000 USD	156	24.8		
More than 2 000 USD	110	17.5		

F, Frequency; %, Percentage; SD, Standard Deviation

The final sample included 630 participants. The characteristics of the sample are shown in Table 3.2. The mean age of the respondents was 25.11 years (SD 5.73) and ranged from 18 to 50 years

old. The majority of these respondents were females (59.2%), in their twenties (81%) and single (77.5%).

63.5% of the respondents held a Bachelor degree. Concerning their major of education, most were related to Business (41.9%) while as for the language of study, there were considerably 60% of the respondents who completed their highest degrees in English language while 36.5% in French language. Respondents from the Lebanese public university represented 17.93% of the total sample size. Time since graduation ranged from less than 6 months up to three years (mean = 19.9 months, SD= 1.15).The respondents' work experience ranged from less than 6 months up to two years (mean = 20.9 months, SD= 8.14).

With regard to job position, there were considerably 34% of the respondents reporting clerk/office administration positions and 20% working as instructors while 22.5% holding supervisor/manager positions. 79.8% of the work positions belonged to the private sector while only 20.2% belonged to the public sector and these positions were distributed in different areas of employment. The majority of the respondents described their jobs as being the first job experience after graduation (57.1%). With regard to job related salaries, most respondents reported salaries that ranged between 500USD and 1000 USD (42.2%) (1 LBP = 0.00066 USD).

Cross tabulation of the respondents' years of job experience and time since graduation reveals that the sample is well qualified. This fact is attributed to the requirements set to be included in the sample.

4.4 The Process of Filling Questionnaires

Following the selection of phone call structured questionnaire with closed ended questions as the data collection technique for this research study, in addition to the development of the survey process and the pilot study, the data gathering process is analyzed in this section. The questionnaires were filled through phone calls with main respondents after their approval on the written invitation letter in the form of consent. The questions were clear, and simple terms and expressions were used (Patton, 1990). Whenever a complexity in understanding a question appeared, further explanations were offered in order to allow a better comprehension for the respondent. Also, during the phone call, further explanations were given when needed.

The length of the questionnaire ranged from 15 minutes up to a maximum of 20 minutes which was considered as acceptable by the majority of respondents.

Data gathered were entered within 24 hours to the SPSS program and comments which occurred mainly during the pilot stage were written down right after the end of each questionnaire (Miles & Huberman, 1994).

Finally, all main respondents welcomed the use of their answers in the final writing of the extant research. Furthermore, the personal information for each respondent was firmly protected. Therefore, concerning the data analysis phase detailed in the subsequent chapter, each respondent was identified by a number (i.e. respondent 1, respondent 2, etc.) in order to guarantee anonymity and confidentiality of the respondents.

4.5 Validity and Reliability for the Quantitative Research

4.5.1 Content Validity

The content validity of the original JDS has been examined and assessed by many scholars (Cleave, 1993; Lee-Ross, 1998; Morgeson & Humphrey, 2006; Rungtusanatham & Anderson, 1996; Vorster et.al., 2005). However, since the JDS was hereby extended and modified, the questions were examined and reviewed by four experts. The panel of experts consented and agreed that MJDS-R reflected the situation in the fresh graduates' labor market, meaning that the items were convenient, relevant and suitable to be examined on fresh graduates and it was of acceptable face validity.

4.5.2 The Individual Scale Items

For individual items, descriptive statistics (mean, standard deviation, skewness and kurtosis) were calculated for examining the variability of the answers and testing for significant deviations from normality. As per George and Mallery (2001), skewness and kurtosis values are considered as acceptable if between -1.5 and +1.5 and excellent if between -1 and +1. The highest mean value was of an item on the internal motivation subscale (item 2.2 in scale 5 – My opinion of myself goes up when I do this job well) with a mean of 6.1095 and a low standard deviation of 1.22081. This item showed marginal values of skewness and kurtosis as well. This verified that the majority of the responses were “mostly accurate” or “very accurate” as opposed to negative attitudes, but the values were within the acceptable range. Even though in many items of the 5

scales there were a slight tendency for positive attitudes (mostly accurate and very accurate, agree and agree strongly and satisfied and extremely satisfied), there were no extremely high positive or negative values of kurtosis and skewness for items with all values being in the acceptable range. As a result, no changes were deemed essential and all items of the 5 scales were included in the analysis as presented in Tables 4.5, 4.7, 4.9, 4.12 and 4.14.

4.5.3 Construct Validity, Internal Consistency and Reliability-Item Analysis

Construct validity was determined by Exploratory Factor Analysis (EFA) with Promax rotation using SPSS version 21.0 (SPSS, Inc., Chicago, IL, USA). EFA was used to uncover the fundamental structure of a pretty large set of variables and to identify the underlying relationships between measured variables. Principal components analysis (PCA) was the extraction method in EFA. The procedure used was similar to other studies of measuring construct validity (e.g., Bergian & Hertel, 2013; Papastavrou et al., 2011, 2016; Vizcaya-Moreno et al., 2015). The assumptions concerning the appropriateness of the data for factor analysis were checked for each of the five scales with regards to Kaiser-Mayer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity. The conditions for selecting subscales consist of *eigenvalues* being higher than 1 as well as the percentage of variance explained by the factors (*ibid.*).

Internal consistency, reliability of the scales and subscales of interest was examined with a number of reliability measures that are widely used in related studies of psychometric properties (e.g., Cronbach, 1971; Polit & Beck, 2011; Tsangari & Petro-Nustas, 2012). Such measures include Cronbach's alpha, item analysis, Cronbach's alpha if item deleted and item-to-total correlations. Values of Cronbach's alpha close to 1 show high internal consistency, where, based on rules-of-thumb, values higher than 0.65 are considered satisfactory (George & Mallery, 2001, 2010).

- *Scale 1 - Core Job Dimensions:*

Concerning scale 1 (core job dimensions), the KMO measure was equal to 0.855, larger than 0.5, showing high sampling adequacy. Bartlett's test of sphericity was significant ($p<0.001$), therefore eliminating the null hypothesis of an identity correlation matrix (Field, 2009). The results of EFA with Promax rotation showed that 11 subscales were extracted, which explained a total of 79.22% of the variance. The subscale with the highest eigenvalue and the highest

percentage of variance explained was “Decision Making and Autonomy” with an eigenvalue of 3.122 and an explanation of around 12% of the variance after rotation. The factor loadings in this subscale ranged from 0.716 to 0.790. The loadings in all the subscales of scale 1 were similarly satisfactory, higher than 0.5.

Subscale “Task Identity” was identical to the corresponding subscale of the original JDS. Similarly, to avoid single-item factors, which are not reliable statistically, items Q1.1 and Q1.4 were grouped together, thus creating the subscale “Skill Variety” exactly as in the original JDS. Grouping the two items together was statistically justified, since the two items had a significant correlation and the subscale had high internal consistency (e.g., Hadjibalasi et al., 2012; Hair et al., 2010; Mikhail & Petro-Nustas, 2001). Similarly, items Q1.13 and Q1.18 were also grouped together by EFA, thus creating the subscale “Work Benefits”. Two subscales, namely “Participation in Decision Making” and “Autonomy” of the original JDS, were grouped together, since the items loaded on one factor and their grouping made sense meaning-wise; the new subscale was named “Decision Making and Autonomy”. The two subscales of the original JDS, “Task Significance” (Q1.5 and Q1.10) and “Feedback from Job” (Q1.3 and Q1.8) were also grouped together and the new subscale was thus named “Job significance and feedback”. The remaining subscales were newly added, included only in the revised instrument MJDS-R, and showed high loadings by EFA.

Summing up, the final structure of Scale 1 was as follows: subscale 1 - decision making and autonomy (four items: Q1.6, Q1.9, Q1.11 and Q1.16); subscale 2 – Job significance and feedback(four items: Q 1.3, Q1.5, Q1.8 and Q1.10); subscale 3 – promotion (two items: Q1.19 and Q1.21); subscale 4 – working conditions (two items: Q1.25 and Q1.26); subscale 5 – work load (two items: Q1.12 and Q1.17); subscale 6 – technology use (two items: Q1.15 and Q1.23); subscale 7 – physical effort (two items: Q1.14 and Q1.20); subscale 8 – social environment (two items: Q1.22 and Q1.24); subscale 9 – task identity (two items: Q1.2 and Q1.7); subscale 10 – skill variety (two items: Q1.1 and Q1.4); and subscale 11 – work benefits (two items: Q1.13 and Q1.18). All items of the new subscale structure loaded significantly onto their respective subscales with loadings ranging from 0.520 to 0.906. All indicators had moderate to large standardized loadings, meaning that the items were reliable indicators of their corresponding factors. No missing data existed in any item. All the results from EFA appear in Table 4.4.

Table 4.4: Exploratory Factor Analysis of Scale 1, Core Job Dimensions (n= 630)

Core Job Dimensions	Subscale 1 Decision Making	Subscale 2 Job Significance & Autonomy	Subscale 3 Promotion & Feedback	Subscale 4 Working Conditions	Subscale 5 Work Load	Subscale 6 Technology Use	Subscale 7 Physical Efforts	Subscale 8 Social Environment	Subscale 9 Task Identity	Subscale 10 Skill Variety	Subscale 11 Work Benefits
1.6	.774										
1.9	.790										
1.11	.717										
1.16	.716										
1.3		.837									
1.5		.781									
1.8		.753									
1.10		.520									
1.19		.836									
1.21		.867									
1.25			.854								
1.26			.882								
1.12				.752							
1.17				.703							
1.15					.778						
1.23					.815						
1.14						.806					
1.20						.799					
1.22							.788				
1.24							.776				
1.2								.719			
1.7								.678			
1.1									.822		
1.4									.906		
1.13										.894	
1.18										.791	
Eigenvalues (After Rotation)	3.122	2.954	2.257	1.769	1.702	1.659	1.608	1.596	1.407	1.336	1.190
% of Variance Explained (total = 79.229%) (After Rotation)	12.008	11.161	8.182	6.805	6.547	6.381	6.184	6.138	5.410	5.338	5.075

The Items are grouped on each corresponding factor according to the strength of their loadings.

As results showed, the reliability of scale 1 (Cronbach's alpha 0.901), as well as of the 11 subscales of scale 1, was found to be highly satisfactory. All the results are presented in Table 4.5.

Item analysis showed that if any item was to be deleted from the scale, the alpha turned to be slightly lower or approximately the same as compared to when all items were included, meaning that all items were considered reliable and were thus retained in the corresponding scale.

Corrected item-to-scale correlations varied from 0.321 to 0.745 showing that individual items were well correlated with the other items in the scale. The corrected item-to-scale correlations and Cronbach's alpha if item is deleted are presented in Table 4.5.

Table 4.5: Descriptives, Internal Consistency and Reliability for Scale 1, Core Job Dimensions

Item	Mean	Std. Deviation	Skewness	Kurtosis	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Scale 1: Core Job Dimensions, 11 sub-scales, 26 items, Cronbach's alpha 0.901						
Skill Variety, 2 items, Cronbach's alpha 0.571						
Q 1.1	5.0889	1.59741	-.906	.111	.326	.901
Q1.4	6.0413	1.54356	-1.508	1.430	.404	.901
Task Identity, 2 items, Cronbach's alpha 0.757						
Q1.2	5.0714	1.78929	-.649	-.721	.498	.897
Q1.7	5.5222	1.62609	-1.074	.347	.578	.896
Job Significance and Feedback, 4 items, Cronbach's alpha 0.836						
Q1.3	5.3270	1.54356	-.901	.196	.689	.783
Q1.5	5.6635	1.52804	-1.253	1.088	.704	.776
Q1.8	5.7016	1.45952	-1.433	1.462	.670	.792
Q1.10	5.4238	1.56260	-1.038	.428	.609	.819
Decision Making and Autonomy, 4 items, Cronbach's alpha 0.868						
Q1.6	5.1032	1.93137	-.829	-.511	.744	.822
Q1.9	4.7413	1.89503	-.565	-.767	.685	.845
Q1.11	4.8349	1.92665	-.593	-.894	.745	.821
Q1.16	4.5556	1.98786	-.475	-.984	.704	.838
Work Load, 2 items, Cronbach's alpha 0.742						
Q1.12	4.8349	1.92665	-.593	-.894	.479	.898
Q1.17	4.4492	1.77147	-.297	-.941	.517	.897
Work Benefits, 2 items, Cronbach's alpha 0.478						
Q1.13	3.8556	2.46045	.111	-1.434	.412	.900
Q1.18	4.7968	2.21212	-.507	-1.259	.422	.899
Physical Effort, 2 items, Cronbach's alpha 0.643						
Q1.14	3.1810	1.94085	.476	-1.045	.475	.901
Q1.20	3.3429	1.81407	.332	-1.068	.415	.899
Technology Use, 2 items, Cronbach's alpha 0.682						
Q1.15	5.6063	1.91902	-1.178	0.071	.400	.899
Q1.23	4.8619	1.87655	-.523	-.854	.443	.899
Promotion, 2 items, Cronbach's alpha 0.936						
Q1.19	3.6143	2.29234	.102	-1.485	.584	.895
Q1.21	3.7159	2.21433	.024	-1.499	.625	.894
Social Environment, 2 items, Cronbach's alpha 0.691						
Q1.22	4.4222	2.09614	-.408	-1.239	.489	.898
Q1.24	3.5778	1.87006	.022	-1.234	.481	.898
Working Conditions, 2 items, Cronbach's alpha 0.777						
Q1.25	5.0270	1.96574	-.925	-.464	.377	.900
Q1.26	4.4111	2.13254	-.503	-1.217	.321	.901

- *Scale 2 - Experienced Psychological States:*

Tests for sampling adequacy of scale 2 (experienced psychological states) showed that KMO measure was equal to 0.749 (larger than 0.5). Bartlett's test of sphericity was significant ($p<0.001$), eliminating the null hypothesis of an identity correlation matrix (Field, 2009). Through applying EFA with Promax rotation, results showed that five subscales were extracted, which explained a total of 58.79% of the variance. The subscale with the highest eigenvalue and the highest percentage of variance explained was "self-confidence" with an eigenvalue of 2.974 and an explanation of around 16.52% of the variance after rotation. The factor loadings in this subscale ranged from 0.755 to 0.886. The loadings in all the subscales of scale 2 were similarly satisfactory, higher than 0.5. The only exceptions were for "prestige inside outside" which

included two items of less than 0.5 and “knowledge of results” which included one item of less than 0.5. However, the three aforementioned items showed high correlation with the other items of the subscale to which they belonged and deleting these items resulted in a lower Cronbach’s alpha, thus it was not deemed necessary to delete them.

Subscale 1 (self-confidence) is a new factor formed of the combination of items 4.4, 4.5, 4.6 and 4.7, which had high loadings, high reliability and they fitted in terms of meaning. As for subscale 2 (experienced meaningfulness of the work), item 4.6 was moved to subscale 1 since it had a low loading (0.139) and not significant correlation with other items ($r=0.011$, $p=0.779$). Items 2.4 and 4.3 were deleted as well, since Cronbach’s alpha was greater if deleted and had low loadings, while items 2.16 and 2.18 were added since they fitted in terms of meaning, they showed high loadings and Cronbach’s alpha was lower if deleted. It should be mentioned that these two items belonged to “self-esteem” in MJDS-R, but this subscale was not extracted from EFA. Subscale 3 “prestige inside outside” is a newly added subscale which loaded satisfactorily. Subscale 4 is “knowledge of results”. It had two items (2.5 and 4.5) that were deleted for their low loadings and low reliability and three items (4.3, 4.11 and 4.14) that were added due to their high reliability and loadings, and which also matched conceptually. Finally, concerning the fifth subscale (experienced responsibility for the work), the name of the subscale was kept the same including two items of the corresponding JDS subscale (2.12 and 2.15) while item 2.1 was deleted (low loadings in all subscales, higher reliability if deleted and low item-to-total correlation, 0.040). Item 2.8 was deleted as well because Cronbach’s alpha was greater if deleted, while items 4.4 and 4.7 were moved to subscale 1.

As a result, the final structure of scale 2 was as follows: subscale 1 –self-confidence (four items: Q4.4, Q4.5, Q4.6 and Q4.7); subscale 2 – experienced meaningfulness of the work(three items: Q 2.7, Q2.16 and Q2.18); subscale 3 – prestige inside outside (four items: Q4.12, Q4.13, Q2.17 and Q2.19); subscale 4 – knowledge of results (five items: Q2.11, Q4.3, Q4.10, Q4.11 and Q4.14) and subscale 5 – experienced responsibility for the work (two items: Q2.12 and Q2.15). All items of the new subscale structure loaded significantly onto their respective subscale with loadings ranging from 0.417 to 0.886. All indicators had moderate to large standardized loadings (i.e. correlations with factors), meaning that the items were reliable indicators of their corresponding factors. No missing data existed in any item. All the results (factor loadings of each item in scale 2, eigenvalues and % of variance explained) appear in Table 4.6.

Table 4.6: Exploratory Factor Analysis of Scale 2, Experienced Psychological States (n= 630)

Psychological States	Subscale 1 Self Confidence	Subscale 2 Experienced Meaningfulness of the Work Outside	Subscale 3 Prestige Inside	Subscale 4 Knowledge of Results	Subscale 5 Experienced Responsibility for the Work
4.4	.886				
4.5	.803				
4.6	.755				
4.7	.817				
2.7		.753			
2.16		.689			
2.18		.660			
4.13		.761			
4.12		.793			
2.17		.392			
2.19		.483			
2.11			.564		
4.3			.702		
4.10			.615		
4.11			.675		
4.14			.417		
2.12				.801	
2.15				.764	
Eigenvalues (After Rotation)	2.974	2.302	1.990	1.912	1.406
% of Variance Explained (total = 58.797%) (After Rotation)	16.520	12.789	11.054	10.625	7.809

The Items are grouped on each corresponding factor according to the strength of their loadings.

As shown in Table 6, the reliability of scale 2 was found to be satisfactory (cronbach's alpha 0.656) and ranged from 0.239 ("knowledge of results") to 0.846 ("Self-confidence").

Item analysis showed that if any item was to be deleted from the scale, the alpha turned to be a little lower or just about the same as compared to when all items were included, thus all the items were retained.

Corrected item-to-scale correlations for scale 2 showed some values that were lower than 0.3. Although according to most literature (Polit & Beck, 2011), the corrected item-total correlation should be > 0.3 , items with corrected item-total correlations of about .2 are also considered to be valuable when the scale studied is rather short and the item contributes to content validity which is true for these subscales (Linley et.al., 2007). Besides, Clark and Watson (1991) considered a low inter item correlation within the range of .15 to .20 to be acceptable for scales that measure broad characteristics, as is the case of this scale. The corrected item-to-scale correlations and Cronbach's alpha if item is deleted are presented in Table 4.7.

Table 4.7: Descriptives, Internal Consistency and Reliability for Scale 2, Experienced Psychological States

Item	Mean	Std. Deviation	Skewness	Kurtosis	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Scale 2: Experienced Psychological States, 5 sub-scales, 17 items, Cronbach's alpha 0.656						
Experienced Meaningfulness of the Work, 3 items, Cronbach's alpha 0.552						
Q2.7	5.5079	1.51172	-1.010	.466	.294	.552
Q2.4	5.5079	1.50857	-.867	-.145	.402	.390
Q4.3	4.8190	1.60156	-.462	-.872	.397	.395
Experienced Responsibility of the Work, 3 items, Cronbach's alpha 0.484						
Q2.12	5.2524	1.55701	-.823	-.017	.336	.331
Q2.15	5.7524	1.31602	-.1459	1.125	.346	.311
Q4.13	5.0333	1.15994	-.059	-.442	.241	.481
Knowledge of Results, 3 items, Cronbach's alpha 0.239						
Q2.5	5.3937	1.46087	-.1324	1.461	.163	.247
Q2.11	5.1333	1.68166	-.829	-.317	.187	.196
Q4.10	4.2222	1.35502	-.220	.194	.169	.236
Prestige Inside Outside, 4 items, Cronbach's alpha 0.535						
Q2.17	4.6794	1.53042	-.422	-.379	.388	.400
Q2.19	5.1825	1.39269	-.690	.161	.442	.352
Q4.12	5.0397	1.28462	-.431	-.183	.383	.413
Q4.14	4.1619	1.22344	-.098	-.431	.196	.624
Self-Confidence, 4 items, Cronbach's alpha 0.846						
Q4.4	4.9175	1.55437	-.1116	.561	.796	.753
Q4.5	4.8508	1.36384	-.1113	1.253	.672	.811
Q4.6	4.8222	1.49407	-.864	-.018	.610	.834
Q4.7	4.7698	1.67447	-.913	-.195	.669	.813

- *Scale 3 - Labor Market Conditions:*

Scale 3 (labor market conditions) is a totally new scale, that is included only in the revised instrument, MJDS-R. The KMO measure of this scale was equal to 0.741, larger than 0.5, indicating that the sample is highly adequate and that data were suitable for factor analysis and Bartlett's test of sphericity was significant ($p<0.001$), thus excluding the null hypothesis of an identity correlation matrix (Field, 2009). EFA with Promax rotation was applied and the results showed that eight subscales were extracted, which explained a total of 83.39% of the variance. The subscale "Educational and Labor Market Gap" had the highest eigenvalue (2.637) and the highest percentage of variance explained after rotation (16.48%) where factor loadings ranged from 0.716 to 0.836. The loadings in all the subscales of scale 3 were correspondingly very high (all were higher than 0.5) and therefore satisfactory.

All items loaded significantly onto their respective subscales and the subscale structure was as follows: subscale 1 – educational and labor market gap (two items: Q7.9 and Q7.16); subscale 2 – formal and informal jobs (two items: Q7.8 and Q7.12); subscale 3 – foreign and national workers (two items: Q7.7 and Q7.15); subscale 4 – geographical location (two items: Q7.1 and

Q7.5); subscale 5 – labor status (two items: Q 7.3 and Q7.11); subscale 6 – Unionization (two items: Q7.2 and Q7.10); subscale 7 – private and public sector (two items: Q7.6 and Q7.14) and subscale 8 – job matching (two items: Q7.4 and Q7.13) with loadings ranging from 0.664 to 0.940. All indicators had large standardized loadings meaning that the items were reliable indicators of their corresponding factors. No missing data existed in any item. All the results (factor loadings of each item in labor market conditions, eigenvalues and % of variance explained) appear in Table 4.8.

Table 4.8: Exploratory Factor Analysis of Scale 3, Labor Market Conditions (n= 630)

Laor Market Conditions	Subscale 1 Educational & Labor Market Gap	Subscale2 Formal & Informal Sector	Subscale3 Foreign & National Workers	Subscale 4 Geographical Location	Subscale5 Labor Status	Subscale 6 Unionization	Subscale7 Private & Public Sector	Subscale 8 Job Matching
7.9	.836							
7.16		.716						
7.8			.819					
7.12				.830				
7.7					.867			
7.15						.848		
7.1							.916	
7.5							.919	
7.3								.830
7.11								.886
7.2								.855
7.10								.745
7.6								
7.14								.752
7.4								.890
7.13								
Eigenvalues (After Rotation)	2.637	1.785	1.785	1.746	1.622	1.532	1.278	1.185
% of Variance Explained (Total = 83.397%) (After Rotation)	16.483	11.157	10.985	10.912	10.139	9.576	7.987	6.157

The Items are grouped on each corresponding factor according to the strength of their loadings.

The reliability of scale 3 was satisfactory as well (Cronbach's alpha 0.782) and ranged from 0.603 ("Unionization") to 0.869 ("Formal and Informal Jobs"). All the results are presented in Table 4.9.

Item analyses showed that all items add to the high reliability of the scale and were kept in the analysis.

Corrected item-to-scale correlations for scale 3 showed some values lower than 0.3 but were considered acceptable (Clark & Watson, 1991; Linley et.al., 2007). The corrected item-to-scale correlations and Cronbach's alpha if item is deleted are presented in Table 4.9.

Table 4.9: Descriptives, Internal Consistency and Reliability for Scale 3, Labor Market Conditions

Item	Mean	Std. Deviation	Skewness	Kurtosis	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Scale 3: Labor Market Conditions, 8 sub-scales, 16 items, Cronbach's alpha 0.782						
Geographical Location, 2 items, Cronbach's alpha 0.829						
Q7.1	5.4889	1.57858	-1.182	.739	.783	.710
Q7.5	5.4397	1.62219	-1.138	.556	.242	.708
Unionization, 2 items, Cronbach's alpha 0.603						
Q7.2	5.8095	1.55203	-1.503	1.506	.310	.706
Q7.10	5.7619	1.27236	-1.595	1.135	.455	.693
Labor Status, 2 items, Cronbach's alpha 0.670						
Q7.3	5.1524	1.56744	-.825	.059	.253	.712
Q7.11	5.0746	1.78649	-.616	-.691	.201	.718
Job Matching, 2 items, Cronbach's alpha 0.778						
Q7.4	6.0984	1.13472	-1.231	1.781	.542	.689
Q7.13	6.0111	1.25768	-1.588	1.569	.587	.709
Private and Public Sector, 2 items, Cronbach's alpha 0.851						
Q7.6	4.9333	1.58551	-.690	-.079	.190	.714
Q7.14	4.8032	1.60860	-.367	-.600	.189	.759
Foreign and National Workers, 2 items, Cronbach's alpha 0.795						
Q7.7	4.7794	1.57602	-.473	-.226	.413	.692
Q7.15	4.6698	1.47546	-.378	.021	.417	.692
Formal and Informal Jobs, 2 items, Cronbach's alpha 0.869						
Q7.8	5.5095	1.38436	-.860	.416	.592	.679
Q7.12	5.2984	1.48864	-.811	.253	.581	.678
Educational and Labor Market Gap, 2 items, Cronbach's alpha 0.708						
Q7.9	5.6619	1.49986	-1.234	.811	.527	.687
Q7.16	5.8460	1.29697	-1.543	1.408	.602	.680

- *Scale 4 - Individual Differences:*

As for scale 4 (individual differences), data proved to be appropriate for factor analysis, given that the KMO measure was higher than 0.5 and equaled to 0.847. Bartlett's test of sphericity proved to be significant ($p<0.001$), hence eliminating the null hypothesis of an identity correlation matrix (Field, 2009). EFA with Promax rotation results showed that four subscales were extracted, which explained a total of 48.19% of the variance. The subscale "Skill and Knowledge" had the highest eigenvalue (4.392) and the highest percentage of variance explained (15.14%) after rotation in addition to factor loadings ranging from 0.851 to 0.884. The loadings in all the subscales of scale 4 were in the same way very high and thus acceptable, all being higher than 0.5 except for "context satisfaction" and "growth need strength (job choice format)" which included items with loadings of less than 0.5. However, based on the large sample size and the fact that all these items showed a high correlation with the other items of the subscale to which they belonged and deleting these items resulted in a lower Cronbach's alpha, it was not deemed necessary to delete any item. Subscale 1 (skill and knowledge), subscale 2 (context satisfaction) and subscale 3 (growth need strength – would like format) loaded high as expected

while subscale 4 (growth need strength – job choice format) had all its items loading acceptably except items 6.6 and 6.12 which had very low loadings on all factors and low item-to-total correlation and thus were deleted.

As a result, the new subscale structure of the scale 4 is as follows: subscale 1 – skill and knowledge (three items: Q3.15, Q3.16 and Q3.17); subscale 2 – context satisfaction (ten items: Q3.1, Q3.2, Q3.4, Q3.5, Q3.7, Q3.8, Q3.9, Q3.11, Q3.12 and Q3.14); subscale 3 – growth need strength would like format (six items: Q5.2, Q5.3, Q5.6, Q5.8, Q5.10 and Q5.11) and subscale 4 – growth need strength job choice format (ten items: Q6.1, Q6.2, Q6.3, Q6.4, Q6.5 , Q6.7 , Q6.8 , Q6.9 , Q6.10 and Q6.11). All items of the new subscale structure loaded significantly onto their respective subscales with loadings ranging from 0.225 to 0.862. All indicators had moderate to large standardized loadings (i.e. correlations with factors), meaning that the items were reliable indicators of their corresponding subscales. No missing data existed in any item. All the results (factor loadings of each item in scale 4, eigenvalues and % of variance explained) appear in Table 4.10.

Table 4.10: Exploratory Factor Analysis of Scale 4 Individual Differences (n= 630)

Individual Differences Items	Subscale 1 Skill & Knowledge	Subscale 2 Context Satisfaction	Subscale 3 Growth Need Strength (Would Like Format)	Subscale 4 Growth Need Strength (Job Choice Format)
3.15	.862			
3.16	.884			
3.17	.851			
3.1		.606		
3.11		.756		
3.2		.829		
3.9		.859		
3.4		.680		
3.7		.452		
3.12		.395		
3.5		.666		
3.8		.752		
3.14		.570		
5.2			.692	
5.3			.760	
5.6			.678	
5.8			.655	
5.10			.698	
5.11			.714	
6.1				.559
6.2				.374
6.3				.303
6.4				.319
6.5				.357
6.7				.665
6.8				.249
6.9				.673
6.10				.225
6.11				.398
Eigenvalues (After Rotation)	4.392	4.258	3.200	2.125
% of Variance Explained (total = 48.19%) (After Rotation)	15.146	14.682	11.034	7.328

The Items are grouped on each corresponding factor according to the strength of their loadings.

Furthermore, it should be mentioned that subscale 3 (context satisfactions) of scale 4 had four short subscales (satisfaction with supervision, satisfaction with co-workers, satisfaction with compensation and satisfaction with job security) and they all loaded high and were identical to the corresponding subscales of the original JDS.

As a result, the final structure of “context satisfaction” is as follows: subscale 1 – satisfaction with supervision (three items: Q3.5, Q3.8 and Q3.14); subscale 2 – satisfaction with co-workers (three items: Q 3.4, Q3.7 and Q3.12); subscale 3 – satisfaction with compensation (two items: Q3.2 and Q3.9) and subscale 4 – satisfaction with job security (two items: Q3.1 and Q3.11). All items of the new subscale structure loaded significantly onto their respective subscales with loadings ranging from 0.578 to 0.889. All indicators had moderate to large standardized loadings (i.e. correlations with factors), meaning that the items were reliable indicators of their

corresponding factors. All the results (factor loadings of each item in context satisfaction, eigenvalues and % of variance explained) appear in Table 4.11.

Table 4.11: Exploratory Factor Analysis of the Subscale Context Satisfaction (n= 630)

Context Satisfaction Items	Subscale 1 Satisfaction with Supervision	Subscale 2 Satisfaction with Co-Workers	Subscale3 Satisfaction with Compensation	Subscale 4 Satisfaction with Job Security
3.5	.710			
3.8	.728			
3.14	.889			
3.4		.578		
3.7		.814		
3.12		.887		
3.2			.843	
3.9			.877	
3.1				.873
3.11				.657
Eigenvalues (After Rotation)	2.382	2.240	2.058	1.564
% of Variance Explained (total = 82.435%) (After Rotation)	23.816	22.398	20.585	15.636

The Items are grouped on each corresponding factor according to the strength of their loadings.

Results showed that the reliability of scale 4 was satisfactory (Cronbach's alpha 0.766) and ranged from 0.511 ("Individual Growth Need Strength - Job Choice Format") to 0.915 ("Context Satisfaction"). All the results are presented in Table 4.12.

Item analysis proved that if any item was to be removed from the scale, the alpha became somewhat lesser or approximately equal to when all items were included, which signified that removing any item did not significantly modify the overall reliability and that all items were necessary to the high reliability of the scale.

It should be mentioned that the corrected item-to-scale correlations for scale 4 showed some values that are lower than 0.3 but as mentioned before according to literature (Clark & Watson, 1991; Linley et.al., 2007), this can be considered as satisfactory. The corrected item-to-scale correlations and Cronbach's alpha if item is deleted are presented in Table 4.12.

Table 4.12: Descriptives, Internal Consistency and Reliability for Scale 4, Individual Differences

Item	Mean	Std. Deviation	Skewness	Kurtosis	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Scale 4: Individual Differences, 4 sub-scales, 31 items, Cronbach's alpha 0.766						
Skill and Knowledge, 3 items, Cronbach's alpha 0.905						
Q3.15	5.1429	1.57138	-.980	.256	.836	.844
Q3.16	5.2571	1.50481	-.980	.356	.878	.806
Q3.17	5.4540	1.39734	-1.115	.886	.729	.901
Context Satisfaction, 10 items, Cronbach's alpha 0.915						
Q3.1	4.5286	1.76117	-.332	-.906	.648	.902
Q3.11	4.2000	1.76199	-.396	-.842	.772	.901
Q3.2	3.8206	1.82925	-.035	-1.160	.669	.901
Q3.9	3.8778	1.74956	-.116	-.975	.668	.901
Q3.4	4.6889	1.79162	-.581	.577	.731	.901
Q3.7	4.9032	1.67042	-.731	-.341	.665	.902
Q3.12	4.9397	1.67546	-.745	-.152	.611	.901
Q3.5	5.0032	1.72238	-.717	-.467	.725	.900
Q3.8	4.5444	1.93465	-.573	-.865	.756	.901
Q3.14	4.6619	1.65986	-.650	-.394	.602	.902
Individual Growth Need Strength (Would Like Format), 6 items, Cronbach's alpha 0.796						
Q5.2	5.3984	1.78716	-.848	-.259	.531	.769
Q5.3	5.4000	1.67047	-.839	.025	.601	.753
Q5.6	5.9937	1.59987	-1.597	1.553	.536	.768
Q5.8	5.4587	1.86441	-1.049	.074	.520	.773
Q5.10	6.0857	1.38432	-1.341	.999	.566	.764
Q5.11	5.6190	1.83439	-1.005	-.128	.566	.761
Individual Growth Need Strength (Job Choice Format), 10 items, Cronbach's alpha 0.511						
Q6.1	3.3046	2.31287	.491	-1.326	.287	.460
Q6.2	4.7667	2.18726	-.553	-1.153	.192	.492
Q6.3	5.2673	2.17492	-.911	-.659	.150	.506
Q6.4	4.1929	1.38285	-.062	-.353	.153	.501
Q6.5	3.5667	1.52650	.293	-.289	.191	.493
Q6.7	4.1714	2.26783	-.148	-1.487	.399	.420
Q6.8	3.5929	1.60772	.425	-.302	.150	.511
Q6.9	4.5857	2.19910	-.301	-.1414	.364	.434
Q6.10	3.3405	1.50976	.045	-.500	.151	.509
Q6.11	4.5595	2.03116	-.348	-1.132	.188	.503

- *Scale 5 - Personal/Work Outcomes:*

Sampling adequacy measures were satisfactory for scale 5(personal/work outcomes), with KMO measure equal to 0.798 (larger than 0.5) and Bartlett's test of sphericity with $p<0.001$. As per EFA with Promax rotation, results showed that five subscales were extracted, which explained a total of 56.98% of the variance. "Growth Satisfaction" had the highest eigenvalue (2.923) and the highest percentage of variance explained (13.28%) after rotation. Its factor loadings ranged from 0.641 to 0.832. It should be mentioned that the subscale "general satisfaction" had three items of loadings less 0.5 while subscales "internal motivation" and "high commitment" had one item each of loadings less than 0.5. However, all these items proved to have a high correlation with the other items of the subscale to which they belong and deleting these items resulted in a lower Cronbach's alpha, thus it was obvious to keep them all.

Subscale 1 (growth satisfaction) was identical to the corresponding subscale in the original JDS. Subscale 2 (general satisfaction) included all the expected items except item 2.13 which moved to subscale 5 where it loaded better and fit best in terms of reliability. Items 4.16 and 4.18 were removed from subscale 5 and added to subscale 2 (better fit meaning-wise, high loadings, higher reliability). Subscale 3 (internal motivation) had two of its original items loading high and had three new items (2.20, 2.24 and 2.25) that were removed from the subscale “high involvement” which didn’t show in factor loadings and thus was deleted. Subscale 4 (high work effectiveness) had all its expected items except item 4.17 which loaded on many subscales and lowered reliability and thus was deleted and item 4.15 which was moved to subscale 5. Subscale 5 is a new factor named “high commitment” which included items 2.13, 4.1, 4.9 and 4.15 that loaded high and showed high reliability as well. This subscale replaced “high involvement “of MJDS-R.

As a result, the final structure of scale 5 (personal/work outcomes) was as follows: subscale 1 – growth satisfaction (four items: Q3.3, Q3.6, Q3.10 and Q3.13); subscale 2 – general satisfaction (six items: Q 2.3, Q2.9, Q4.2, Q4.8, Q4.16 and Q4.18); subscale 3 – internal motivation (five items: Q2.2, Q2.6, Q2.20, Q2.24 and Q2.25); subscale 4 – high work effectiveness (three items: Q2.21, Q2.22 and Q2.23) and subscale 5 – high commitment (four items: Q2.13, Q4.1, Q4.9 and Q4.15).

All items of the new subscale structure loaded significantly onto their respective subscales with loadings ranging from 0.331 to 0.855. All indicators had moderate to large standardized loadings, meaning that the items were reliable indicators of their corresponding factors.

No missing data existed in any item. All the results (factor loadings of each item in personal/work outcomes, eigenvalues and % of variance explained) appear in Table 4.13.

Table 4.13: Exploratory Factor Analysis of Scale 5 Personal/Work Outcomes (n= 630)

Personal/Work Outcomes Items	Subscale 1 Growth Satisfaction	Subscale 2 General Satisfaction	Subscale 3 Internal Motivation	Subscale 4 High Work Effectiveness	Subscale 5 High Commitment
3.3	.786				
3.6	.799				
3.10	.641				
3.13	.832				
2.3		.431			
2.9		.469			
4.2		.417			
4.8		.536			
4.16		.829			
4.18		.855			
2.2			.362		
2.6			.577		
2.20			.631		
2.24			.580		
2.25			.666		
2.21				.804	
2.22				.847	
2.23				.720	
2.13					.331
4.1					.755
4.9					.506
4.15					.623
Eigenvalues (After Rotation)	2.923	2.880	2.581	2.226	1.927
% of Variance Explained (total = 56.983%) (After Rotation)	13.287	13.091	11.730	10.116	8.760
The Items are grouped on each corresponding factor according to the strength of their loadings.					

Scale 5 proved to have high reliability (Cronbach's alpha 0.851) and it ranged from 0.512 ("High Commitment") to 0.839 ("Growth Satisfaction"). All the results are presented in Table 13.

It should be mentioned that Item analysis proved that all the items contributed to the high reliability of the scale since if any item was to be deleted from the scale, the alpha turned to be more or less lower or exactly equal to when all items were included. Corrected item-to-scale correlations showed some values lower than 0.3 but were considered satisfactory (Clark & Watson, 1991; Linley et.al., 2007). The corrected item-to-scale correlations and Cronbach's alpha if item is deleted are presented in Table 4.14.

Table 4.14: Descriptives, Internal Consistency and Reliability for Scale 5, Personal/Work Outcomes

Item	Mean	Std. Deviation	Skewness	Kurtosis	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Scale 5: Personal/Work Outcomes, 5 sub-scales, 22 items, Cronbach's alpha 0.851						
General Satisfaction, 6 items, Cronbach's alpha 0.750						
Q2.3	5.0365	1.52570	-1.048	.446	.508	.710
Q2.9	4.4302	1.96408	-.306	-1.033	.473	.726
Q4.2	4.4190	1.39917	-.244	-.599	.401	.737
Q4.8	3.8254	1.48377	.299	-.604	.341	.752
Q4.16	4.8524	1.53873	-1.067	.449	.621	.679
Q4.18	4.8254	1.54467	-1.015	.258	.626	.677
Internal Motivation, 5 items, Cronbach's alpha 0.667						
Q2.2	6.1095	1.22081	-1.451	1.596	.240	.689
Q2.6	5.9365	1.35183	-1.566	1.502	.280	.679
Q2.20	5.5508	1.34618	-1.281	1.349	.430	.611
Q2.24	5.6000	1.30256	-1.480	1.593	.581	.538
Q2.25	5.2333	1.30956	-.804	.530	.600	.528
Growth Satisfaction, 4 items, Cronbach's alpha 0.839						
Q3.3	4.5667	1.69948	-.375	-.781	.704	.782
Q3.6	5.1000	1.55590	-.914	.304	.745	.767
Q3.10	4.5206	1.78192	-.575	-.645	.585	.838
Q3.13	4.9270	1.60417	-.636	-.365	.666	.799
High Work Effectiveness, 3 items, Cronbach's alpha 0.778						
Q2.21	5.6444	1.21226	-1.594	1.597	.712	.596
Q2.22	5.6286	1.19424	-1.556	1.399	.670	.645
Q2.23	5.5984	1.38318	-1.355	1.060	.487	.851
High Commitment, 4 items, Cronbach's alpha 0.512						
Q2.13	5.4937	1.34121	-1.218	1.321	.263	.478
Q4.1	5.3175	1.33112	-1.115	.900	.312	.433
Q4.9	5.0413	1.29259	-.711	-.220	.251	.487
Q4.15	4.8079	1.12478	-.417	.195	.403	.363

Finally, even though item analysis didn't give evidence of any significant deviations from normality, principal axing factoring was additionally applied in EFA for the 5 scales, given that it is a method with no distributional assumptions (Johansson et al., 2010). The outcomes from the two methods (principal components analysis and principal axis factoring) were the same in terms of the factor structure and grouping of items, indicating the robustness and consistency of the results.

- *Discussion:*

MJDS-R is an extended version of JDS, and it is specifically designed to examine, for the first time in related literature, the joint effect of core job dimensions and labor market conditions on fresh graduates' retention. The psychometric properties of the new instrument were examined.

MJDS-R is composed of five scales: core job dimensions consisting of eleven subscales (scale 1), experienced psychological states made of five subscales (scale 2), labor market conditions comprising eight subscales (scale 3), individual differences composed of four subscales (scale 4) and personal/work outcomes containing five subscales (scale 5). This composition was to some

extent similar to the original JDS factor structure (scale 3 (labor market conditions) was not considered by JDS and was newly-added in MJDS-R).

The construct validity of the five scales was examined using a sample of 630 fresh graduates with an exploratory factor analysis with Promax rotation. The reliability of the five scales was satisfactory, where Cronbach's alpha ranged from 0.656 (scale 2) to 0.901 (scale 1), while the alpha values of the sub-dimensions were satisfactory as well.

EFA for scale 1 showed that 11 subscales (skill variety, task identity, job significance and feedback, decision making and autonomy, work load, work benefits, physical effort, technology use, promotion, social environment and working conditions) were extracted. EFA for scale 2 consisted of five extracted subscales (self-confidence, experienced meaningfulness of the work, prestige inside outside, knowledge of results and experienced responsibility for the work). EFA for scale 3, which is a new scale in the modified questionnaire, showed that eight subscales (educational and labor market gap, formal and informal sector, foreign and national workers, geographical location, labor status, unionization, private and public sector and job matching) were extracted. EFA for scale 4 was made up of four extracted subscales (skill and knowledge, context satisfaction, growth need strength - would like format and growth need strength - job choice format). EFA for scale 5 comprised five extracted subscales (growth satisfaction, general satisfaction, internal motivation, high work effectiveness and high commitment). In this context, it was noticed that when conducting EFA with Varimax (a non-orthogonal rotation) rotation, similar results were obtained for all the five scales.

The strongest subscale for scale 1 was "decision making and autonomy" with loadings ranging from 0.716 to 0.790 while the strongest one for scale 2 was "self-confidence" with loadings ranging from 0.755 to 0.886. As for scale 3, the strongest subscale was "educational and labor market gap" with high loadings as well, ranging from 0.716 to 0.836. Scale 4 had "skill and knowledge" as the strongest subscale with loadings ranging from 0.851 to 0.862. Finally, subscale 5 had "growth satisfaction" as the strongest subscale with loadings ranging from 0.641 to 0.832. It should be mentioned that most of the subscales with high loadings are new subscales that were not included in the original JDS (except for "skill and knowledge" and "growth satisfaction"), which involve specific characteristics related to fresh graduates.

In general the results showed that some subscales were identical to the corresponding scales in the original JDS while others had slight changes, both in terms of items loading as well as in terms of level of factor loadings and reliability coefficients. Regarding scale 1, “skill variety” and “task identity” were the only two subscales which were exactly the same as the original JDS. Cronbach’s alpha for “skill variety” in MJDS-R (0.57) was lower than that in JDS (0.71) while Cronbach’s alpha for “task identity” in MJDS-R (0.75) was higher than that in JDS (0.59). The remaining subscales were new subscales in their majority except for “job significance and feedback” which was the combination of two subscales from the original JDS and “decision making and autonomy” which was the combination of one new subscale (participation in decision making) and “autonomy” from JDS.

Scale 2 of MJDS-R had two new subscales (self-confidence and prestige inside outside) and three subscales (experienced meaningfulness of the work, experienced responsibility of the work and knowledge of results) almost identical to the corresponding subscales in the original JDS, with some items either deleted or moved and with very high factor loadings.

Scale 3 of MJDS-R was a totally new scale showing high factor loadings for its subscales and an extremely high reliability.

Scale 4 of MJDS-R had three scales totally similar to JDS in their composition and one scale (growth need strength – job choice format) not totally identical in that two items were deleted for lack of consistency reliability and very low factor loadings reasons. The similar subscales were: “skill and knowledge”, “context satisfactions” and “individual growth need strength – would like format”, which had very high reliability coefficients. Cronbach’s alpha for “growth need strength – would like format” was in fact similar to the corresponding subscale in JDS (at the 0.8 level), while “skill and knowledge” and “context satisfactions” in the original JDS were not tested by Hackman and Oldham and thus cannot be compared to MJDS-R Cronbach’s alpha for these two subscales.

Scale 5 of MJDS-R consisted of a totally new subscale “high commitment” and four subscales which were almost identical to JDS. These subscales are: “general satisfaction”, “internal motivation”, “growth satisfaction” and “high work effectiveness”. “General satisfaction” and “growth satisfaction” showed the same consistency reliability in MJDS-R and in JDS (0.75 for general satisfaction and 0.84 for growth satisfaction). “Internal motivation” had a slightly lower

reliability at MJDS-R (0.66 at MJDS-R versus 0.76 at JDS) while “high work effectiveness” was not tested by Hackman and Oldham.

MJDS-R is an instrument that offers the opportunity to measure all the factors affecting fresh graduates’ retention in a consistent way taking into consideration the aspects of the various probable environments in which this instrument could be assessed. Thus, MJDS-R is a strong, valid and reliable instrument that can be safely administered to all fresh graduates to evaluate their perceptions of various core job dimensions and labor market conditions which can affect their decision to stay at an organization. Knowing that fresh graduates worldwide have been suffering from work complexity and lack of integration, a great and urgent need for systematically empirical data collected with valid reliable instruments is evident, in order to allow international and national comparisons and to increase the pressures on legal authorities. The instrument was currently tested and validated in a sample of Lebanese fresh graduates. It would be interesting to test the psychometric properties of MJDS-R in different contexts and cultures.

4.6. Pilot Study for the Qualitative Research

Two pilot interviews were carried out for this research, with respondents having the same characteristics as the main respondents of the actual sample of the research study (Robinson & Callan, 2001). Thus, two semi-structured interviews were conducted with Lebanese employers working in the most productive sectors of the Lebanese labor market. The results showed that the interview questions were clear and the information gathered is valuable. The duration of the interviews was about 60 minutes of length. There were a difficulty in scheduling the place, date and time of the meeting where one meeting was postponed twice for travel reasons and then rescheduled again. The pilot interviews showed that the location of the meeting was very important as it should provide a suitable environment of comfort allowing easier data collection and face to face approach was the best choice as it was essential for collecting as much information as possible. They also helped to ensure the appropriateness of the semi-structured interview guide, to improve the way of asking the questions and inquiring more information, and finally to formulate the template of the data analysis process.

4.7 Validity and Reliability for the Qualitative Research

Construct validity can be enhanced by pilot testing the interview guideline prior to the actual data collection phase with the main respondents (Sinkovics et al., 2008). Thus to improve the construct validity of this study, two interviews were first conducted as a pilot test prior to data gathering. This aimed to clarify the appropriateness of the research approach, research questions, and data gathering and analysis techniques. Besides, the three supervisors of the research study in addition to two experts in the field of management and qualitative research examined, verified and tested the draft of all interview questions to assure construct validity (Chang & Cheng, 2015). Through taking into consideration the advices offered by these researchers who have a wide experience in the field of qualitative research and more specifically in conducting interviews as the data collection technique, the interviews were enhanced. Finally, the directions and procedures set in the interview guide were applied with high levels of carefulness (*ibid.*).

Furthermore, it was obvious to make sure that this research study is reliable in order to ensure that bias was kept to the minimum. Enhancing reliability requires (1) the development of a case study protocol allowing others to repeat the same procedures (Riege, 2003) and (2) the description of the research process such as interview process and case selection (Stenbacka, 2001). Thus, a protocol was developed detailing the process of conducting this case study research in addition to recording the data through using two digital recorders (Riege, 2003). An informed consent (refer to Appendix E) was developed as well and signed by each probable respondent. This enhanced the reliability through ensuring the clarity of the information needed from all the respondents. Lastly, the case study protocol in the phase of research design was refined by carrying out the two pilot interviews to test the structure of the questions and way of interviewing (*ibid.*).

4.8 Conclusion

MJDS-R has been shown to be a valid and reliable instrument, which can be used in studies to simultaneously test the role of all the aforementioned groups of factors, namely core job dimensions, experienced psychological states, individual differences, labor market conditions and personal/work outcomes on the retention of fresh graduates.

It evaluates the core job dimensions, the experienced psychological states, the labor market conditions, the individual differences and the personal/work outcomes that affect the fresh

graduates' retention. MJDS-R enables researchers to use a methodological tool to assess the process of retaining fresh graduates in their local labor markets. Besides, the case study protocol in the phase of qualitative research design was refined by carrying out two pilot interviews to test the structure of the questions. In this context, the construct validity and reliability of this qualitative study were tested and proved along with special caution for the ethical considerations.



Chapter 5

Quantitative Data Analysis

5.1 Introduction

This chapter presents the results from the quantitative data analysis. It involves testing MJCM-R which supposes that fresh graduates' retention is affected by various personal/work outcomes which in turn are affected by core job dimensions and labor market conditions as deducted from literature review taking into consideration the experienced psychological states as mediators and the individual differences as moderators between core job dimensions and personal/work outcomes.

The primary data collection instrument is MJDS-R which was particularly designed to test each of MJCM-R variables. The psychometric properties of MJDS-R including testing the validity and the reliability of each scale of the instrument were detailed in the previous chapter. Knowing that the model is very complex, hypotheses were set and various analytic steps were conducted to test them.

Indeed, throughout this chapter, eleven groups of analyses (please refer to Chapter 3, section 3.7.1.3), where each corresponds to a specific part of the model and helps to accept or reject the related hypotheses were conducted.

5.2 Hypotheses of the Quantitative Research

In particular, this chapter seeks to test the following hypotheses so as to validate the conceptual model of the research:

H1. Personal/work outcomes are influenced by core job dimensions.

SH1.1. There is a significant and positive relationship between core job dimensions and personal/work outcomes.

SH1.2. There is a significant and positive relationship between core job dimensions and critical psychological states.

SH1.3. There is a significant and positive relationship between critical psychological states and personal/work outcomes.

SH1.4. In the presence of all five psychological states, personal/work outcomes maximize.

H2. Personal/work outcomes are influenced by labor market conditions.

SH2.1. There is a significant and positive relationship between labor market conditions and personal/work outcomes.

SH2.2. In the presence of labor market conditions, personal/work outcomes maximize.

H3. Individual differences are moderators affecting the relationships among core job dimensions, critical psychological states and personal/work outcomes.

SH3.1. Individual differences moderate the relationship between core job dimensions and critical psychological states.

SH3.2. Individual differences moderate the relationship between critical psychological states and personal/work outcomes.

H4. Psychological states have a mediating role between core job dimensions and personal/work outcomes.

H5. Personal/work outcomes are a good predictor of labor market outcomes (Retention of fresh graduates).

5.3 Descriptive Statistics

As already mentioned in the previous chapter, the final sample included 630 fresh graduates. First, all the scales and subscales were created by taking the average of the items in each scale and subscale respectively so as to yield a summary score for each one except for “growth need strength” subscale which was created by first transforming the “job choice” summary score from a 5-point scale to a 7-point scale through using the formula $Y = 1.5X - .5$ as suggested by Hackman and Oldham (1976), and then averaging the “would like” and the transformed “job choice” summary scores. Based on the scale coding the possible minimum for all scales was 1 and the possible maximum was 7. Then, descriptive statistics were obtained, including the mean and standard deviation of each of the five scales, as well as the mean and standard deviation of the corresponding subscales. In order to examine the variability of the answers and test for significant deviations from normality, scales and subscales’ skewness and kurtosis as well as Shapiro Wilk p-values were also reported in addition to the highest and lowest scores. There

were no critical values (high positive or negative) of kurtosis and skewness for any scale or subscale with all values being in the acceptable range between -2 and +2 showing normal univariate distributions (Trochim & Donnelly, 2006; Field, 2000 & 2009; George & Mallery, 2010; Gravetter & Wallnau, 2014). Shapiro Wilk p-value for each scale and subscale was greater than .05 meaning that all scales and subscales are normally distributed. The highest scale mean was for scale 3 (Labor Market Conditions) with a mean of 5.40 whereas for subscales, the highest mean was for “job matching” of the same scale with a mean of 6.05 with both having low standard deviations close to 1 meaning that fresh graduates are highly interested in jobs which meet their expectations in terms of job offer rates. The high means for almost all the scales and subscales showed that the respondents tended mostly toward positive attitudes with answers ranging mostly from “agree slightly” to “agree” and from “slightly accurate” to “mostly accurate”, implying high levels of concern about their work motivation and job satisfaction and the various practices, conditions and psychological states affecting their work retention. The lowest scale mean was for scale 4 (Individual Differences) with a mean of 4.70 and a standard deviation of .66. This low score is caused mainly by the low mean of the subscale “Growth Need Strength – Job Choice Format” where most fresh graduates tend towards jobs where the pay is good and greater responsibilities are given to those who performs the best rather than working with pleasant people and having lots of vacation time. Whereas for subscales, the lowest mean was for “Physical Effort” of the Core Job Dimensions’ scale with a mean of 3.26 and a standard deviation of 1.61 meaning that fresh graduates are very interested in jobs where the least physical effort is needed and strength is not required. All the results on descriptive statistics of the five scales and their corresponding subscales appear in Table 5.1.

Table 5.1: Descriptive Statistics of the Five Scales and their Corresponding Subscales

	No. of Items	Minim-um	Maxi-mum	Mean	Std. Devia-tion	Skew ness	Kurt osis	Shapiro Wilk p-value
Scale 1: Core Job Dimensions	26	1.62	6.65	4.72	1.01	-.84	.45	.87
Skill Variety	2	1.00	7.00	5.56	1.25	-1.25	1.55	.96
Task Identity	2	1.00	7.00	5.30	1.53	-.89	.08	.78
Job Significance & Feedback	4	1.00	7.00	5.53	1.25	-1.46	1.63	.73
Decision Making & Autonomy	4	1.00	7.00	4.81	1.64	-.76	-.23	.82
Work Load	2	1.00	7.00	4.64	1.58	-.53	-.50	.07
Work Benefits	2	1.00	7.00	4.33	1.90	-.13	-1.07	.09
Physical Effort	2	1.00	7.00	3.26	1.61	.31	-.87	.91
Technology Use	2	1.00	7.00	5.23	1.65	-1.01	.14	.65
Promotion	2	1.00	7.00	3.67	2.18	.04	-1.55	.20
Social Environment	2	1.00	7.00	4.00	1.74	-.20	-1.04	.08
Working Conditions	2	1.00	7.00	4.72	1.85	-.67	-.79	.3
Scale 2: Experienced Psychological States	18	3.28	6.61	4.95	.58	.01	.13	.83
Experienced Meaningfulness of the Work	3	2.33	7.00	5.48	1.13	-.66	-.31	.66
Experienced Responsibility for the Work	2	1.50	7.00	5.50	1.17	-.72	-.04	.51
Knowledge of Results	5	1.20	7.00	4.49	.90	-.30	.27	.77
Self Confidence	4	1.00	7.00	4.84	1.26	-1.23	1.40	.95
Prestige Inside Outside	4	1.50	7.00	4.98	.99	-.01	-.49	.91
Scale 3: Labor Market Conditions	16	2.44	7.00	5.40	.72	-.92	1.75	.88
Geographical Location	2	1.00	7.00	5.46	1.48	-1.29	1.33	.90
Unionization	2	1.00	7.00	5.78	1.20	-1.80	2.07	.77
Labor Status	2	1.00	7.00	5.11	1.46	-.73	.04	.91
Job Matching	2	1.00	7.00	6.05	1.08	-2.02	2.05	.27
Private & Public Sector	2	1.00	7.00	4.87	1.49	-.55	-.14	.38
Foreign & National Workers	2	1.00	7.00	4.72	1.39	-.45	.12	.57
Formal & Informal Jobs	2	1.00	7.00	5.40	1.35	-.79	.29	.93
Educational & Labor Market Gap	2	1.00	7.00	5.75	1.23	-1.37	2.03	.86
Scale 4: Individual Differences	29	2.47	6.31	4.70	.66	-.15	.03	.79
Skill & Knowledge	3	1.00	7.00	5.28	1.37	-1.08	.74	.77
Context Satisfactions	10	1.00	7.00	4.51	1.32	-.63	-.38	.65
Context Satisfactions – Satisfaction with Job Security	2	1.00	7.00	4.36	1.63	-.37	-.81	.59
Context Satisfactions – Satisfaction with Compensation (Pay)	2	1.00	7.00	4.85	1.69	-.08	-.98	.79
Context Satisfactions – Co-Workers	3	1.00	7.00	4.84	1.48	-.85	-.01	.84
Context Satisfactions – Satisfaction with Supervision	3	1.00	7.00	4.73	1.55	-.62	-.41	.89
Total Growth Need Strength	16	2.97	6.72	4.71	.69	.24	-.07	.91
Growth Need Strength – Would Like Format	6	1.83	7.67	5.66	1.19	-.59	-.58	.70
Growth Need Strength – Job Choice Format	10	2.05	6.55	4.13	.85	.26	-.35	.56
Scale 5: Personal/Work Outcomes	22	2.36	6.73	5.11	.71	-.67	.58	.83
High General Satisfaction	6	1.17	6.83	4.56	1.06	-.74	.39	.79
High Internal Work Motivation	5	2.20	7.00	5.69	.85	-.91	1.05	.73
High Growth Satisfaction	4	1.00	7.00	4.79	1.36	-.68	-.20	.80
High Work Effectiveness	3	1.00	7.00	5.62	1.05	-1.83	2.08	.91
High Commitment	4	2.25	7.00	5.16	.81	-.31	-.23	.97

5.4 Correlations between the Subscales of Each Scale

Table 5.2 shows the zero-order correlations among the various subscales of Scale 1 (Core Job Dimensions). As in previous job design studies (Hackman & Oldham, 1975, 1976), there is a high level of significant positive intercorrelation among the core job dimensions themselves (except for working conditions with job significance & feedback and with physical effort) implying that fresh graduates who agree on one dimension also agree on other dimensions. This has been found previously (Hackman & Lawler, 1971; Hackman & Oldham, 1975) while testing JDS and has been expected since it is assumed that "good" jobs frequently are good in numerous ways, and "bad" jobs most often are bad in general (*ibid.*). There is no theoretic or deductive reason to anticipate that core job dimensions are completely independent. Besides, this significant intercorrelation does not lessen their usefulness as separate job dimensions as long as this is acknowledged and taken into consideration while analyzing the scores of jobs on a certain core job dimension (*ibid.*).

Table 5.2: Intercorrelations among Core Job Dimensions Subscales

Scale 1: Core Job Dimensions	1	2	3	4	5	6	7	8	9	10	11
1. Skill Variety	-										
2. Task Identity	.286**	-									
3. Job Significance & Feedback	.264**	.660**	-								
4. Decision Making & Autonomy	.357**	.484**	.544**	-							
5. Work Load	-.056	.407**	.411**	.396**	-						
6. Work Benefits	.152**	.259**	.254**	.358**	.433**	-					
7. Physical Effort	.169**	.269**	.343**	.392**	.176**	.129**	-				
8. Technology Use	.140**	.396**	.461**	.321**	.356**	.345**	.072	-			
9. Promotion	.305**	.256**	.279**	.519**	.406**	.421**	.222**	.242**	-		
10. Social Environment	.157**	.230**	.310**	.485**	.405**	.355**	.272**	.228**	.434**	-	
11. Working Conditions	.240**	.119**	.070	.317**	.189**	.344**	.057	.193**	.230**	.230**	-

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5.3 illustrates the zero-order correlations among the various subscales of Scale 2 (Experienced Psychological States). Results show that there is a high level of significant intercorrelation among the various psychological states experienced by fresh graduates as a result of core job dimensions. However, the relationships between experienced responsibility for the work and self confidence and between experienced responsibility for the work and experienced

meaningfulness of the work are not significant as well as the relationship between self confidence and prestige inside outside. There is also a negative but significant intercorrelation between knowledge of results and self confidence. These diversified results have been expected due to the fact that fresh graduates are known for having confused feelings while beginning their careers (Tektas et al., 2013).

Table 5.3: Intercorrelations among Experienced Psychological States Subscales

Scale 2: Experienced Psychological States	1	2	3	4	5
1. Experienced Meaningfulness of the Work	-				
2. Experienced Responsibility for the Work	.068	-			
3. Knowledge of Results	.138**	.166**	-		
4. Self Confidence	.189**	-.053	-.121**	-	
5. Prestige Inside Outside	.440**	.202**	.135**	.030	-

**. Correlation is significant at the 0.01 level (2-tailed).

Table 5.4 illustrates the zero-order correlations among the various subscales of Scale 3 (Labor Market Conditions). Results show that there is a high level of significant intercorrelation among most of the labor market conditions implying that fresh graduates who prefer one labor market condition also prefer other ones due to the fact that each one completes the other so as to create an ideal labor market. The relationship between labor status and formal and informal jobs is moderate but positively significant. Besides, the relationships between geographical location and each of labor status, job matching and private and public sector are not significant as well as the relationships between private and public sector and each of unionization, labor status, foreign and national workers and formal and informal jobs.

Table 5.4: Intercorrelations among Labor Market Conditions Subscales

Scale 3: Labor Market Conditions	1	2	3	4	5	6	7	8
1. Geographical Location	-							
2. Unionization	.194**	-						
3. Labor Status	.048	.251**	-					
4. Job Matching	.050	.227**	.119**	-				
5. Private and Public Sector	-.036	-.013	-.028	.293**	-			
6. Foreign and National Workers	.107**	.176**	.132**	.349**	-.074	-		
7. Formal and Informal Jobs	.150**	.319**	.088*	.535**	.042	.531**	-	
8. Educational and Labor Market Gap	.110**	.403**	.148**	.641**	.224**	.296**	.495**	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5.5 points up the zero-order correlations among the various subscales of Scale 4 (Individual Differences). Results show that there is a high level of significant positive intercorrelation between skill and knowledge and context satisfactions and among all the context satisfactions' subscales (satisfaction with job security, satisfaction with compensation, satisfaction with co-workers and satisfaction with supervision) implying that fresh graduates who appreciate the value of skill and knowledge as affecting the relationship between core job dimensions and personal/work outcomes appreciate as well the importance of being satisfied with pay, co-workers and supervisors and enjoying security at work. However, the relationships between total growth need strength and all the other subscales and the relationship between the two components of growth need strength (would like format and job choice format) are not significant.

Table 5.5: Intercorrelations among Individual Differences Subscales

Scale 4: Individual Differences	1	2	2.1	2.2	2.3	2.4	3	3.1	3.2
1. Skill & Knowledge	-								
2. Context Satisfactions	.596**	-							
2.1 Context Satisfactions – Satisfaction with Job Security	.531**	.836**	-						
2.2 Context Satisfactions – Satisfaction with Compensation (Pay)	.299**	.782**	.644**	-					
2.3 Context Satisfactions – Co-Workers	.614**	.853**	.633**	.494**	-				
2.4 Context Satisfactions – Satisfaction with Supervision	.515**	.870**	.601**	.570**	.663**	-			
3. Total Growth Need Strength	.000	-.048	-.065	-.074	-.049	.011	-		
3.1 Growth Need Strength – Would Like Format	-.044	-.268**	-.251**	-.257**	-.181**	-.225**	.646**	-	
3.2 Growth Need Strength – Job Choice Format	.038	.164**	.127**	.120**	.088	.204**	.765**	.002	-

**. Correlation is significant at the 0.01 level (2-tailed).

Intercorrelations among the subscales of scale 5 (Personal/Work Outcomes) are presented in Table 5.6. All personal/work outcomes themselves are highly positively intercorrelated, as has been found previously (Hackman & Lawler, 1971; Hackman and Oldham, 1975, 1976). This is to be expected, if it is assumed that highly satisfied fresh graduates are generally enjoying a high internal work motivation and effectiveness and are highly committed to their jobs.

Table 5.6: Intercorrelations among Personal/Work Outcomes Subscales

Scale 5: Personal/Work Outcomes	1	2	3	4	5
1. High General Satisfaction	-				
2. High Internal Work Motivation	.466**	-			
3. High Growth Satisfaction	.406**	.419**	-		
4. High Work Effectiveness	.254**	.439**	.310**	-	
5. High Commitment	.220**	.295**	.256**	.214**	-

** Correlation is significant at the 0.01 level (2-tailed).

5.5 Correlations between the Scales

As expected, Table 5.7 shows that core job dimensions are highly positively correlated to the experienced psychological states and the personal/work outcomes. In addition, experienced psychological states are strongly positively correlated to personal/work outcomes.

However, labor market conditions do not have a significant correlation with personal/work outcomes. As for individual differences, they have a strong significant positive correlation with the other scales except with labor market conditions where the correlation is negative and moderate but significant.

Table 5.7: Correlations between the Five Scales

	MJDS-R FiveScales				
	Scale 1 Core Job Dimensions	Scale 2 Experienced Psychological States	Scale 3 Labor Market Conditions	Scale 4 Individual Differences	Scale 5 Personal/Work Outcomes
Scale 1: Core Job Dimensions	-				
Scale 2: Experienced Psychological States	.268**	-			
Scale 3: Labor Market Conditions	-.043	.192**	-		
Scale 4: Individual Differences	.503**	.354**	-.082*	-	
Scale 5: Personal/Work Outcomes	.472**	.615**	.026	.624**	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

5.5.1 Relationships of the Core Job Dimensions and Experienced Psychological States with the Personal/Work Outcomes

Results in general are as predicted by the model. Correlations are in the expected direction and most of them are statistically significant. Experienced psychological states, which present the

direct cause of personal/work outcomes as expected by the model, achieve higher correlation levels with personal/work outcomes subscales than do core job dimensions except for knowledge of results which correlates significantly with high work commitment only and experienced responsibility for the work which correlates with internal motivation, general satisfaction and high commitment only. Core job dimensions' correlations with high work commitment, however, are not as strong as expected and are in general smaller than correlations with satisfaction, motivation and work effectiveness. The correlations of experienced psychological states and core job dimensions with each personal/work outcomes' subscale are shown in Table 5.8.

Table 5.8: Correlations of Experienced Psychological States and Core Job Dimensions with the Personal/Work Outcomes

	Scale 5: Personal/Work Outcomes				
	High Internal Work Motivation	High General Satisfaction	High Growth Satisfaction	High Work Effectiveness	High Work Commitment
Scale 2: Experienced Psychological States					
Experienced Meaningfulness of the Work	.590**	.334**	.479**	.447**	.344**
Experienced Responsibility for the Work	.168**	-.122**	-.004	.038	.220**
Knowledge of Results	.053	-.072	-.041	.050	.253**
Self Confidence	.332**	.658**	.253**	.231**	.107**
Prestige Inside Outside	.308**	.084*	.341**	.175**	.427**
Scale 1: Core Job Dimensions					
Skill Variety	.353**	.141**	.336**	.236**	.064
Task Identity	.197**	.116**	.342**	.197**	.157**
Job Significance & Feedback	.182**	.012	.327**	.164**	.125**
Decision Making & Autonomy	.240**	.330**	.584**	.236**	-.025
Work Load	.052	.215**	.359**	.124**	.095
Work Benefits	.057	.111**	.442**	.051	.080*
Physical Effort	-.010	.057	.133**	.004	-.058
Technology Use	.074	-.055	.282**	.102*	.077*
Promotion	.196**	.323**	.540**	.129**	.014
Social Environment	.190**	.348**	.374**	.155**	.041
Working Conditions	.162**	.301**	.302**	.168**	.146**

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

5.5.2 Relationships of the Core Job Dimensions with Experienced Psychological States

As shown in Table 5.9, results are consistent with expectations from the model. Most correlations among the core job dimensions and the experienced psychological states' subscales are in the predicted direction and most achieve high levels of statistical significance, with p-

values<0.01. However, correlations of most core job dimensions with experienced responsibility for the work and knowledge of results are not as strong as expected and are smaller in general if compared to the correlations with the other personal work/outcomes. Indeed, “significance and feedback” is the only core job dimension which is highly correlated to experienced responsibility of the work and only three core job dimensions (job significance & Feedback, decision making & autonomy and physical effort) are highly correlated to knowledge of results where only one of them (job significance & Feedback) shows a positive significant correlation. All core job dimensions except “work load” show a high level of significant positive correlation with “experienced meaningfulness of the work” and all of them except “job significance and feedback” are highly correlated to “self confidence” where all correlations are positive except for “technology use”. Finally, correlations between core job dimensions and “prestige inside outside” vary from moderate to high and are all significant except for “working conditions”.

Table 5.9: Correlations of Core Job Dimensions with Experienced Psychological States

	Scale 2: Experienced Psychological States				
	Experienced Meaningfulness of the Work	Experienced Responsibility for the Work	Knowledge of Results	Self Confidence	Prestige Inside Outside
Scale 1: Core Job Dimensions					
Skill Variety	.401**	.049	-.017	.115**	.291**
Task Identity	.182**	.092*	-.031	.111**	.241**
Job Significance & Feedback	.198**	.132**	.114**	.011	.266**
Decision Making & Autonomy	.245**	-.061	-.173**	.350**	.145**
Work Load	.042	.074	-.054	.161**	.091*
Work Benefits	.129**	-.068	-.073	.119**	.124**
Physical Effort	.093*	-.054	-.189**	.120**	.143**
Technology Use	.111**	.030	-.027	-.084*	.092*
Promotion	.250**	-.074	-.194**	.234**	.162**
Social Environment	.170**	-.112**	-.124**	.298**	.109**
Working Conditions	.244**	-.099*	-.065	.301**	.070

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

5.5.3 Relationships of the Labor Market Conditions with Personal/Work Outcomes

The correlations of labor market conditions with personal/work outcomes subscales are shown in Table 5.10. Results show that labor market conditions achieve moderate and high levels of significant correlations with most personal/work outcomes as expected by the model except for “labor status” which has no significant relationship with any of the personal/work outcomes’ subscales implying that fresh graduates are not concerned by being self employed at the beginning of their job carrier but prefer to build a professional experience instead. Besides, it is

remarkable that correlations among the labor market conditions and the personal/work outcomes' subscales vary from negative to positive. Indeed, "geographical location" is negatively correlated to "internal motivation", "general satisfaction" and "growth satisfaction" implying that fresh graduates are interested in a job that is far from home so as they can profit from discovering new areas and maybe new cultures; "foreign & national workers" is negatively correlated to "general satisfaction" and "growth satisfaction" and "formal & informal jobs" is negatively correlated to "growth satisfaction" which can be explained by the fresh graduates' concerns for the job offers rather than the type of the job or the nationality of the colleagues where they don't mind having co-workers of various nationalities and enjoying the same benefits.

Table 5.10: Correlations of Labor Market Conditions with the Personal/Work Outcomes

	Scale 5: Personal/Work Outcomes				
	High Internal Work Motivation	High General Satisfaction	High Growth Satisfaction	High Work Effectiveness	High Work Commitment
Scale 3: Labor Market Conditions					
Geographical Location	-.084*	-.153**	-.134**	-.021	.045
Unionization	-.010	.021	-.056	.009	.115**
Labor Status	-.020	.000	-.031	-.073	.037
Job Matching	.124**	.153**	.043	.250**	.113**
Private & Public Sector	.036	.038	.157**	.072	.007
Foreign & National Workers	-.012	-.100*	-.144**	.026	.097*
Formal & Informal Jobs	.019	.006	-.122**	.150**	.149**
Educational & Labor Market Gap	.088*	.007	-.005	.140**	-.008

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

5.5.4 Relationships of the Individual Differences with Core Job Dimensions and Personal/Work Outcomes

Results show that core job dimensions are highly positively related to skill and knowledge and context satisfactions including satisfaction with job security, with compensation, with co-workers and with supervision, and are generally independent of the total growth need strength. This independence of the growth need strength and its two subscales (would like format and job choice format) was predicted by MJCM-R and by JCM as well. Indeed, all the core job dimensions have a strong positive significant correlation with skill and knowledge and with context satisfactions except for "skill variety" which is independent from "satisfaction with supervision" and "job significance & feedback" which is totally independent from "satisfaction with pay". Only four core job dimensions (work load, work benefits, physical effort and working

conditions) are significantly correlated to growth need strength with correlations ranging from moderate to high and from negative to positive.

Just as core job dimensions, personal/work outcomes show a strong positive correlation with skill and knowledge and context satisfactions including its four subscales except for “high commitment” which is not correlated to satisfaction with pay, co-workers and supervision. Only three personal/work outcomes (high internal work motivation, high growth satisfaction, high commitment) are significantly correlated to total growth need strength.

Moreover, experienced psychological states are significantly related to most of the individual differences subscales including growth need strength but these relations are judged as weak. Experienced meaningfulness of the work is the only psychological state subscale that is significantly correlated to all the individual differences subscales.

The correlations of core job dimensions, experienced psychological states and personal/work outcomes with each individual differences subscale are shown in Tables 5.11, 5.12 and 5.13.

Table 5.11: Correlations of Individual Differences with Core Job Dimensions

	Scale 1: Core Job Dimensions										
	Skill Variety	Task Identity	Job Significance & Feedback	Decision Making & Autonomy	Work Load	Work Benefits	Physical Effort	Technology Use	Promotion	Social Environment	Working Conditions
Scale 4: Individual Differences											
Skill & Knowledge	.344*	.408**	.400**	.482**	.324**	.399**	.190**	.326**	.377**	.227**	.206**
Context Satisfactions	.177**	.235**	.205**	.577**	.432**	.465**	.151**	.261**	.601**	.455**	.399**
Context Satisfactions – Satisfaction with Job Security	.236**	.256**	.165**	.438**	.365**	.507**	.150**	.268**	.577**	.368**	.409**
Context Satisfactions – Satisfaction with Compensation (Pay)	.133**	.084*	.044	.440**	.228**	.269**	.062	.168**	.437**	.322**	.387**
Context Satisfactions – Co-Workers	.211**	.264**	.256**	.524**	.445**	.399**	.116**	.263**	.517**	.413**	.314**
Context Satisfactions – Satisfaction with Supervision	.040	.174**	.191**	.511**	.379**	.390**	.167**	.181**	.489**	.403**	.265**
Total Growth Need Strength	.030	-.044	.044	-.032	-.106**	-.101*	-.097*	-.040	-.012	-.040	.105**
Growth Need Strength – Would Like Format	.044	-.033	.057	-.164**	-.165**	-.251**	-.130**	-.056	-.169**	-.203**	-.198**
Growth Need Strength – Job Choice Format	.002	-.030	.010	.096*	.001	.079*	-.018	-.005	.127**	.119**	.030

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5.12: Correlations of Individual Differences with Personal/work Outcomes

	Scale 5: Personal/Work Outcomes				
	High Internal Work Motivation	High General Satisfaction	High Growth Satisfaction	High Work Effectiveness	High Work Commitment
Scale 4: Individual Differences					
Skill & Knowledge	.329**	.179**	.791**	.245**	.219**
Context Satisfactions	.282**	.530**	.803**	.279**	.081*
Context Satisfactions – Satisfaction with Job Security	.243**	.469**	.665**	.244**	.175**
Context Satisfactions – Satisfaction with Compensation (Pay)	.185**	.461**	.562**	.135**	.023
Context Satisfactions – Co-Workers	.341**	.400**	.759**	.334**	.048
Context Satisfactions – Satisfaction with Supervision-	.170**	.458**	.680**	.204**	.046
Total Growth Need Strength	.143**	.007	.111**	.031	.111**
Growth Need Strength – Would Like Format	.089*	-.207**	-.049	.037	.137**
Growth Need Strength – Job Choice Format	.113**	.183**	.187**	.009	.030

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 5.13: Correlations of Individual Differences with Experienced Psychological States

	Scale 2: Experienced Psychological States				
	Experienced Meaningfulness of the Work	Experienced Responsibility for the Work	Knowledge of Results	Self Confidence	Prestige Inside Outside
Scale 4: Individual Differences					
Skill & Knowledge	.411**	.028	.030	-.002	.338**
Context Satisfactions	.310**	-.95*	-.183**	.424**	.150*
Context Satisfactions – Satisfaction with Job Security	.327**	-.052	-.069	.313**	.227**
Context Satisfactions – Satisfaction with Compensation	.201**	-.103**	-.287**	.411**	.109**
Context Satisfactions – Co-Workers	.335**	-.065	-.141**	.332**	.180**
Context Satisfactions – Satisfaction with Supervision-	.186**	-.095*	-.127**	.369**	.015
Total Growth Need Strength	.102*	.145**	.233**	-.037	.116**
Growth Need Strength – Would Like Format	.117**	.173**	.346**	-.206**	.205**
Growth Need Strength – Job Choice Format	.035	.044	.014	.125**	-.021

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

5.5.5 Conclusion

In brief, the scales measured by MJDS-R relate to one another as predicted by MJCM-R on which the instrument is based. In particular, the core job dimensions relate positively and often significantly to the other scales measured by MJDS-R which are predicted to be affected by the job characteristics, including the five critical psychological states and the five personal/work outcomes.

As already stated at MJCM-R, results show that core job dimensions are positively related to personal/work outcomes subscales, and are generally independent of the total growth need strength. The subscales of the critical psychological states are strongly related to core job dimensions as predicted by the model. They also are very highly significantly related to personal/work outcomes subscales. Moreover, most labor market conditions achieve moderate to high levels of statistical significant correlations with personal/work outcomes subscales with correlations varying from negative to positive.

Thus the hypotheses that there is a significant and positive relationship between core job dimensions and personal/work outcomes (SH1.1), between core job dimensions and critical psychological states (SH1.2), and between critical psychological states and personal/work outcomes (SH1.3) and that there is a significant relationship between labor market conditions and personal/work outcomes (SH2.1) are verified.

5.6 In the Presence of All Five Psychological States, Personal/Work Outcomes Maximize

To test this hypothesis, regressions were computed predicting the personal/work outcome subscales (a) from each of the five psychological states taken alone, (b) from the ten possible pairs of the psychological states, and (c) from the ten possible combinations of three psychological states, (d) from the five possible combinations of four psychological states, and (e) from all five psychological states taken together. Results are summarized in Table 5.14.

Table 5.14: Average % of Variance Explained in Regressions Predicting Personal/Work Outcome subscales from One, Two, Three, Four and Five Psychological States

Number of Predictors used in Regressions	Average R ²				
	High Internal Work Motivation	High General Satisfaction	High Growth Satisfaction	High Commitment	High Work Effectiveness
One (EM; ER; KR; SC; PIO)*	.117	.114	.082	.200	.057
Two (EM+ER; EM+KR; +EM+SC; EM+PIO; ER+KR; ER+SC; ER+PIO; KR+SC; KR+PIO; SC+PIO)	.216	.222	.153	.230	.108
Three (EM+ER+KR; EM+ER+SC; EM+ER+PIO; EM+KR+SC; EM+KR+PIO; EM+SC+PIO; ER+KR+SC; ER+KR+PIO; ER+SC+PIO; KR+SC+PIO)	.298	.321	.211	.251	.152
Four (EM+ER+KR+SC; EM+ER+KR+PIO; EM+KR+SC+PIO; EM+ER+SC+PIO; ER+KR+SC+PIO)	.366	0.410	.257	.261	.190
Five (EM+ER+KR+SC+PIO)	.422	.489	.292	.268	.223

*n=630. EM= Experienced Meaningfulness; ER= Experienced Responsibility; KR= Knowledge of Results; SC= Self-Confidence; PIO= Prestige Inside Outside.

Outcomes show that when additional psychological states are further added to the regression equations, the amount of outcome subscale variance explained does certainly increase, consistent with MJCM-R. Besides, the R-square change which is tested with an F-test referred to as the F-change shows a significant F-change (p-values smaller than 5%) for all cases, implying that adding the additional psychological states to the regression significantly improved the prediction.

Knowing that an increment in the amount of subscale variance explained is noticed when predictors are added to the regression with a significant F-change, and knowing that subscales of the five psychological states are themselves only weakly (significantly) intercorrelated (median correlation = .166), the hypothesis that personal/work outcomes maximize when all five psychological states are present (SH1.4) is verified. This means that a fresh graduate who experiences all the five psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities, self-confidence and prestige inside outside) is more able to show high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high commitment.

5.7 Which Specific Core Job Dimensions Relate to Which Experienced Psychological State?

Multiple regression analysis using stepwise method (based on the significant p-values and beta values) shows that:

- 1- “Experienced Meaningfulness of the Work” is affected the most by “Skill Variety” since it shows the highest regression weight (Beta = .322) (This is similar to the original JCM). The second most important is “Working Conditions” (Beta= .133) (new subscale), the third most important is “Promotion” (Beta = .086) (new subscale) and the fourth most important is “Job Significance & Feedback” (Beta=.079) (This is similar to original JCM for job significance only).
- 2- “Experienced Meaningfulness for the Work” is affected the most by “Job Significance & Feedback” since it has the highest regression weight with Beta = .196. (This subscale is the combination of two subscales from the original JCM: “Task Significance” and “Feedback”; where results show that both were related to “experienced meaningfulness of the work”, and then one can say that this is similar to the original JCM). The second most important is “Decision Making & Autonomy” (Beta = -.166) (this subscale is the combination of “Autonomy” from the original JCM and decision making which is a new subscale. It is important to mention that “Autonomy” was related to “Experienced Meaningfulness for the Work” similar to here), the third most important is “Work Load” (Beta=.163) (This is a new subscale), the fourth most important is “Social Environment” (Beta= -.141) (new subscale), the fifth most important is “Skill Variety”(Beta = .103) and the sixth most important is “Work Benefits” (Beta = -.095) (new subscale).
- 3- “Knowledge of Results” is affected the most by “Job Significance & Feedback” since it has the highest regression weight with Beta = .393. (This subscale is the combination of two subscales from the original JCM: “Task Significance” and “Feedback”; where “task significance” was mostly related to “experienced meaningfulness of the work” and “feedback” was mostly related to “knowledge of results”, and then one can say that this is partly similar to original JCM). The second most important is “Physical Effort” (Beta= -.189) (new subscale), the third most important is “Decision Making & Autonomy” (Beta = -.187) (this subscale is the combination of “Autonomy” from the original JCM and decision making which is a new subscale. It is important to mention that “Autonomy” was related to “Experienced Responsibility for the Work” different from here), the fourth

most important is “Promotion” (Beta= -.135) (This is a new subscale) and the fifth most important is “Task Identity” (Beta = -.115).

- 4- “Self Confidence” which is a new subscale is affected the most by “Decision Making & Autonomy” since it has the highest regression weight with Beta = .329. The second most important is “Technology Use” (Beta= -.215) (new subscale), the third most important is “Job Significance & Feedback” (Beta = -.214), the fourth most important is “Working Conditions” (Beta=.198), the fifth most important is “Social Environment” (Beta = .183) and the sixth most important is “Task Identity” (Beta = .113).
- 5- “Prestige Inside Outside” which is a new subscale is affected the most by “Skill Variety” (Beta= .237). The second most important is “Job Significance & Feedback” (Beta = .204).

In addition, to test these results, hierarchical regressions were computed for each of the psychological states, in which the predictors in the first step were the job dimensions selected from regression as directly causal of that psychological state. Thus, Experienced Meaningfulness was predicted from Skill Variety, Working Conditions, Promotion and Job Significance & Feedback; Experienced Responsibility was predicted from Job Significance & Feedback, Social Environment, Decision Making & Autonomy, Work Load, Skill Variety and Work Benefits; Knowledge of Results was predicted from Promotion, Job Significance & Feedback, Physical Effort, Decision Making & Autonomy and Task Identity; Self Confidence was predicted from Decision Making & Autonomy, Job Significance & Feedback, Working Conditions, Technology Use, Social Environment and Task Identity; and Prestige Inside Outside was predicted from Skill Variety and Job Significance & Feedback.

Next, the remaining job dimensions (that is those not expected to directly influence the psychological state) were introduced into each regression equation as additional predictors. If the predictions are correct, the selected job dimensions should account for substantial variance in the psychological states, and the introduction of the remaining job dimensions should not substantially increase the amount of variance controlled. Results are presented in table 5.15, and show that a moderate (but significant) amount of variance in the psychological states is controlled by the selected job dimensions from regression (p-value for F-change is less than 5%). For the equations predicting experienced meaningfulness, experienced responsibility, knowledge of results, self confidence and prestige inside outside, the addition of the job dimensions that

were not predicted to affect these psychological states resulted in very small and not significant increases in the level of prediction attained (p-value for F-change being higher than 5%), implying that adding the additional core job dimensions to the regression did not significantly improve the prediction, consistent with regression results. The standardized regression weights for the equations predicting these psychological states also are as would be expected, with the exception of a very low weight for job significance & feedback in predicting experienced meaningfulness.

Table 5.15: Multiple Regressions Predicting the Psychological States from all Job Dimensions Compared to Predictions from Selected Job Dimensions

Betas and p-values for Significant relationships												
	Skill Variety	Task Identity	Job Significance & Feedback	Decision Making & Autonomy	Work Load	Work Benefits	Physical Effort	Technology Use	Promotion	Social Environment	Working Conditions	
Experienced Meaningfulness of the Work	.322 (p<.001)		.079 (p=.037)						.086 (p=.033)		.133 (p=.001)	
Experienced Responsibility for the Work	.103 (p=.018)		.196 (p<.001)	-.166 (p=.002)	.163 (p=.001)	-.095 (p=.033)				-.141 (p=.002)		
Knowledge of Results		-.115 (p=.023)	.393 (p<.001)	-.187 (p<.001)			-.189 (p<.001)		-.135 (p=.002)			
Self Confidence		.113 (p=.017)	-.214 (p<.001)	.329 (p<.001)				-.215 (p<.001)		.183 (p<.001)	.198 (p<.001)	
Prestige Inside Outside	.237 (p<.001)		.204 (p<.001)									
Summary Statistics												
	Multiple Correlation (R) for the full equation (All Eleven Job Dimensions)			R ²	Increase in R ² by adding to the regression those Job Dimensions that were not included in Step 1			Significance of F Change for adding to the regression those Job Dimensions that were not included in Step 1				
Experienced Meaningfulness of the Work	.451			.199 ^a	.004			.746				
Experienced Responsibility for the Work	.291			.075 ^b	.010			.501				
Knowledge of Results	.390			.142 ^c	.010			.571				
Self Confidence	.512			.258 ^d	.004			.637				
Prestige Inside Outside	.377			.123 ^e	.019			.883				

^a Skill Variety, Working Conditions, Promotion and Job Significance & Feedback

^b Job Significance & Feedback, Social Environment, Decision Making & Autonomy, Work Load, Skill Variety and Work Benefits

^c Promotion, Job Significance & Feedback, Physical Effort, Decision Making & Autonomy and Technology Use

^d Decision Making & Autonomy, Job Significance & Feedback, Working Conditions, Technology Use, Social Environment and Task Identity

^e Skill Variety and Job Significance & Feedback

In sum, as shown in Figure 5.1 below, the results reported above show that indeed core job dimensions predict psychological states. More specifically, Experienced Meaningfulness was predicted from Skill Variety, Working Conditions, Promotion and Job Significance & Feedback; Experienced Responsibility was predicted from Job Significance & Feedback, Social

Environment, Decision Making & Autonomy, Work Load, Skill Variety and Work Benefits; Knowledge of Results was predicted from Promotion, Job Significance & Feedback, Physical Effort, Decision Making & Autonomy and Task Identity; Self Confidence was predicted from Decision Making & Autonomy, Job Significance & Feedback, Working Conditions, Technology Use, Social Environment and Task Identity; and Prestige Inside Outside was predicted from Skill Variety and Job Significance & Feedback.

These relationships can further be explained by the following formulas taking into consideration the Unstandardized coefficients (B) and showing the strength of the core job dimensions in predicting each experienced psychological states subscale (Refer to Chapter 3 for the corresponding theoretical model and regression equation). The independent variables being the various core job dimensions are considered significant when the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017).

- Experienced Meaningfulness of the Work = $3.018 + 0.311 \text{ Skill Variety} + 0.070 \text{ Job Significance \& Feedback} + 0.081 \text{ Promotion} + 0.122 \text{ Working Conditions}$
- Experienced Responsibility for the Work = $4.495 + 0.123 \text{ Skill Variety} + 0.181 \text{ Job Significance \& Feedback} + 0.169 \text{ Decision Making \& Autonomy} + 0.163 \text{ Work Load} + 0.090 \text{ Work Benefits} - 0.152 \text{ Social Environment}$
- Knowledge of Results = $4.319 - 0.109 \text{ Task Identity} + 0.386 \text{ Job Significance \& Feedback} + 0.181 \text{ Decision Making \& Autonomy} - 0.185 \text{ Physical Effort} - 0.139 \text{ Promotion}$
- Self Confidence = $3.545 + 0.108 \text{ Task Identity} + 0.203 \text{ Job Significance \& Feedback} + 0.317 \text{ Decision Making \& Autonomy} - 0.210 \text{ Technology Use} + 0.170 \text{ Social Environment} + 0.206 \text{ Working Conditions}$
- Prestige Inside Outside = $3.018 + 0.249 \text{ Skill Variety} + 0.211 \text{ Job Significance \& Feedback}$

First, concerning experienced meaningfulness of the work, when skill variety increases by 1, experienced meaningfulness of the work increases by 0.311, given that other variables remain constant i.e. fresh graduates with high skill variety have high experienced meaningfulness of the work. When job significance & feedback increases by 1, experienced meaningfulness of the work increases by 0.070, given that other variables remain constant i.e. fresh graduates who

enjoy a significant job and receive feedback have high experienced meaningfulness of the work. When promotion increases by 1, experienced meaningfulness of the work increases by 0.081, given that other variables remain constant i.e. fresh graduates with jobs offering good promotion chances have high experienced meaningfulness of the work and when working conditions increases by 1, experienced meaningfulness of the work increases by 0.122, given that other variables remain constant i.e. the better the working conditions the higher the fresh graduates' experienced meaningfulness of the work.

Second, concerning experienced responsibility for the work, when skill variety increases by 1, experienced responsibility for the work increases by 0.123, given that other variables remain constant i.e. fresh graduates with high skill variety have high experienced meaningfulness of the work. When job significance & feedback increases by 1, experienced responsibility for the work increases by 0.123, given that other variables remain constant i.e. fresh graduates who enjoy a significant job and receive feedback have high experienced responsibility for the work. When decision making & autonomy increases by 1, experienced responsibility for the work increases by 0.169, given that other variables remain constant i.e. fresh graduates who are allowed to take decisions at work have high experienced responsibility for the work. When work load increases by 1, experienced responsibility for the work increases by 0.090, given that other variables remain constant i.e. fresh graduates with balanced work load have high experienced responsibility for the work. When work benefits increases by 1, experienced responsibility for the work increases by 0.090, given that other variables remain constant i.e. the higher the work the higher the experienced responsibility for the work .When social environment decreases by 1, experienced responsibility for the work increases by 0.152, given that other variables remain constant i.e. the lower the social relationships at work, the higher the experienced responsibility for the work.

Third, concerning knowledge of results, when task identity increases by 1, knowledge of results increases by 0.109, given that other variables remain constant i.e. fresh graduates with clear task identity have high knowledge of results. When job significance & feedback increases by 1, knowledge of results increases by 0.386, given that other variables remain constant i.e. fresh graduates who consider their jobs as significant and receives positive feedback have high knowledge of results. When decision making & autonomy increases by 1, knowledge of results decreases by 0.181, given that other variables remain constant i.e. fresh graduates allowed to take

decisions at work have high knowledge of results. When physical effort increases by 1, knowledge of results decreases by 0.185, given that other variables remain constant i.e. when the physical effort required at work increases the knowledge of results decreases and when promotion increases by 1, knowledge of results decreases by 0.139, given that other variables remain constant i.e. fresh graduates with jobs offering promotion opportunities experiences low knowledge of results.

Fourth, concerning self-confidence, when task identity increases by 1, self-confidence increases by 0.108, given that other variables remain constant i.e. fresh graduates with clear task identity at work have high self confidence. When job significance & feedback increases by 1, self-confidence decreases by 0.203, given that other variables remain constant i.e. fresh graduates who consider their jobs as significant and receives positive feedback have high self-confidence. When decision making & autonomy increases by 1, self-confidence increases by 0.317, given that other variables remain constant i.e. fresh graduates allowed to take decisions at work have high self-confidence. When technology use increases by 1, self-confidence decreases by 0.210, given that other variables remain constant i.e. jobs requiring high technology use decreases fresh graduates' self-confidence. When social environment increases by 1, self-confidence increases by 0.170, given that other variables remain constant i.e. the higher the social relationships at work, the higher the self-confidence and when working conditions increases by 1, self-confidence increases by 0.206, given that other variables remain constant i.e. fresh graduates enjoying good working conditions have high self-confidence.

Finally, concerning prestige inside outside, when skill variety increases by 1, prestige inside outside increases by 0.249, given that other variables remain constant i.e. fresh graduates with high skill variety have high prestige inside outside. When job significance & feedback increases by 1, prestige inside outside increases by 0.211, given that other variables remain constant i.e. fresh graduates who consider their jobs as significant and receives positive feedback have high prestige.

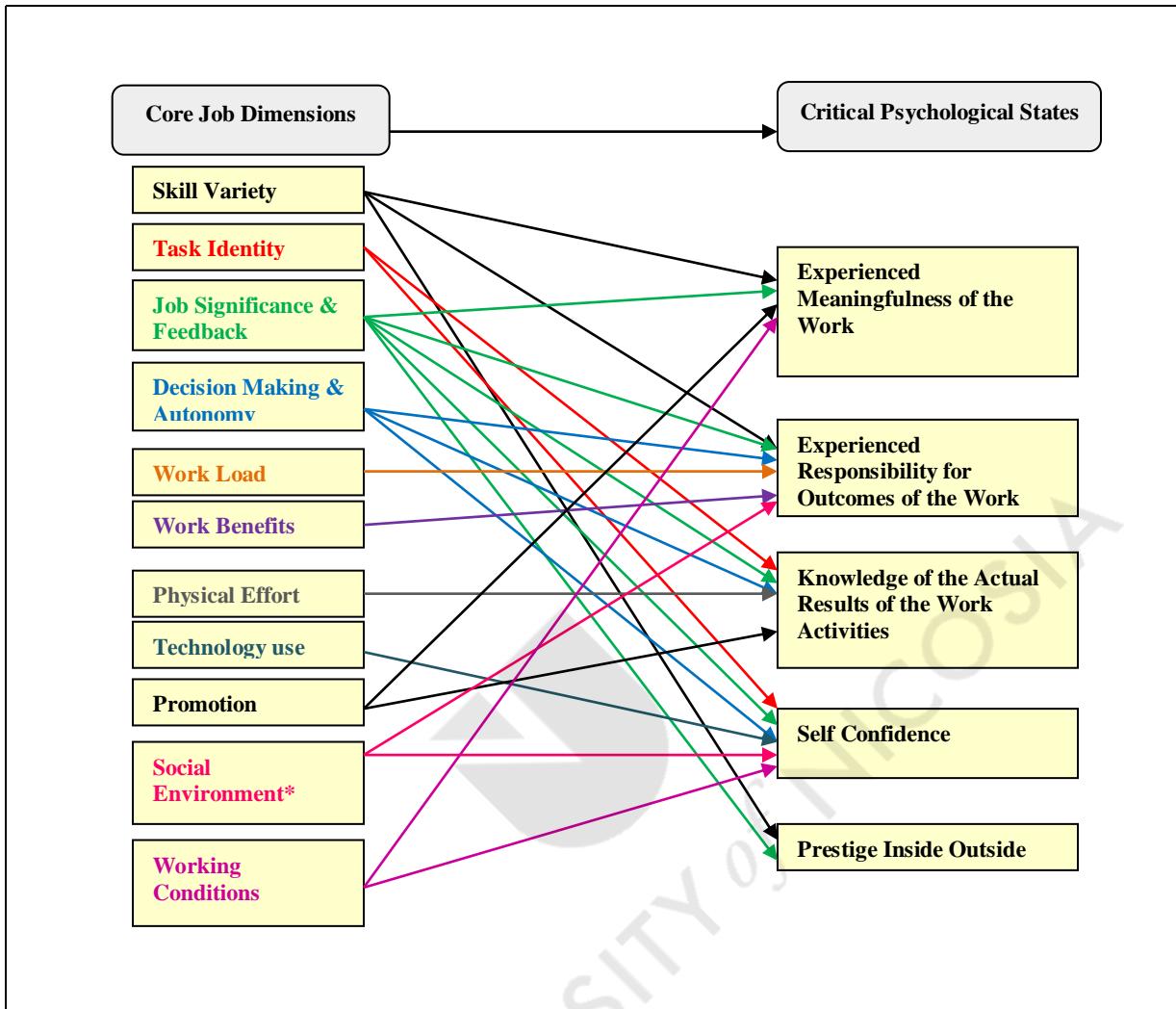


Figure 5.1: Core Job Dimensions Predicting Experienced Psychological States

5.8 Testing the Mediating Effect of Psychological States

Are Core Job Dimensions – Personal/Work Outcomes Subscales Relationships Dependent on the Experienced Psychological States? For experienced psychological states to mediate between core job dimensions and personal/work outcomes, it should help better explain why there is a relation between core job dimensions and personal/work outcomes. In other words, a mediation effect for experienced psychological states proposes that core job dimensions influence experienced psychological states(mediator variable), which in turn influence personal/work outcomes. Thus, experienced psychological states serve to clarify the nature of the relationship between core job dimensions and personal/work outcomes, as shown in Figure 5.2.

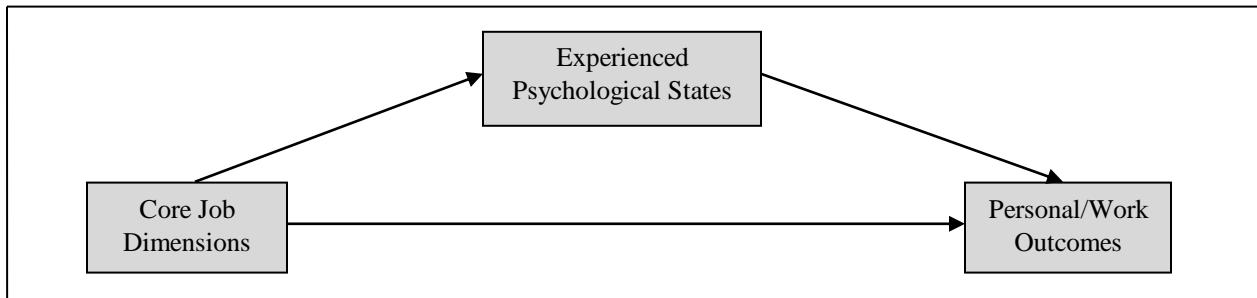


Figure 5.2The Mediation Role of Experienced Psychological States

To test whether the relationships between core job dimensions' subscales and personal/work outcomes' subscales are dependent on the experienced psychological states, two complementary methods were applied.

First, the relationships between each core job dimension and the various personal/work outcomes' subscales were examined before and after the predicted mediating psychological states were statistically controlled for (by partial correlation). Therefore, the effect of experienced meaningfulness of the work was controlled for in the relationships between skill variety, working conditions, promotion and job significance & feedback with the personal/work outcomes' subscales; experienced responsibility for the work was controlled for in the relationships between job significance & feedback, social environment, decision making & autonomy, work load, skill variety and work benefits and the personal/work outcomes' subscales; knowledge of results was controlled for in the relationships between promotion, job significance & feedback, physical effort, decision making & autonomy and technology use and the personal/work outcomes' subscales; Self-confidence was controlled for in the relationships between decision making & autonomy, job significance & feedback, working conditions, technology use, social environment and task identity and the personal/work outcomes' subscales; and prestige inside outside was controlled for in the relationships between skill variety and job significance & feedback and the personal/work outcomes' subscales. If the predictions are correct: (1) the partial correlations should be close to zero and be significantly lower in magnitude than the direct zero order correlations between core job dimensions and the personal/work outcomes' subscales and (2) the zero-order correlations should be significant (with p-value less than 5%) and the partial correlations should be non-significant (with p-value larger than 5%).

Table 5.16: Relationship between Core Job Dimensions and the Personal/Work Outcomes' Subscales Controlling for the Effects of the Experienced Psychological States

Core Job Dimensions	Zero-order Correlation	p-value for Zero-order Correlation	Partial Correlation ^a	p-value for Partial Correlation	Difference
	Internal Motivation				
Skill Variety	.353	p < .001	.155	p = .123	.198
Task Identity	.197	p < .001	.170	p = .080	.027
Job Significance & Feedback	.182	p < .001	.066	p = .099	.116
Decision Making & Autonomy	.240	p < .001	.164	p = .297	.076
Work Load	.052	p = .191	.040	p = .426	.012
Work Benefits	.057	p = .150	.047	p = .237	.010
Physical Effort	-.010	p = .804	.000	p = .918	.010
Technology Use	.074	p = .065	.072	p = .371	.002
Promotion	.196	p < .001	.055	p = .718	.141
Social Environment	.190	p < .001	.202	p = .168	.146
Working Conditions	.162	p < .001	-.056	p = .344	.218
	General Satisfaction				
Skill Variety	.141	p < .001	.012	p = .844	.129
Task Identity	.116	p = .004	.057	p = .506	.059
Job Significance & Feedback	.012	p = .760	.003	p = .424	.009
Decision Making & Autonomy	.330	p < .001	.138	p = .094	.192
Work Load	.215	p < .001	.212	p = .055	.003
Work Benefits	.111	p = .005	.103	p = .929	.008
Physical Effort	.057	p = .153	.044	p = .118	.013
Technology Use	-.055	p = .171	.001	p = .360	.056
Promotion	.323	p < .001	.241	p = .051	.082
Social Environment	.348	p < .001	.202	p = .061	.146
Working Conditions	.301	p < .001	.092	p = .145	.209
	Growth Satisfaction				
Skill Variety	.336	p < .001	.160	p = .123	.176
Task Identity	.342	p < .001	.226	p = .061	.116
Job Significance & Feedback	.327	p < .001	.301	p = .155	.172
Decision Making & Autonomy	.584	p < .001	.484	p = .058	.100
Work Load	.359	p < .001	.339	p = .054	.020
Work Benefits	.442	p < .001	.312	p = .212	.130
Physical Effort	.133	p = .001	.128	p = .329	.005
Technology Use	.282	p < .001	.270	p = .099	.012
Promotion	.540	p < .001	.483	p = .051	.057
Social Environment	.374	p < .001	.326	p = .053	.048
Working Conditions	.302	p < .001	.177	p = .155	.125
	High Work Effectiveness				
Skill Variety	.236	p < .001	.069	p = .097	.167
Task Identity	.197	p < .001	.177	p = .060	.020
Job Significance & Feedback	.164	p < .001	.096	p = .170	.068
Decision Making & Autonomy	.236	p < .001	.185	p = .133	.051
Work Load	.124	p = .002	.114	p = .120	.010
Work Benefits	.051	p = .204	.050	p = .612	.001
Physical Effort	.004	p = .915	.003	p = .160	.001
Technology Use	.102	p = .010	.099	p = .057	.003
Promotion	.129	p = .001	.017	p = .846	.112
Social Environment	.155	p < .001	.099	p = .193	.056
Working Conditions	.168	p < .001	.024	p = .504	.144
	High Work Commitment				
Skill Variety	.064	p = .108	-.142	p = .075	.206
Task Identity	.157	p < .001	.147	p = .241	.010
Job Significance & Feedback	.125	p = .002	.031	p = .439	.094

Decision Making & Autonomy	-.025	p = .531	-.020	p = .097	.005
Work Load	.095	p = .017	.081	p = .176	.014
Work Benefits	.080	p= .044	.079	p = .333	.001
Physical Effort	-.058	p = .149	-.010	p = .117	.048
Technology Use	.077	p = .053	.072	p = .226	.005
Promotion	.014	p = .727	-.028	p = .089	.042
Social Environment	.041	p = .301	.034	p = .713	.007
Working Conditions	.146	p< .001	.058	p= .071	.088

^aThe effect of experienced meaningfulness of the work was controlled for in the relationships between skill variety, working conditions, promotion and job significance & feedback with the personal/work outcomes' subscales; experienced responsibility for the work was controlled for in the relationships between job significance & feedback, social environment, decision making & autonomy, work load, skill variety and work benefits and the personal/work outcomes' subscales; knowledge of results was controlled for in the relationships between promotion, job significance & feedback, physical effort, decision making & autonomy and technology use and the personal/work outcomes' subscales; Self-confidence was controlled for in the relationships between decision making & autonomy, job significance & feedback, working conditions, technology use, social environment and task identity and the personal/work outcomes' subscales; and prestige inside outside was controlled for in the relationships between skill variety and job significance & feedback and the personal/work outcomes' subscales

As results show in Table 5.16, there is a substantial support for the proposition that the psychological states mediate between the core job dimensions and the personal/work outcomes' subscales. Indeed, statistically controlling the corresponding psychological states substantially lowers the magnitude of the significant relationship between a single core job dimension and a personal/work outcome subscale. Besides, most of the partial correlations are quite low, and many approach zero as predicted. More specifically, the results show that not all core job dimensions significantly affect all personal/work outcomes as shown in Figure 5.3, but for those that do it is verified that the psychological states mediate between the core job dimensions and personal/work outcomes.

In other words, all the significant zero-order correlations (with p-value less than 5%) show non-significant partial correlations (with p-value larger than 5%). The core job dimensions that are found to have a non-significant relationship with some specific personal/work outcomes are the following: (1) work load, work benefits, physical effort and technology use are not significantly correlated to internal work motivation, (2) job significance & feedback, physical effort and technology use are not significantly correlated to general satisfaction, (3) work benefits and physical effort are not significantly correlated to high work effectiveness and (4) skill variety, decision making & autonomy, physical effort, promotion and social environment are not significantly correlated to high work commitment.

An additional and complementary examination was executed using multiple regression analysis. First, for each of the personal/work outcomes' subscales, the five psychological states were introduced into a multiple regression equation to serve as primary predictors. Then, the core job

dimensions were added to the regression as secondary predictors. If the psychological states mediate the core job dimensions – personal/work outcomes' subscales relationships as predicted, (1) the experienced psychological states alone should account for a considerable portion of the dependent variable variance, and (2) the introduction of the core job dimensions into the equation (as additional predictors) should not significantly raise the amount of dependent variable variance controlled.

Results are shown in Table 5.17. As expected, the experienced psychological states alone account for significant variance for each of the personal/work outcomes' subscales, as shown in Figure 5.4. Moreover, the introduction of the core job dimensions into the regression equations resulted in a near-zero non-significant increase in the variance controlled for all the dependent subscales (p-value for F-change being higher than 5%) implying that adding the core job dimensions to the regression did not significantly improve the prediction, consistent with regression results. This result was similar to what Hackman & Oldham reported while conducting the same test.

Besides, knowing that ideally the Beta values for the psychological states should all be significantly moderate to high (with p-value less than 5%) and should all exceed the Beta values for the core job dimensions, results show that they are all significant indeed and only few anomalies regarding the magnitude of the Beta values exist: through examining the Beta values for the individual subscales in the equations, it is found that Experienced Responsibility for the Work and Knowledge of Results add little to prediction for two of the Personal/Work outcome subscales (growth satisfaction and high work effectiveness) though these relationships are significant. For Growth Satisfaction subscale, Decision Making & Autonomy and Work Benefits (both core job dimensions mediated by Experienced Responsibility for the Work), in addition to Physical Efforts and Promotion have a relatively larger Beta value (with p-value less than 5%) than does Experienced Responsibility for the work. For High Work Effectiveness subscale, Task Identity, Decision Making & Autonomy and Physical Effort have a relatively larger Beta value than does Knowledge of Results and Experienced Responsibility for the Work. In addition, the Beta values for Knowledge of Results are relatively small and one of them is negative for Growth Satisfaction.

These relationships can better be explained by the following formulas taking into consideration the Unstandardized coefficients (B) and showing the strength of the core job dimensions and the strength of the experienced psychological states in predicting each personal/work outcomes subscale (Refer to Chapter 3 for the corresponding theoretical model and regression equation). The independent variables being the various core job dimensions and experienced psychological states are considered significant when the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017).

- High Internal Work Motivation = $2.419 + 0.110 \text{ Skill Variety} + 0.078 \text{ Job Significance \& Feedback} - 0.127 \text{ Physical Effort} + 0.455 \text{ Experienced Meaningfulness of the Work} + 0.155 \text{ Experienced Responsibility for the Work} + 0.131 \text{ Knowledge of Results} + 0.244 \text{ Self Confidence} + 0.124 \text{ Prestige Inside Outside}$
- High General Satisfaction = $3.497 - 0.070 \text{ Job Significance \& Feedback} - 0.115 \text{ Work Load} + 0.098 \text{ Work Benefits} - 0.062 \text{ Physical Effort} - 0.069 \text{ Technology Use} + 0.107 \text{ Promotion} + 0.107 \text{ Social Environment} + 0.215 \text{ Experienced Meaningfulness of the Work} - 0.118 \text{ Experienced Responsibility for the Work} + 0.121 \text{ Knowledge of Results} + 0.532 \text{ Self Confidence} - 0.108 \text{ Prestige Inside Outside}$
- High Growth Satisfaction = $2.734 + 0.342 \text{ Decision Making \& Autonomy} + 0.060 \text{ Work Load} + 0.119 \text{ Work Benefits} - 0.101 \text{ Physical Effort} + 0.139 \text{ Promotion} + 0.268 \text{ Experienced Meaningfulness of the Work} - 0.083 \text{ Experienced Responsibility for the Work} - 0.102 \text{ Knowledge of Results} + 0.112 \text{ Self Confidence} + 0.129 \text{ Prestige Inside Outside}$
- High Work Effectiveness = $4.519 + 0.092 \text{ Task Identity} + 0.089 \text{ Decision Making \& Autonomy} - 0.109 \text{ Physical Effort} + 0.412 \text{ Experienced Meaningfulness of the Work} + 0.010 \text{ Experienced Responsibility for the Work} + 0.010 \text{ Knowledge of Results} + 0.129 \text{ Self Confidence} - 0.127 \text{ Prestige Inside Outside}$
- High Work Commitment = $2.564 - 0.113 \text{ Skill Variety} + 0.118 \text{ Task Identity} + 0.189 \text{ Decision Making \& Autonomy} + 0.122 \text{ Working Conditions} + 0.191 \text{ Experienced Meaningfulness of the Work} + 0.179 \text{ Experienced Responsibility for the Work} + 0.185 \text{ Knowledge of Results} + 0.184 \text{ Self Confidence} + 0.327 \text{ Prestige Inside Outside}$

First, concerning high internal work motivation, when skill variety increases by 1, high internal work motivation increases by 0.110, given that other variables remain constant i.e. fresh graduates with high skill variety experiences high work motivation. When job significance & feedback increases by 1, high internal work motivation increases by 0.078, given that other variables remain constant i.e. fresh graduates who enjoy a significant job and receive positive feedback at work have high internal work motivation. When physical effort increases by 1, high internal work motivation decreases by 0.127, given that other variables remain constant i.e. when high physical effort is needed at work, internal work motivation decrease. When experienced meaningfulness of the work increases by 1, high internal work motivation increases by 0.455, given that other variables remain constant i.e. fresh graduates who consider their jobs as meaningful have high internal work motivation. When experienced responsibility for the work increases by 1, high internal work motivation increases by 0.155, given that other variables remain constant i.e. fresh graduates who experience responsibility for their work have high internal work motivation. When knowledge of results increases by 1, high internal work motivation increases by 0.131, given that other variables remain constant i.e. fresh graduates with high knowledge of results have high internal work motivation. When self-confidence increases by 1, high internal work motivation increases by 0.244, given that other variables remain constant i.e. fresh graduates with high self-confidence have high internal work motivation and when prestige inside outside increases by 1, high internal work motivation increases by 0.124, given that other variables remain constant i.e. fresh graduates feeling a high prestige inside outside have high internal work motivation.

Second, concerning high general satisfaction, when job significance & feedback increases by 1, high general satisfaction decreases by 0.070, given that other variables remain constant i.e. fresh graduates who consider their job as significant and receive positive feedback have high general satisfaction. When work load increases by 1, high general satisfaction increases by 0.115, given that other variables remain constant i.e. the higher the work load the lower the fresh graduates' general satisfaction. When work benefits increases by 1, high general satisfaction increases by 0.098, given that other variables remain constant i.e. the higher the work benefits the higher the fresh graduates' general satisfaction. When physical effort increases by 1, high general satisfaction decreases by 0.062, given that other variables remain constant i.e. the higher the physical effort at work, the lower the fresh graduates' general satisfaction. When technology use

increases by 1, high general satisfaction decreases by 0.069, given that other variables remain constant i.e. the higher the technology use at work the lower the fresh graduates' general satisfaction. When promotion increases by 1, high general satisfaction increases by 0.107, given that other variables remain constant i.e. the higher the promotion opportunities at work, the higher the fresh graduates' general satisfaction. When social environment increases by 1, high general satisfaction increases by 0.107, given that other variables remain constant i.e. the richer the social environment at work, the higher the fresh graduates' general satisfaction. When experienced meaningfulness of the work increases by 1, high general satisfaction increases by 0.215, given that other variables remain constant i.e. the higher the experienced meaningfulness of the work, the higher the fresh graduates' general satisfaction. When experienced responsibility for the work increases by 1, high general satisfaction decreases by 0.118, given that other variables remain constant i.e. the highest the experienced responsibility for the work, the lowest the fresh graduates' general satisfaction. When knowledge of results increases by 1, high general satisfaction increases by 0.121, given that other variables remain constant i.e. the higher the knowledge of results the higher the fresh graduates' general satisfaction. When self-confidence increases by 1, high general satisfaction increases by 0.532, given that other variables remain constant i.e. the higher the self-confidence at work, the higher the fresh graduates' general satisfaction and when prestige inside outside increases by 1, high general satisfaction decreases by 0.108, given that other variables remain constant i.e. the higher the prestige inside outside at work, the lower the fresh graduates' general satisfaction.

Third, concerning high growth satisfaction, when decision making & autonomy increases by 1, high growth satisfaction increases by 0.342, given that other variables remain constant i.e. the higher the decision making and autonomy at work the higher the fresh graduates' growth satisfaction. When work load increases by 1, high growth satisfaction increases by 0.060, given that other variables remain constant i.e. the higher the work load the lower the fresh graduates' growth satisfaction. When work benefits increases by 1, high growth satisfaction increases by 0.119, given that other variables remain constant i.e. the higher the work benefits the higher the fresh graduates' growth satisfaction. When physical effort increases by 1, high growth satisfaction decreases by 0.101, given that other variables remain constant i.e. the higher the physical effort at work the lower the fresh graduates' growth satisfaction. When promotion increases by 1, high growth satisfaction increases by 0.139, given that other variables remain

constant i.e. the higher the promotion chances at work, the higher the fresh graduates' growth satisfaction. When experienced meaningfulness of the work increases by 1, high growth satisfaction increases by 0.268, given that other variables remain constant i.e. the higher the experienced meaningfulness of the work, the highest the fresh graduates' growth satisfaction. When experienced responsibility for the work increases by 1, high growth satisfaction decreases by 0.083, given that other variables remain constant i.e. the highest the responsibility for the work the lowest the fresh graduates' growth satisfaction. When knowledge of results increases by 1, high growth satisfaction decreases by 0.102, given that other variables remain constant i.e. the highest the knowledge of results the lowest the fresh graduates' growth satisfaction. When self-confidence increases by 1, high growth satisfaction increases by 0.112, given that other variables remain constant i.e. the highest the self-confidence at work the highest the fresh graduates' growth satisfaction and when prestige inside outside increases by 1, high growth satisfaction increases by 0.129, given that other variables remain constant i.e. the highest the prestige inside outside at work the highest the fresh graduates' growth satisfaction.

Fourth, concerning high work effectiveness, when task identity increases by 1, high work effectiveness increases by 0.092, given that other variables remain constant i.e. the clearer the task identity at work the highest the fresh graduates' work effectiveness. When decision making & autonomy increases by 1, high work effectiveness increases by 0.081, given that other variables remain constant i.e. the highest the decision making and autonomy opportunities at work the highest the fresh graduates' work effectiveness. When physical effort increases by 1, high work effectiveness decreases by 0.109, given that other variables remain constant i.e. the more the physical effort is required at work, the less the fresh graduates' work effectiveness. When experienced meaningfulness of the work increases by 1, high work effectiveness increases by 0.412, given that other variables remain constant i.e. the highest the work meaningfulness the highest the work effectiveness. When experienced responsibility for the work increases by 1, high work effectiveness increases by 0.010, given that other variables remain constant i.e. the highest the responsibility for the work the highest the fresh graduates' work effectiveness. When knowledge of results increases by 1, high work effectiveness increases by 0.010, given that other variables remain constant i.e. the more the knowledge of results the higher the fresh graduates' work effectiveness. When self-confidence increases by 1, high work effectiveness increases by 0.129, given that other variables remain constant i.e. the highest the fresh graduates' self-

confidence the highest the work effectiveness and when prestige inside outside increases by 1, high work effectiveness decreases by 0.127, given that other variables remain constant i.e. the highest the feeling of prestige inside outside, the lowest the fresh graduates' work effectiveness.

Fifth, concerning high commitment, when skill variety increases by 1, high commitment decreases by 0.113, given that other variables remain constant i.e. when fresh graduates' skill variety increases at work, high commitment decreases. When task identity increases by 1, high commitment increases by 0.118, given that other variables remain constant i.e. fresh graduates with clear task identity have high commitment at work. When decision making & autonomy increases by 1, high commitment increases by 0.189, given that other variables remain constant i.e. the higher the decision making and autonomy the higher the commitment at work. When working conditions increases by 1, high commitment increases by 0.122, given that other variables remain constant i.e. the more working conditions are good the more the fresh graduates' commitment at work. When experienced meaningfulness of the work increases by 1, high commitment increases by 0.191, given that other variables remain constant i.e. the more the experienced meaningfulness of the work the high the fresh graduates' commitment at work. When experienced responsibility for the work increases by 1, high commitment increases by 0.179, given that other variables remain constant i.e. the highest the experienced responsibility at work the more the fresh graduates' commitment at work. When knowledge of results increases by 1, high commitment increases by 0.185, given that other variables remain constant i.e. the more the knowledge of results the high the fresh graduates' commitment level at work. When self-confidence increases by 1, high commitment increases by 0.184, given that other variables remain constant i.e. fresh graduates who experiences self-confidence have high commitment at work and when prestige inside outside increases by 1, high commitment decreases by 0.327, given that other variables remain constant i.e. fresh graduates whose feeling of prestige inside outside increases experience higher levels of commitment at work.

In addition, considering the single effect of experienced psychological states on personal/work outcomes subscales can better be explained by the following formula taking into consideration the Unstandardized coefficients (B) and showing the strength of the five experienced psychological states in predicting each personal/work outcomes subscale (Refer to Chapter 3 for the corresponding theoretical model and regression equation). The independent variables being

the five experienced psychological state are considered significant when the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017).

- High Internal Work Motivation = $2.074 + 0.392 \text{ Experienced Meaningfulness of the Work} + 0.102 \text{ Experienced Responsibility for the Work} - 0.018 \text{ Knowledge of Results} + 0.041 \text{ Prestige Inside Outside} + 0.161 \text{ Self Confidence}$
- High General Satisfaction = $1.549 + 0.219 \text{ Experienced Meaningfulness of the Work} - 0.091 \text{ Experienced Responsibility for the Work} - 0.015 \text{ Knowledge of Results} + 0.016 \text{ Prestige Inside Outside} + 0.509 \text{ Self Confidence}$
- High Growth Satisfaction = $1.016 + 0.459 \text{ Experienced Meaningfulness of the Work} - 0.052 \text{ Experienced Responsibility for the Work} - 0.140 \text{ Knowledge of Results} + 0.263 \text{ Prestige Inside Outside} + 0.175 \text{ Self Confidence}$
- High Work Effectiveness = $2.804 + 0.396 \text{ Experienced Meaningfulness of the Work} + 0.018 \text{ Experienced Responsibility for the Work} + 0.010 \text{ Knowledge of Results} - 0.024 \text{ Prestige Inside Outside} + 0.128 \text{ Self Confidence}$
- High Work Commitment = $1.789 + 0.113 \text{ Experienced Meaningfulness of the Work} + 0.085 \text{ Experienced Responsibility for the Work} + 0.163 \text{ Knowledge of Results} + 0.252 \text{ Prestige Inside Outside} + 0.062 \text{ Self Confidence}$

First, concerning high internal work motivation, when experienced meaningfulness of the work increases by 1, high internal work motivation increases by 0.392, given that other variables remain constant i.e. fresh graduates who experience high meaningfulness of the work are more able to be highly motivated at work. When experienced responsibility for the work increases by 1, high internal work motivation increases by 0.102, given that other variables remain constant i.e. fresh graduates who are more responsible for the work are more able to experience internal work motivation. When knowledge of results increases by 1, high internal work motivation decreases by 0.018, given that other variables remain constant i.e. fresh graduates who have high knowledge of results have high internal work motivation. When prestige inside outside increases by 1, high internal work motivation increases by 0.041, given that other variables remain constant i.e. fresh graduates with high feeling of prestige inside outside have high internal work motivation and when self confidence increases by 1, high internal work motivation increases by

0.161, given that other variables remain constant i.e. fresh graduates with high self-confidence have high internal work motivation.

Second, concerning high general satisfaction, when experienced meaningfulness of the work increases by 1, high general satisfaction increases by 0.219, given that other variables remain constant i.e. fresh graduates who consider their work as highly meaningful have high general satisfaction. When experienced responsibility for the work increases by 1, high general satisfaction decreases by 0.091, given that other variables remain constant i.e. fresh graduates who are highly responsible for the work are more able to experience high general satisfaction. When knowledge of results increases by 1, high general satisfaction decreases by 0.015, given that other variables remain constant i.e. the highest the knowledge of results the lowest the fresh graduates' general satisfaction. When prestige inside outside increases by 1, high general satisfaction increases by 0.016, given that other variables remain constant i.e. fresh graduates whose work makes them feel prestigious inside outside have high general satisfaction and when self confidence increases by 1, high general satisfaction increases by 0.509, given that other variables remain constant i.e. fresh graduates whose self-confidence is high at work have high general satisfaction.

Third, concerning high growth satisfaction, when experienced meaningfulness of the work increases by 1, high growth satisfaction increases by 0.459, given that other variables remain constant i.e. fresh graduates whose jobs are highly meaningful have high growth satisfaction. When experienced responsibility for the work increases by 1, high growth satisfaction decreases by 0.052, given that other variables remain constant i.e. fresh graduates who experience high responsibility for the work have high growth satisfaction. When knowledge of results increases by 1, high growth satisfaction decreases by 0.140, given that other variables remain constant i.e. fresh graduates who have high knowledge of results are more able to experience high growth satisfaction. When prestige inside outside increases by 1, high growth satisfaction increases by 0.263, given that other variables remain constant i.e. fresh graduates who feel highly prestigious at work have high growth satisfaction and when self confidence increases by 1, high growth satisfaction increases by 0.175, given that other variables remain constant i.e. fresh graduates who are highly self-confident at work have high growth satisfaction.

Fourth, concerning high work effectiveness, when experienced meaningfulness of the work increases by 1, high work effectiveness increases by 0.396, given that other variables remain constant i.e. fresh graduates who consider their work as meaningful have high work effectiveness. When experienced responsibility for the work increases by 1, high work effectiveness increases by 0.018, given that other variables remain constant i.e. fresh graduates who are highly responsible for the work have high work effectiveness. When knowledge of results increases by 1, high work effectiveness increases by 0.010, given that other variables remain constant i.e. the higher the knowledge of results the more the fresh graduates' work effectiveness. When prestige inside outside increases by 1, high work effectiveness decreases by 0.024, given that other variables remain constant i.e. when fresh graduates have a high feeling of prestige inside outside work they enjoy high work effectiveness and when self confidence increases by 1, high work effectiveness increases by 0.128, given that other variables remain constant i.e. fresh graduates who enjoys a high self-confidence at work have high work effectiveness.

Finally, concerning high work commitment, when experienced meaningfulness of the work increases by 1, high work commitment increases by 0.113, given that other variables remain constant i.e. fresh graduates who experiences a high meaningfulness of work are highly committed to their work. When experienced responsibility for the work increases by 1, high work commitment increases by 0.085, given that other variables remain constant i.e. when fresh graduates experiences high work responsibility they are more committed to their job. When knowledge of results increases by 1, high work commitment increases by 0.163, given that other variables remain constant i.e. the higher the knowledge of results the higher the fresh graduates' level of commitment at work. When prestige inside outside increases by 1, high work commitment increases by 0.163, given that other variables remain constant i.e. the higher the feeling of prestige inside outside the higher the fresh graduates' commitment to work and when self confidence increases by 1, high work commitment increases by 0.252, given that other variables remain constant i.e. the more the self-confidence the higher the work commitment.

In sum, the results in Tables 5.16 and 5.17 provide generally strong support for the predictions of the MJCM-R for the mediation effect of the psychological states, for the significant relations between core job dimensions and personal/work outcomes, and thus for the validation of hypothesis SH4 (psychological states have a mediating role between core job dimensions and

personal/work outcomes). Besides, through multiple regression, it was confirmed that core job dimensions affect personal/work outcomes and thus hypothesis H1 (personal/work outcomes are influenced by core job dimensions) was verified.

Indeed, as shown in Figure 5.5, psychological states mediate the relationship of (1) task identity and working conditions with all the personal/work outcomes subscales, (2) skill variety, decision making & autonomy, promotion and social environment with four out of five personal/work outcomes (Internal Work Motivation, General Satisfaction, Growth Satisfaction and High Work Effectiveness), (3) job significance & feedback with four out of five personal/work outcomes (Internal Work Motivation, Growth Satisfaction, High Work Effectiveness and High Work Commitment), (4) work load with four out of five personal/work outcomes (General Satisfaction, Growth Satisfaction, High Work Effectiveness and High Work Commitment), (5) work benefits with three out of five personal/work outcomes (General Satisfaction, Growth Satisfaction and High Work Commitment), (6) technology use with three out of five personal/work outcomes (Growth Satisfaction, High Work Effectiveness and High Work Commitment), and (7) physical effort with the personal/work outcome Growth Satisfaction. There was not a significant relation (and thus no mediating effect) for the following: (1) work load, work benefits, physical effort and technology use and the personal/work outcome “Internal Work Motivation”, (2) job significance & feedback, physical effort and technology use and the personal/work outcome “General Satisfaction”, (3) work benefits and physical effort and the personal/work outcome “High Work Effectiveness” and (4) skill variety, decision making & autonomy, physical effort, promotion and social environment and the personal/work outcome “High Work Commitment”. The Experienced Psychological States alone account for significant variance for each of the personal/work outcomes’ subscales and adding the core job dimensions to the regression did not significantly improve the prediction, consistent with regression results, thus supporting the prediction that psychological states mediate the core job dimensions – personal/work outcomes’ subscales relationships.

Table 5.17: Multiple Regressions Predicting the Personal/Work Outcomes' Subscales from all Prior Subscales Compared to Predictions from the Experienced Psychological States Only

	Betas and p-values for Significant relationships										
	Skill Variety	Task Identity	Job Significance & Feedback	Decision Making & Autonomy	Work Load	Work Benefits	Physical Effort	Technology Use	Promotion	Social Environment	Working Conditions
High Internal Work Motivation	.119 (p<.001)		.080 (p=.019)				-.137 (p<.001)				
High General Satisfaction			-.073 (p=.045)		.105 (p<.001)	-.088 (p=.008)	-.072 (p=.020)	-.066 (p=.048)	.102 (p=.001)	.104 (p<.001)	
High Growth Satisfaction				.358 (p<.001)	.064 (p=.044)	.128 (p<.001)	-.109 (p<.001)		.132 (p<.001)		
High Work Effectiveness		.099 (p=.016)		.094 (p=.029)			-.104 (p=.007)				
High Work Commitment	-.109 (p=.008)	.122 (p=.010)		-.181 (p=.001)							.126 (p=.001)
	Experienced Meaningfulness of the work		Experienced Responsibility for the Work		Knowledge of Results		Self Confidence		Prestige Inside Outside		
High Internal Work Motivation	.475 (p<.001)		.145 (p<.001)		.141 (p=.021)		.244 (p<.001)			.137 (p=.033)	
High General Satisfaction	.225 (p<.001)		-.108 (p=.001)		.111 (p=.014)		.540 (p<.001)			-.112 (p=.016)	
High Growth Satisfaction	.271 (p<.001)		-.073 (p=.047)		-.092 (p=.040)		.142 (p=.006)			.133 (p<.001)	
High Work Effectiveness	.404 (p<.001)		.013 (p=.041)		.011 (p=.046)		.126 (p=.001)			-.134 (p=.039)	
High Work Commitment	.195 (p<.001)		.184 (p=.001)		.182 (p<.001)		.184 (p=.004)			.321 (p<.001)	
Summary Statistics											
	Multiple Correlation (R) for the full equation (All Job Dimensions and Psychological States)	R ² for the five variable Equation (Psychological States Only)	Increase in R ² by adding the Job Dimensions to the Regression	P-value of R ² Change when adding the Job Dimensions to the Regression							
High Internal Work Motivation	.670	.422	.027	.637							
High General Satisfaction	.734	.489	.040	.538							
High Growth Satisfaction	.756	.292	.095	.891							
High Work Effectiveness	.496	.223	.023	.737							
High Work Commitment	.569	.268	.045	.583							

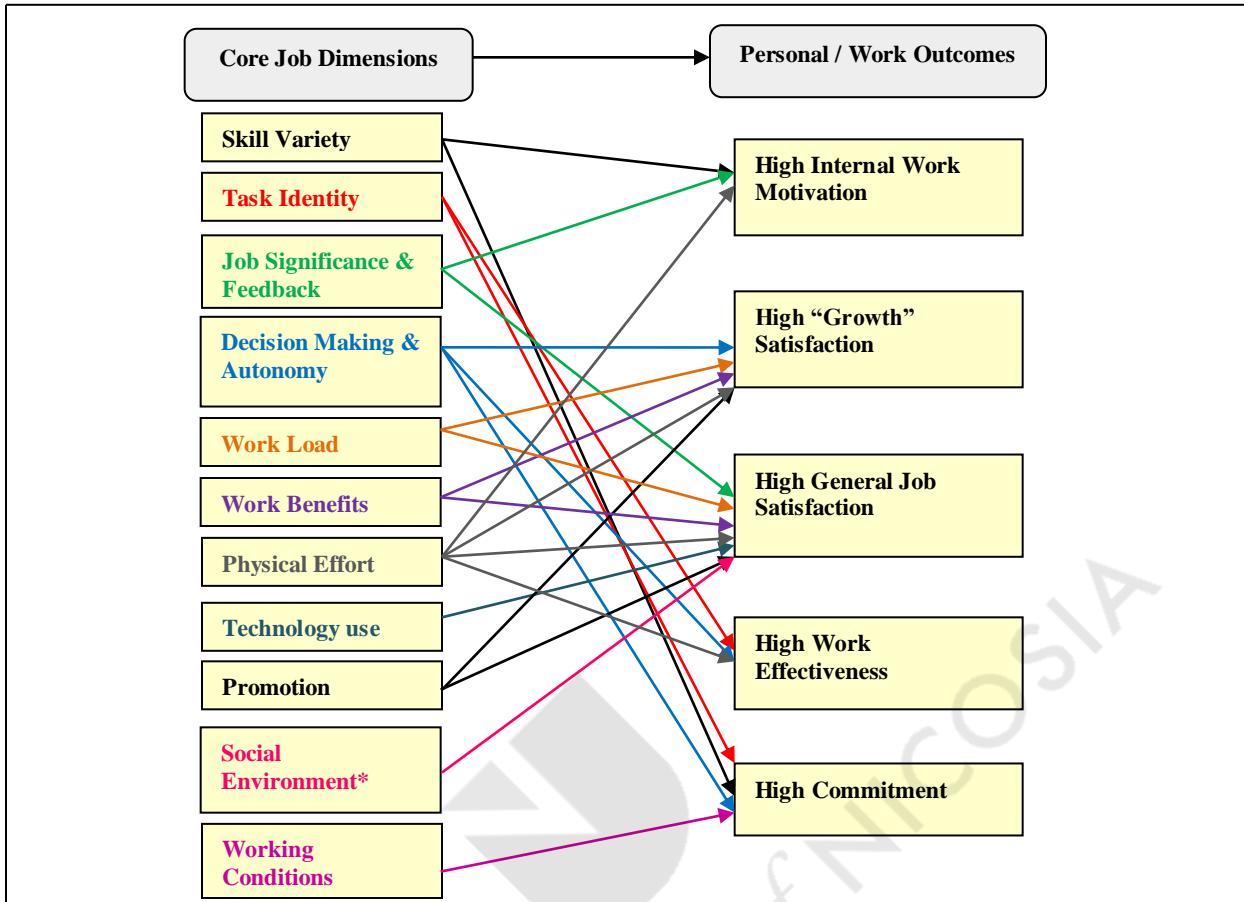


Figure 5.3: Core Job Dimensions Predicting Personal/Work Outcomes

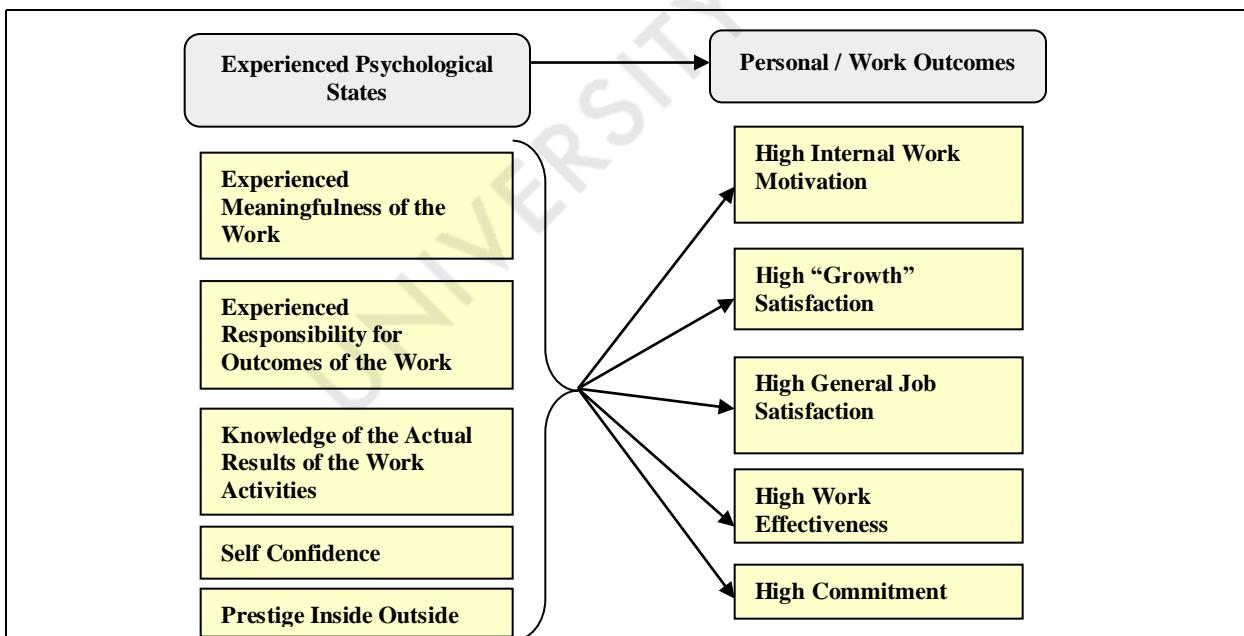


Figure 5.4: Experienced Psychological States Predicting Personal/Work Outcomes

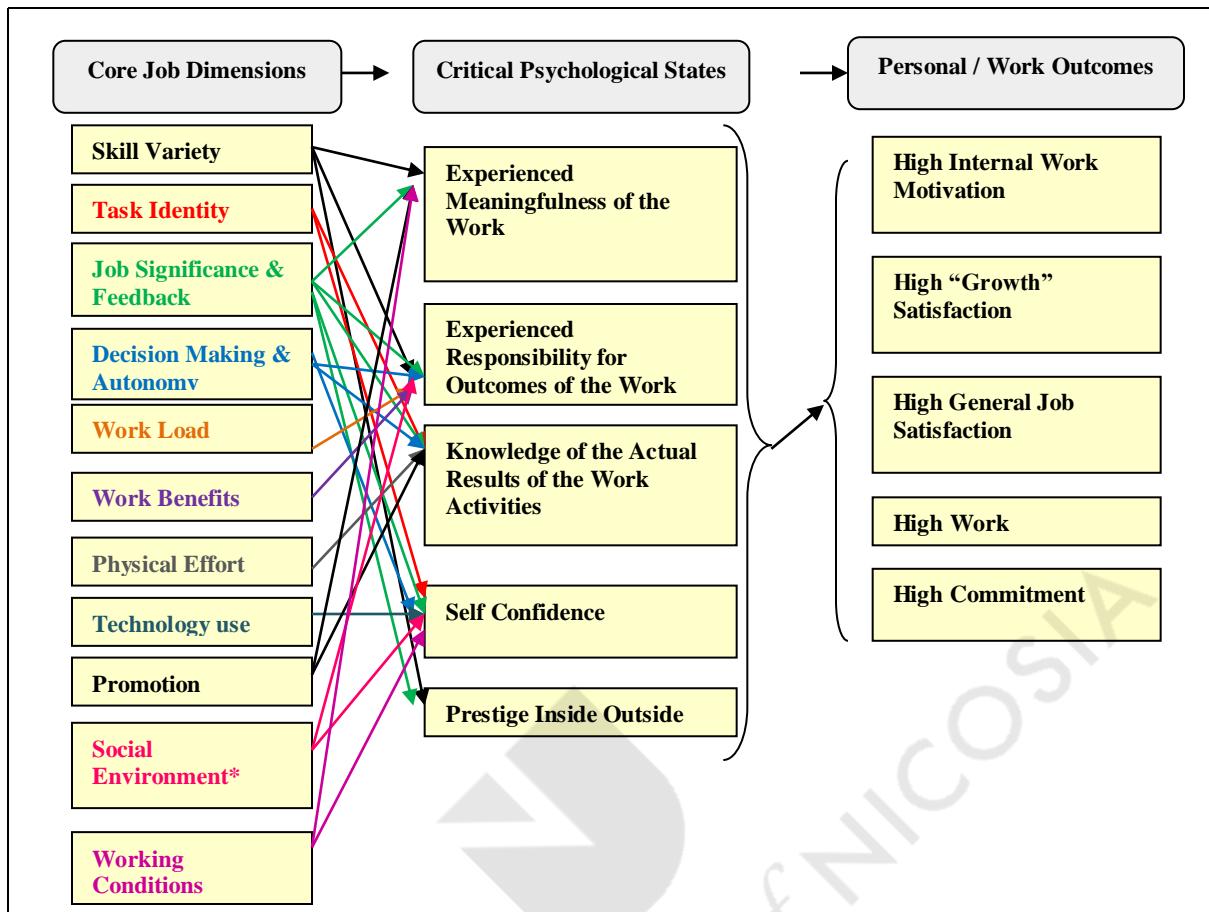


Figure 5.5: Critical Psychological States as Mediators Affecting the Relationships between Core Job Dimensions and Personal/Work Outcomes

5.9 MMPS as a Summary Subscale for Core Job Dimensions

The Motivating Potential Score (MPS) which has been used by Hackman and Oldham (1976) as an index to summarize the extent to which work properties are objectively set so as to foster psychological states and through them enhance internal work motivation, derives directly from the propositions of JCM. Nevertheless, MJCM-R introduces new core job dimensions (e.g., Decision Making, Work Load, Work Benefits, Physical Effort, Technology Use, Promotion, Social Environment and Working Conditions) which proved to affect the experienced psychological states and the personal/work outcomes of fresh graduates; therefore it was obvious to create a new, modified index for fresh graduates ‘motivating potential’.

The Modified Motivating Potential Score (MMPS) is then the tool used to summarize the total degree to which a job is designed in an objective way so as to maximize the possibility for fresh graduates’ internal motivation. The MMPS formulation derives directly from the MJCM-R

regression analysis results and therefore is valid to the degree that the model itself has validity. Nevertheless, it is significant to evaluate its empirical performance and to compare it with that of other alternative formulations since there is increasing evidence that in various prediction situations simple unweighted linear formulations might outperform complex ones (Daves & Corrigan, 1974).

Four different formulations for combining the core job dimensions were developed and correlated with the five personal/work outcomes' subscales.

The MMPS formulation takes into consideration the extent to which each core job dimension affect psychological states. It is noticed that "Job Significance & Feedback" affects all of the psychological states, so it is the one that has the most important effect and thus is not averaged. Then come Skill Variety and Decision Making and Autonomy which affect three out of the five psychological states, so they should get more weight compared to the remaining (1/2). Then, Promotion, Working Conditions, Social Environment and Task Identity affect two out of the five psychological states, so less weight (1/4) and finally Work Load, Work Benefits, Physical Effort and Technology Use affect only one psychological state so they should have the smallest weight (1/8). As a result, MMPS is then computed as follows:

$$\text{MMPS} = \text{Job significance \& Feedback} \times (\text{Skill Variety} + \text{Decision Making \& Autonomy})/2 \times (\text{Promotion} + \text{Working Conditions} + \text{Social Environment} + \text{Task identity})/4 \times (\text{Work Load} + \text{Work Benefits} + \text{Physical Effort} + \text{Technology Use})/8$$

Another alternative could be a weighted average formulation knowing that 1 core job dimension(Job Significance & Feedback) affects 5 psychological states, another 2 core job dimensions (Skill Variety and Decision Making and Autonomy) affect 3 psychological states, 4 other core job dimensions (Promotion, Working Conditions, Social Environment and Task Identity) affect 2 psychological states, and 4 other core job dimensions (Work Load, Work Benefits, Physical Effort and Technology Use) affect 1 psychological state, which make a total of 23 [(5+3+3+2+2+2+1+1+1)=23]. As a result the Weighted Average Score is then as follows:

$$\text{Weighted Average Score} = (1/23) \times (5 \text{ Job Significance \& Feedback} + 3 \text{ Skill variety} + 3 \text{ Decision Making \& Autonomy} + 2 \text{ Promotion} + 2 \text{ Working Conditions} + 2 \text{ Social Environment} + 2 \text{ Task Identity} + \text{Work Load} + \text{Work Benefits} + \text{Physical Effort} + \text{Technology Use})$$

The third alternative is a simple additive formulation which simply takes the sum of all variables and then is as follows:

Simple Additive Score = Job significance & Feedback + Skill Variety + Decision Making & Autonomy + Promotion + Working Conditions + Social Environment + Task Identity + Work Load + Work Benefits + Physical Effort + Technology Use

The fourth alternative is a full multiplicative formulation which takes the product of all variables and then is computed as follows:

Full Multiplicative Score = Job significance & Feedback x Skill Variety x Decision Making & Autonomy x Promotion x Working Conditions x Social Environment x Task Identity x Work Load x Work Benefits x Physical Effort x Technology Use

As can be noticed from the MMPS formula, a near-zero score of a job on Job Significance & Feedback will reduce the overall MMPS to near-zero while a near-zero score on any of the remaining core job dimensions cannot by itself reduce the overall MMPS to near-zero (although some dimensions do have more effect on the score, accordingly). However, in the Weighted Average and Simple Additive formulas, a near-zero score on any single core job dimension cannot by itself reduce the overall score to near-zero while in the Full Multiplicative formulation a near-zero score of any single core job dimension will reduce the overall score to near-zero. The formulations and the correlations are shown in Table 5.18.

Table 5.18: Comparison of Several Formulations for Combining the Core Job Dimensions

	Personal/Work Outcomes				
	High Internal Work Motivation	High General Satisfaction	High Growth Satisfaction	High Work Effectiveness	High Work Commitment
MMPS	.295**	.315**	.594**	.264**	.194**
Weighted Average Score	.291**	.301**	.616**	.257**	.108**
Simple Additive Score	.247**	.303**	.617**	.229**	.104**
Full Multiplicative Score	.138**	.234**	.327**	.171**	.190**

**. Correlation is significant at the 0.01 level (2-tailed).

The results do not expressively differentiate among the formulations. While the full multiplicative formulation proves to be slightly the worst (agreeing with the corresponding full multiplicative formulation of Hackman and Oldham (1976) which proved to be the worst as well when testing MPS), the MMPS is found to be slightly the best showing the highest correlations for four out of five personal/work outcomes. The correlations are all significant and the noticed differences among the scores are very small. Thus, the suggested MMPS formulation which is

derived from MJCM-R and which takes into consideration the extent to which each core job dimension affect psychological states and through them enhance the personal/work outcomes of fresh graduates, is confirmed by the results and by this, a low standing on Job Significance & Feedback will substantially compromise a job's MMPS, because Job Significance & Feedback is the only core job dimension expected to foster all the psychological states. On the contrary, a low score on one of the ten remaining core job dimensions may not reduce a job's MMPS, because a strong presence of one of those ten attributes can offset the absence of the others.

5.10 Which Specific Labor Market Conditions Relate to Which Personal/Work Outcome?

Multiple regression analysis using stepwise method (based on the significant p-values and beta values) shows that:

- 1- “High Internal Work Motivation” is affected by the following labor market conditions: Job Matching, Educational & Labor Market Gap, and Geographical Location. More specifically it is affected the most by “Job Matching” since it shows the highest standardized regression weight (Beta = .199). The second most important is “Educational & Labor Market Gap” (Beta= -.111), and the third most important is “Geographical Location” (Beta = -.082).
- 2- “High General Satisfaction” is affected by the following labor market conditions: Job Matching, Foreign & National Workers, and Geographical Location. More specifically it is affected the most by “Job Matching” since it has the highest standardized regression weight with Beta = .216. The second most important is “Foreign & National Workers” (Beta = -.160) and the third most important is “Geographical Location” (Beta=-.147).
- 3- “High Growth Satisfaction” is affected by the following labor market conditions: Private & Public Sector, Foreign & National Workers and Geographical Location. More specifically it is affected the most by “Private & Public Sector” since it has the highest standardized regression weight with Beta = .144. The second most important is “Foreign & National Workers” (Beta= -.121) and the third most important is “Geographical Location” (Beta = -.116).
- 4- “High Work Effectiveness” is affected by the following labor market conditions: Job Matching and Labor Status. More specifically it is affected the most by “Job Matching”

since it has the highest standardized regression weight with Beta = .262. The second most important is “Labor Status” (Beta= -.104).

- 5- “High Work Commitment” is affected by the following labor market conditions: Educational & Labor Market Gap, Job Matching, Formal & Informal Jobs and Unionization. More specifically it is affected the most by “Educational & Labor Market Gap” (Beta= -.228). The second most important is “Job Matching” (Beta = .157), the third most important is “Formal & Informal Jobs” (Beta = .137) and the fourth most important is “Unionization” (Beta = .127).

In addition, to test these results, hierarchical regressions were computed for each of the personal/work outcomes, in which the predictors in the first step were the labor market conditions selected from regression as directly causal of that personal/work outcome. Thus, in the first step, High Internal Work Motivation was predicted from Job Matching, Educational & Labor Market Gap and Geographical Location; High General Satisfaction was predicted from Job Matching, Foreign & National Workers and Geographical Location; High Growth Satisfaction was predicted from Private & Public Sector, Foreign & National Workers and Geographical Location; High Work Effectiveness was predicted from Job Matching and Labor Status; and High Work Commitment was predicted from Educational & Labor Market Gap, Job Matching, Formal & Informal Jobs and Unionization.

Next, the remaining Labor Market Conditions (that is those that were found not directly influencing the personal/work outcomes) were introduced into each regression equation as additional predictors. If the predictions are correct, the selected Labor Market Conditions should account for substantial variance in the Personal/Work Outcomes, and the introduction of the remaining Labor Market Conditions should not substantially increase the amount of variance controlled. Results are presented in Table 5.19, and show that a moderate (but significant)amount of variance in the Personal/Work Outcomes is controlled by the selected Labor Market Conditions from regression (p-value for F-change is less than 5%). For the equations predicting High Internal Work Motivation, High General Satisfaction, High Growth Satisfaction, High Work Effectiveness and High Work Commitment, the addition of the Labor Market Conditions that were not predicted by regression to affect these Personal/Work Outcomes resulted in very small and not significant increases in the level of prediction attained (p-value for F-change being higher than 5%), implying that adding the additional Labor Market Conditions to the regression

did not significantly improve the prediction, consistent with regression results. The standardized regression weights for the equations predicting these Personal/Work Outcomes also are as would be expected, and with weights varying from positive to negative. More specifically Geographical Location has a negative weight for the three personal/work outcomes (High Internal Work Motivation, High General Satisfaction and High Growth Satisfaction) which it affects implying that fresh graduates are interested in a job that is far from home so they profit from discovering new areas and cultures and enjoy the feeling of independence far from their parents' daily guidance. Foreign & National Workers has a negative weight for General and Growth Satisfaction which it affects. This can be explained by the fresh graduates' concerns for the job offers rather than the nationality of the colleagues where they don't mind having co-workers of various nationalities and enjoying the same benefits. Educational & Labor Market Gap has a negative weight for High Internal Work Motivation and High Commitment implying that fresh graduates are not interested in being well prepared to fit into their local labor markets but are more concerned to having their personal competencies being very well matching their job salary as the positive weights with Job Matching indicates. Finally, Labor Status has a negative weight toward High Work Effectiveness implying fresh graduates are not concerned toward starting their carriers as being employers but instead prefer profiting from being an employee first so as to gain some experience. Results are shown in Table 5.19.

In Sum, these relationships can better be explained by the following formulas taking into consideration the Unstandardized coefficients (B) and showing the strength of the labor market conditions in predicting each personal/work outcomes subscale (Refer to Chapter 3 for the corresponding theoretical model and regression equation). The independent variables being the various labor market conditions are considered significant when the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017).

- High Internal Work Motivation = $4.338 - 0.078 \text{ Geographical Location} + 0.203 \text{ Job Matching} - 0.110 \text{ Educational \& Labor Market Gap}$
- High General Satisfaction = $1.789 - 0.135 \text{ Geographical Location} + 0.202 \text{ Job Matching} - 0.169 \text{ Foreign \& National Workers}$
- High Growth Satisfaction = $2.128 - 0.120 \text{ Geographical Location} + 0.151 \text{ Private \& Public Sector} - 0.116 \text{ Foreign \& National Workers}$

- High Work Effectiveness = $3.562 - 0.110 \text{ Labor Status} + 0.271 \text{ Job Matching}$
- High Work Commitment = $2.108 + 0.132 \text{ Unionization} + 0.164 \text{ Job Matching}$
+ $0.128 \text{ Formal \& Informal Jobs} - 0.219 \text{ Educational \& Labor Market Gap}$

First, concerning high internal work motivation, when geographical location increases by 1, high internal work motivation decreases by 0.078, given that other variables remain constant i.e. closer geographical locations have lower internal work motivation. When job matching increases by 1, high internal work motivation increases by 0.203, given that other variables remain constant i.e. the most the job matching, the higher the internal work motivation and when educational and labor market gap increases by 1, high internal work motivation decreases by 0.110, given that other variables remain constant i.e. the higher the gap the lower the internal work motivation.

Second, concerning high general satisfaction, when geographical location increases by 1, high general satisfaction decreases by 0.135, given that other variables remain constant i.e. closer geographical locations have lower general satisfaction. When job matching increases by 1, high general satisfaction increases by 0.202, given that other variables remain constant i.e. the most the job matching the higher the general satisfaction and when foreign and national workers increases by 1, high general satisfaction decreases by 0.169, given that other variables remain constant i.e. the fresh graduates with high concern for the nationality of the co-workers have low general satisfaction.

Third, concerning high growth satisfaction, when geographical location increases by 1, high growth satisfaction decreases by 0.120, given that other variables remain constant i.e. closer geographical locations have lower growth satisfaction. When private and public sector increases by 1, high growth satisfaction increases by 0.151, given that other variables remain constant and when foreign and national workers increases by 1, high growth satisfaction decreases by 0.116, given that other variables remain constant i.e. fresh graduates with high concern for the type of the job have a high growth satisfaction while those with high concern for the nationality of the co-workers have a low growth satisfaction.

Fourth, concerning high work effectiveness, when labor status increases by 1, high work effectiveness decreases by 0.110, given that other variables remain constant i.e. fresh graduates with high interest in labor status (employer or employee) have low high work effectiveness and

when job matching increases by 1, high work effectiveness increases by 0.271, given that other variables remain constant i.e. fresh graduates with jobs matching their qualifications have high work effectiveness.

Finally, concerning high work commitment, when unionization increases by 1, high work commitment increases by 0.132, given that other variables remain constant i.e. fresh graduates with union protection have high work commitment. When job matching increases by 1, high work commitment increases by 0.164, given that other variables remain constant i.e. the highest the job matching, the highest the work commitment. When formal and informal jobs increases by 1, high work commitment increases by 0.128, given that other variables remain constant i.e. fresh graduates with high concern for the type of the job have high commitment for the work and when educational and labor market gap increases by 1, high work commitment decreases by 0.219, given that other variables remain constant i.e. the highest the gap the lowest the work commitment.

Table 5.19: Multiple Regressions Predicting the Personal/Work Outcomes from all Labor Market Conditions Compared to Predictions from Selected Labor Market Conditions

	Betas and p-values for Significant relationships							
	Geographical location	Unionization	Labor Status	Job Matching	Private & Public Sector	Foreign & National Workers	Formal & Informal Jobs	Educational & Labor Market Gap
High Internal Work Motivation	-.082 (p= .039)			.199 (p<.001)				-.111 (p = .031)
High General Satisfaction	-.147 (p<.001)			.216 (p< .001)		-.160 (p<.001)		
High Growth Satisfaction	-.116 (p = .003)				.144 (p<.001)	-.121 (p = .002)		
High Work Effectiveness			-.104 (p = .008)	.262 (p<.001)				
High Work Commitment		.127 (p = .003)		.157 (p = .004)			.137 (p = .005)	-.228 (p<.001)
Summary Statistics								
	Multiple Correlation (R) for the full equation (All Eight Labor Market Conditions)		R ²	Increase in R ² by adding to the regression those Labor Market Conditions that were not selected	Significance of F Change for adding to the regression those Labor Market that were not selected			
High Internal Work Motivation	.175		.031 ^a	.001	.636			
High General Satisfaction	.291		.023 ^b	.049	.792			
High Growth Satisfaction	.236		.055 ^c	.001	.529			
High Work Effectiveness	.270		.073 ^d	.001	.538			
High Work Commitment	.233		.077 ^e	.002	.707			
High Work Commitment	.233		.077 ^e	.002	.707			

^aGeographical Location, Job Matching and Educational & Labor Market Gap

^bGeographical Location, Job Matching and Foreign & National Workers

^cGeographical Location, Private & Public Sector and Foreign & National Workers

^dLabor Status and Job Matching

^eUnionization, Job Matching, Formal & Informal Jobs and Educational & Labor Market Gap

In sum, as shown in Figure 5.6, the results reported above show that indeed Labor Market Conditions predict Personal/Work Outcomes and thus validate the hypothesis H2 (Personal/Work Outcomes are influenced by labor market conditions). More specifically, High Internal Work Motivation was predicted from Job Matching, Educational & Labor Market Gap and Geographical Location; High General Satisfaction was predicted from Job Matching, Foreign & National Workers and Geographical Location; High Growth Satisfaction was predicted from Private & Public Sector, Foreign & National Workers and Geographical Location; High Work Effectiveness was predicted from Job Matching and Labor Status; and High Work Commitment was predicted from Educational & Labor Market Gap, Job Matching, Formal & Informal Jobs and Unionization.

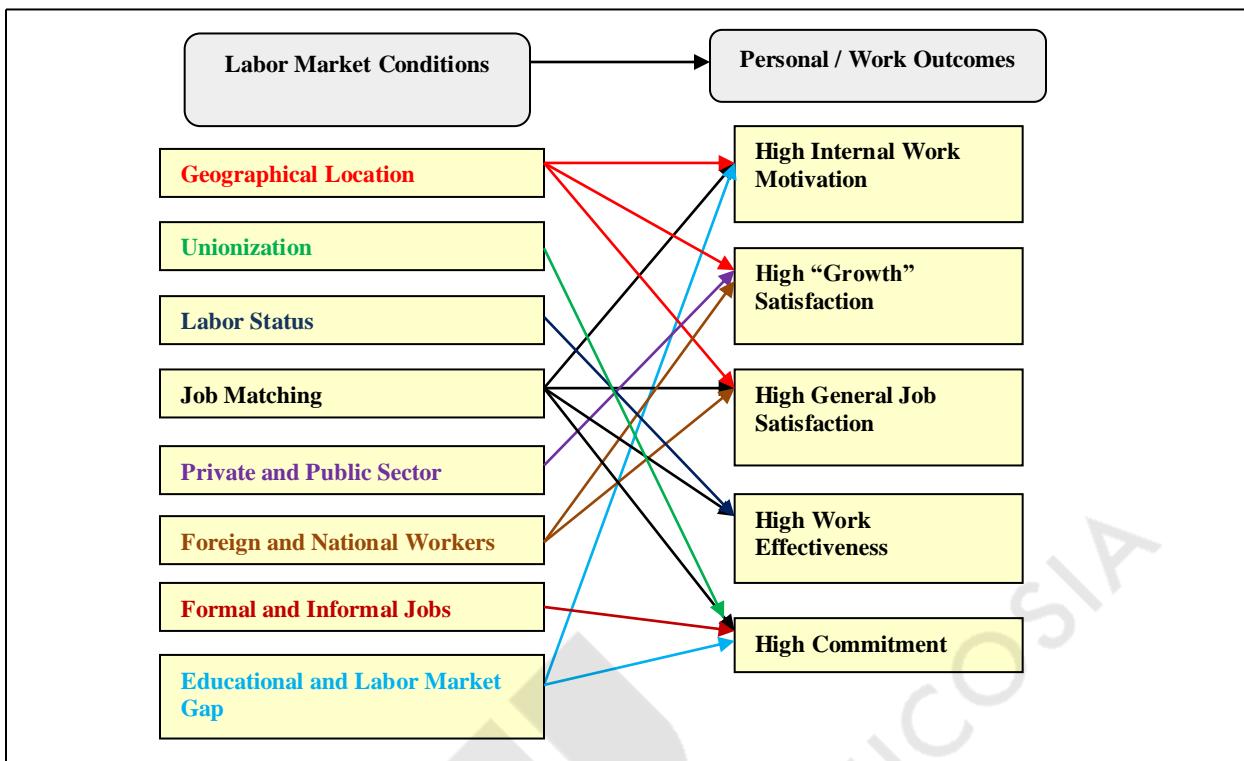


Figure 5.6: Labor Market Conditions Predicting Personal/Work Outcomes

5.11 In the Presence of Labor Market Conditions, Personal/Work Outcomes Maximize

To test this hypothesis (SH2.2), regressions were computed predicting the Personal/Work outcomes' subscales (a) from each of the eight Labor Market Conditions taken alone, (b) from the seventy possible combinations of four Labor Market Conditions, (c) from the fifty six possible combinations of five Labor Market Conditions, (d) from the twenty eight possible combinations of six labor Market Conditions, (e) from the eight possible combinations of seven Labor Market Conditions and (d) from all eight Labor Market Conditions taken together through using Stepwise method. Results are summarized in Table 5.20.

Table 5.20: Average % of Variance Explained in Regressions Predicting Personal/Work Outcomes' subscales from One, Four and Eight Labor Market Conditions

	Average R ²				
	High Internal Motivation	High General Satisfaction	High Growth Satisfaction	High Work Effectiveness	High Commitment
Number of Predictors used in Regressions					
One (GL; U; LS; JM; PPS; FNW; FIJ; ELMG) ^a	.003	.011	.006	.021	.027
Four (GL+U+LS+JM; GL+U+LS+PPS; GL+U+LS+FNW; GL+U+LS+FIJ; GL+U+LS+ELMG; GL+U+JM+PPS; GL+U+JM+FNW; GL+U+JM+ELMG; GL+U+JM+FIJ; GL+U+PPS+FNW; GL+U+PPS+ELMG; GL+U+PPS+FIJ; GL+U+FNW+ELMG; GL+U+FNW+FIJ; GL+U+ELMG+FIJ; GL+LS+JM+PPS; GL+LS+JM+FNW; GL+LS+JM+ELMG; GL+LS+JM+FIJ; GL+LS+PPS+FNW; GL+LS+PPS+ELMG; GL+LS+PPS+FIJ; GL+LS+FNW+ELMG; GL+LS+FNW+FIJ; GL+LS+ELMG+FIJ; GL+JM+PPS+FNW; GL+JM+PPS+ELMG; GL+JM+PPS+FIJ; GL+JM+FNW+ELMG; GL+JM+FNW+FIJ; GL+ELMG+FIJ; GL+PPS+FNW+ELMG; GL+PPS+FNW+FIJ; GL+PPS+ELMG+FIJ; GL+FNW+ELMG+FIJ; U+LS+JM+PPS; U+LS+JM+FNW; U+LS+JM+ELMG; U+LS+JM+FIJ; U+LS+PPS+FNW; U+LS+PPS+ELMG; U+LS+PPS+FIJ; U+LS+FNW+ELMG; U+LS+ELMG+FIJ; U+JM+PPS+FNW; U+JM+PPS+ELMG; U+JM+PPS+FIJ; U+JM+FNW+ELMG; U+JM+ELMG+FIJ; U+PPS+FNW+ELMG; U+PPS+FNW+FIJ; U+PPS+ELMG+FIJ; U+FNW+ELMG+FIJ; LS+JM+PPS+FNW; LS+JM+PPS+ELMG; LS+JM+PPS+FIJ; LS+JM+FNW+ELMG; LS+JM+FNW+FIJ; LS+JM+ELMG+FIJ; LS+PPS+FNW+ELMG; LS+PPS+FNW+FIJ; LS+PPS+ELMG+FIJ; LS+FNW+ELMG+FIJ; JM+PPS+FNW+ELMG; JM+PPS+FNW+FIJ; JM+PPS+ELMG+FIJ; JM+FNW+ELMG+FIJ; PPS+FNW+ELMG+FIJ)	.014	.041	.034	.036	.028
Five (GL+U+LS+PPS+FNW; GL+U+LS+PPS+ELMG; GL+U+LS+PPS+FIJ; GL+U+LS+PPS+JM; GL+U+LS+FNW+ELMG; GL+U+LS+FNW+FIJ; GL+U+LS+FNW+JM; GL+U+LS+ELMG+FIJ; GL+U+LS+ELMG+JM; GL+U+LS+FIJ+JM; GL+U+PPS+FNW+ELMG; GL+U+PPS+FNW+FIJ; GL+U+PPS+FNW+JM; GL+U+PPS+ELMG+FIJ; GL+U+PPS+ELMG+JM; GL+U+PPS+FIJ+JM; GL+U+FNW+ELMG+FIJ; GL+U+FNW+ELMG+JM; GL+U+ELMG+FIJ+JM; GL+LS+PPS+FNW+ELMG; GL+LS+PPS+FNW+FIJ; GL+LS+PPS+FNW+JM; GL+LS+PPS+ELMG+FIJ; GL+LS+PPS+ELMG+JM; GL+LS+PPS+FIJ+JM; GL+LS+FNW+ELMG+FIJ; GL+LS+FNW+ELMG+JM; GL+LS+ELMG+FIJ+JM; GL+PPS+FNW+ELMG+FIJ; GL+PPS+FNW+ELMG+JM; GL+PPS+FNW+FIJ+JM; GL+FNW+ELMG+FIJ+JM; U+LS+PPS+FNW+ELMG; U+LS+PPS+FNW+FIJ; U+LS+PPS+FNW+JM; U+LS+PPS+ELMG+FIJ; U+LS+PPS+ELMG+JM; U+LS+PPS+FIJ+JM; U+LS+FNW+ELMG+FIJ; U+LS+FNW+ELMG+JM; U+LS+FIJ+ELMG+JM; U+PPS+FNW+ELMG+FIJ; U+PPS+FNW+ELMG+JM; U+PPS+FNW+FIJ+JM; U+PPS+ELMG+FIJ+JM; U+FNW+ELMG+FIJ+JM; LS+PPS+FNW+ELMG+FIJ; LS+PPS+FNW+ELMG+JM; LS+PPS+FNW+FIJ+JM; LS+PPS+ELMG+FIJ+JM; LS+FNW+ELMG+FIJ+JM; PPS+FNW+ELMG+FIJ+JM)	.019	.050	.055	.059	.034
Six (GL+U+LS+PPS+FNW+ELMG; GL+U+LS+PPS+FNW+FIJ; GL+U+LS+PPS+FNW+JM; GL+U+LS+PPS+ELMG+FIJ; GL+U+LS+PPS+ELMG+JM; GL+U+LS+PPS+FIJ+JM; GL+U+LS+FNW+ELMG+FIJ; GL+U+LS+FNW+ELMG+JM; GL+U+LS+FNW+FIJ+JM; U+LS+FNW+ELMG+FIJ+JM; U+PPS+FNW+ELMG+FIJ+JM; LS+PPS+FNW+ELMG+FIJ+JM; GL+U+LS+ELMG+FIJ+JM; GL+U+PPS+FNW+ELMG+JM; GL+U+PPS+FNW+FIJ+JM; GL+U+PPS+ELMG+FIJ+JM; GL+U+FNW+ELMG+FIJ+JM; GL+LS+PPS+FNW+ELMG+FIJ; GL+LS+PPS+FNW+ELMG+JM; GL+LS+PPS+FNW+FIJ+JM; GL+LS+FNW+ELMG+FIJ+JM; GL+PPS+FNW+ELMG+FIJ+JM; GL+LS+PPS+ELMG+FIJ+JM; U+LS+PPS+FNW+ELMG+FIJ; U+LS+PPS+ELMG+JM; U+LS+PPS+FIJ+JM; U+LS+FNW+ELMG+FIJ; U+LS+FNW+ELMG+JM; U+LS+PPS+ELMG+FIJ+JM; U+FNW+ELMG+FIJ+JM; LS+PPS+FNW+ELMG+FIJ; LS+PPS+FNW+ELMG+JM; U+LS+PPS+FNW+FIJ+JM; U+LS+PPS+ELMG+FIJ+JM)	.023	.065	.055	.067	.041
Seven (GL+U+LS+JM+PPS+FNW+FIJ; GL+U+LS+JM+PPS+FNW+ELMG; GL+U+LS+JM+PPS+FIJ+ELMG; GL+U+LS+JM+FNW+FIJ+ELMG; GL+U+LS+PPS+FNW+FIJ+ELMG; GL+U+JM+PPS+FNW+FIJ+ELMG; GL+LS+JM+PPS+FNW+FIJ+ELMG; U+LS+JM+PPS+FNW+FIJ+ELMG)	.029	.066	.061	.074	.048
Eight (GL + U + LS + JM + PPS + FNW + FIJ + ELMG)	.033	.075	.067	.081	0.055

^an=630. GL= Geographical Location; U= Unionization; LS= Labor Status; JM= Job Matching; PPS= Private & Public Sector; FNW= Foreign & National Workers; ELMG= Educational & Labor Market Gap; FIJ= Formal & Informal Jobs

Outcomes show that when additional labor market conditions are further added to the regression equations, the amount of outcome subscale variance explained does certainly increase, consistent with MJCM-R. Besides, it should be noted that the increase in R^2 is considerably greater between four and eight predictors than it is between one and four. The R-square change which is tested with an F-test referred to as the F-change shows a significant F-change (p-values smaller than 5%) for all cases except for the change between five and six predictors and between six and seven predictors. Thus, the maximum value of outcome subscale variance explained is achieved when all eight labor market conditions are present, but the significant change is obtained only up to five labor market conditions. Thus, when five of the labor market conditions are present, personal/work outcomes maximize, meaning that a fresh graduate who enjoys these five labor market conditions (Geographical Location, Unionization, Labor Status, Private and Public Sector and Foreign and National Workers) is more able to experience high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high commitment. In other words, a fresh graduate who enjoys a strong labor union, whose job is far from home allowing discovering new areas and new cultures and who is concerned for the job offers rather than the type or the status of the job or the nationality of the colleagues is the most motivated, satisfied, effective and committed.

Finally, knowing that an increment in the amount of subscale variance explained is noticed when predictors are added to the regression with a significant F-change for up to five labor market conditions, and knowing that subscales of the eight labor market conditions are themselves only weakly (significantly) intercorrelated (median correlation = .227), the hypothesis (SH2.2) that personal/work outcomes maximize in the presence of labor market conditions is verified.

5.12 Testing the Moderating Effect of Individual Differences

Group analyses are used to test the degree to which the individual difference subscales of Skill & Knowledge, Context Satisfactions, Growth Need Strength and Personal Characteristics moderate the fresh graduates' reactions to their jobs i.e. to test the degree to which the individual differences affect the strength of the relation between core job dimensions and experienced psychological states and between experienced psychological states and personal/work outcomes. Groups are created for each individual difference subscale. Comparisons are made between the correlations in the groups of each subscale at the following potential sites: core job dimensions

with experienced psychological states, experienced psychological states with personal/work outcomes and core job dimensions with personal/work outcomes. Fisher's Z is then used to test the significance of the differences between corresponding correlations in the groups of each individual difference subscale.

5.12.1 Skill & Knowledge, Context Satisfactions and Growth Need Strength as Moderators

MJCM-R notes that Skill & Knowledge, Context Satisfactions and Growth Need Strength moderate fresh graduates' responses toward their jobs at two points in the motivational sequence presented in Figure 1. More specifically, it is predicted that:

- (a) The relation between the core job dimensions and their corresponding psychological states is expected to be stronger for high than for low (1) Skill & Knowledge fresh graduates, (2) Context Satisfactions fresh graduates including Satisfaction with Job Security, with Compensation, with Co-workers and with Supervision, and (3) Growth Need Strength fresh graduates with significant differences between the correlation coefficients of each low and high group;
- (b) The relation between the five Experienced Psychological States and the Personal/Work Outcomes' subscales is expected to be stronger (1) for fresh graduates with high Skill & Knowledge than for fresh graduates with low Skill & Knowledge, (2) for fresh graduates with high Context Satisfactions than for fresh graduates with low Context Satisfactions, and (3) for fresh graduates with high Growth Need Strength than for fresh graduates with low Growth Need Strength with significant differences between the correlation coefficients of each low and high group.

In other words, it is expected that fresh graduates with high Skill & Knowledge, high Context Satisfactions or high Growth Need Strength are better able to experience the psychological states of a well designed job and are more likely to react positively to that experience.

Based on the fresh graduates' scores on Skill & Knowledge subscale, Context Satisfactions subscale and Growth Need Strength subscale, the top and bottom quartiles for each of these subscales were identified, and correlations were computed separately for each of these groups. For each of the tested relationships, the correlation was expected to be higher for fresh graduates in the top quartile of the distribution of Skill & Knowledge scores, Context Satisfactions scores

and Growth Need Strength Scores than for those in their corresponding bottom quartiles and differences were expected to be significant.

To test the moderating effects of the various Individual Differences on the relationship between Experienced Psychological States and Personal/Work Outcomes subscales, it was obvious to use a single scale that summarizes the extent to which all five psychological states simultaneously are present. The scale Experienced Psychological States is then created (by averaging all the items related to the five psychological states) and correlated with each Personal/Work outcome subscale, separately for high and low groups in Skill & Knowledge, Context Satisfactions and Growth Need Strength. To test the moderating effects of the various Individual Differences on the relationship between Core Job Dimensions and Experienced Psychological States, the relationships between the Core Job Dimensions and the Experienced Psychological States for high and low Skill & Knowledge fresh graduates, Context Satisfactions fresh graduates and Growth Need Strength Fresh graduates are then computed. This includes the relationship between the overall MMPS and the scale of the Experienced Psychological States in addition to the relationships between each Core Job Dimension and its related psychological states. In case a core job dimension affects more than one psychological state, correlations were computed separately for each of the corresponding psychological states and medians were reported. Statistical significance of the differences between correlations for high and low groups was determined by combining the p-values according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Finally, the relationship between the overall MMPS and the personal/Work Outcomes' subscales is computed, in effect bridging the mediating function of the Experienced Psychological States. The significance of the difference between the two correlation coefficients of low and high groups was tested through conducting Fisher's z-test.

Table 21 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates high and low in Skill & Knowledge in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.21 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for high versus low Skill & Knowledge fresh graduates. All differences are statistically significant and are in the predicted direction. The middle group of Table 5.21 shows the relationship between the Core Job Dimensions and their related Experienced Psychological

States for high and low Skill & Knowledge fresh graduates. All differences between correlations are in the predicted direction and are statistically significant (except for Work Benefits). The bottom group of Table 5.21 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for high and low Skill & Knowledge fresh graduates. Once again, all differences between high and low Skill & Knowledge fresh graduates are in the expected direction and are statistically significant.

Table 5.21: Relationship among Core Job Dimensions, Experienced Psychological States, and Personal/Work Outcomes' Subscales for Fresh Graduates High and Low in Skill and Knowledge

	Correlations		Z
	Low Skill & Knowledge	High Skill & Knowledge	
Experienced Psychological States with:			
High Internal Work Motivation	.342**	.712**	4.51**
High General Job Satisfaction	.273**	.515**	2.44**
High Growth Satisfaction	.168*	.406**	2.20**
High Work Effectiveness	.225**	.457**	2.23**
High Commitment	.511**	.664**	1.99*
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.210**	.387**	1.65*
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.202**	.371**	1.56*
Task Identity with Knowledge of Results and Self-confidence ¹	.209**	.412**	1.90*
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.202**	.369**	1.54*
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	-.207**	-.409**	-1.81*
Work Load with Experienced Responsibility	.172*	.394**	2.05*
Work Benefits with Experienced Responsibility	-.076	-.054	0.19
Physical Effort with Knowledge of Results	.189**	.397**	1.93*
Technology Use with Self-confidence	.108**	.330**	1.98*
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.159**	.465**	2.81**
Social Environment with Experienced Responsibility and Self-confidence ¹	.156**	.375**	2.00*
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.201**	.412**	1.98*
Modified Motivating Potential Score with:			
High Internal Work Motivation	.168*	.384**	1.98*
High General Job Satisfaction	.176*	.387**	1.94*
High Growth Satisfaction	.252**	.451**	1.93*
High Work Effectiveness	.214**	.421**	1.95*
High Commitment	.215**	.435**	2.09**

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for high and low Skill and Knowledge subjects was determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n= 291 (139 and 152, respectively, in the high and low Skill and Knowledge groups; ns are unequal because of tied scores).

* p < .05; ** p < .01

Tables 5.22 and 5.23 show the relationships among Core Job Dimensions, Experienced Psychological States, and Personal/Work Outcomes' subscales for high and low Context

Satisfactions fresh graduates including Satisfaction with Job Security, Satisfaction with Compensation, Satisfaction with Co-workers and Satisfaction with Supervision in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.22 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for high versus low Context Satisfactions fresh graduates. All differences are statistically significant and are in the predicted direction. The middle group of Table 5.22 shows the relationship between the Core Job Dimensions and the Experienced Psychological States for high and low Context Satisfactions fresh graduates. All differences between correlations are in the predicted direction and are statistically significant (except for Work Benefits). The bottom group of Table 5.22 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for high and low Context Satisfactions fresh graduates. Once again, all differences between high and low Context Satisfactions fresh graduates are in the expected direction and are statistically significant (except for General Satisfaction). The top group of Table 5.23 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for fresh graduates with high versus low Context Satisfactions' subscales (Satisfaction with Job Security, Satisfaction with Compensation, Satisfaction with Co-workers and Satisfaction with Supervision). All differences are statistically significant and are in the predicted direction. The middle group of Table 5.23 shows the relationship between the Core Job Dimensions and the Experienced Psychological States for fresh graduates with high and low Context Satisfactions' subscales. All differences between correlations are statistically significant (except for Decision Making & Autonomy with high and low Satisfaction with Co-workers, for Promotion with high and low Satisfaction with Compensation and with high and low Satisfaction with Co-workers, for Task Identity with high and low Satisfaction with Job Security, for Work Benefits with high and low Satisfaction with Compensation, and for Working Conditions with high and low Satisfaction with Job Security) and are in the predicted direction (except for both Satisfaction with Job Security and Satisfaction with Supervision where low groups have higher correlations than high groups and both exceptions involved Task Identity only). The bottom group of Table 5.23 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for fresh graduates with high and low Context Satisfactions' subscales. Once again, all differences

are in the expected direction (except for Satisfaction with Compensation, low groups have higher correlations than high groups for the relationship between MMPS and High Work Effectiveness only) and are statistically significant (except for General Satisfaction for fresh graduates with high and low Satisfaction with Compensation and for High Commitment for fresh graduates with high and low Satisfaction with Job Security).

Table 5.22: Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales for Fresh Graduates High and Low in Context Satisfactions

	Correlations		Z
	Low Context Satisfactions	High Context Satisfactions	
Experienced Psychological States with:			
High Internal Work Motivation	.315**	.558**	2.53**
High General Job Satisfaction	.207**	.459**	2.46**
High Growth Satisfaction	.225**	.499**	2.74**
High Work Effectiveness	.230**	.433**	1.97*
High Commitment	.337**	.542**	2.20**
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.201**	.409**	1.98*
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.305**	.498**	1.99*
Task Identity with Knowledge of Results and Self-confidence ¹	.179*	.387**	1.95*
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.201**	.405**	1.94*
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.170*	.393**	2.09**
Work Load with Experienced Responsibility	.244**	.450**	2.03*
Work Benefits with Experienced Responsibility	.089	-.096	-1.60
Physical Effort with Knowledge of Results	-.215**	-.419**	-1.96*
Technology Use with Self-confidence	.205**	.410**	1.96*
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.217**	.450**	2.27**
Social Environment with Experienced Responsibility and Self-confidence ¹	.314**	.512**	2.07**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.287**	.498**	2.16**
Modified Motivating Potential Score with:			
High Internal Work Motivation	.301**	.491**	1.95*
High General Job Satisfaction	-.099	.063	1.40
High Growth Satisfaction	.317**	.510**	2.02**
High Work Effectiveness	.247**	.496**	2.51**
High Commitment	.211**	.418**	1.99*

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for high and low Context Satisfactions subjects was determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n= 302 (156 and 146, respectively, in the high and low Context Satisfactions groups; ns are unequal because of tied scores).

* p < .05; ** p < .01

Table 5.23 Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales for Fresh Graduates High and Low in Context Satisfaction Subscales

	Correlations		Z	Correlations		Z	Correlations		Z	Correlations		Z
	Low CS - with Job Security ²	High CS - with Job Security ³		Low CS - with Compens- ation ⁴	High CS - with Compens- ation ⁵		Low CS - with Co- Workers ⁶	High CS - with Co- Workers ⁷		Low CS - with Super- vision ⁸	High CS - with Super- vision ⁹	
Experienced Psychological States with:												
High Internal Work Motivation	.222**	.538**	3.05**	.220**	.563**	3.15**	.202**	.518**	2.65**	.304**	.592**	2.93**
High General Job Satisfaction	.214**	.444**	2.11*	.235**	.467**	2.03*	.264**	.498**	1.99*	.279**	.594**	3.17**
High Growth Satisfaction	.196*	.487**	2.71**	.271**	.489**	1.95*	.175*	.476**	2.45**	.271**	.492**	2.08*
High Work Effectiveness	.212**	.570**	3.51**	.202**	.432*	1.96*	.214**	.497**	2.36**	.242**	.457**	1.97*
High Commitment	.288**	.577**	2.94**	.433**	.619**	1.98*	.339**	.622**	2.7**	.272**	.539**	2.59**
Job Dimensions with Corresponding Psychological States:												
MMPS with Experienced Psychological States	.156	.378**	1.95*	.219**	.530**	2.80**	.220**	.476**	2.11*	.170*	.398**	1.99*
Skill Variety with Exp. Meaningfulness, Exp. Responsibility & Prestige Inside Outside ¹	.224**	.441**	1.99*	.190*	.493**	2.65**	.213**	.451**	1.94*	.197*	.441**	2.19*
Task Identity with Knowledge of Results & Self-confidence ¹	.295**	.241**	-0.47	.201**	.596**	3.68**	.301**	.532**	2.03*	.440**	.200**	-2.15*
Job Significance & Feedback with Exp. Meaningfulness, Exp. Responsibility, Knowledge of Results, Self-confidence & Prestige Inside Outside ¹	.213**	.466**	2.34**	.240**	.526**	2.59**	.376**	.601**	2.15*	.310**	.597**	2.94**
Decision Making & Autonomy with Exp. Responsibility, Knowledge of Results & Self-confidence ¹	318**	.550**	2.35**	.270**	.490**	1.97*	.105	.130	0.18	.210**	.502**	2.71**
Work Load with Exp. Responsibility	.187*	.421**	2.11*	.195*	.465**	2.33**	.210**	.451**	1.96*	.268**	.512**	2.32*
Work Benefits with Exp. Responsibility	-.220**	.129**	2.87**	.201**	.212**	0.09	.243**	.557**	2.74**	.257**	.498**	2.27*
Physical Effort with Knowledge of Results	-.161*	-.389**	-2.02*	-.212**	-.443**	-1.98*	.231**	.470**	1.98*	.293**	.687**	4.32**
Technology Use with Self-confidence	-.290**	.111**	-3.33**	.170**	.443**	2.30**	.210**	.452**	1.97*	.307**	.676**	4.03**
Promotion with Exp. Meaningfulness & Knowledge of Results ¹	.225**	.450**	2.08*	.110	.120	0.08	.116*	.210**	0.69	.258**	.502**	2.30*
Social Environment with Exp. Responsibility & Self-confidence ¹	.178*	.399**	1.97*	.195**	.436**	2.05*	.210**	.480**	2.23*	.207**	.492**	2.63**
Working Conditions with Exp. Meaningfulness & Self-confidence ¹	.292**	.301**	0.08	.212**	.587**	3.48**	.266**	.501**	2.00*	.182*	.409**	2.00*
Modified Motivating Potential Score with:												
High Internal Work Motivation	.304**	.610**	3.21**	.248**	.495**	2.20*	.207**	.450**	1.97*	.190*	.410**	1.94*
High General Job Satisfaction	.151*	.401*	2.21*	.074	.150	0.59	.287**	.514**	1.96*	.210**	.465**	2.32*
High Growth Satisfaction	.232**	.508**	2.63**	.311**	.674**	3.78**	.201**	.490**	2.39**	.278**	.545**	2.60**
High Work Effectiveness	.218**	.573**	3.50**	.496**	.274**	-2.00*	.370**	.602**	2.21*	.276**	.356**	2.52**
High Commitment	-.098	.137	1.92	.170*	.405**	1.96*	.210**	.519**	2.6**	.234**	.470**	2.17*

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for high and low GNS subjects was determined by combining the p values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). ²n= 119. ³n= 156. ⁴n= 124. ⁵n= 114. ⁶n= 140. ⁷n= 86. ⁸n= 161. ⁹n= 110.

* p < .05; ** p < .01

Table 5.24 shows the relationships among the Core Job Dimensions, the Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates high and low in total GNS and its two subscales (Job Choice Format and Would Like Format) in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.24 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for high versus low GNS fresh graduates. All differences are statistically significant and are in the predicted direction with no exceptions. The middle group of Table 5.24 shows the relationship between the Core Job Dimensions and the Experienced Psychological States for high and low GNS fresh graduates. All differences between correlations are in the predicted direction (except for GNS Job Choice Format, low groups have higher correlations than high groups for Working Conditions only; for GNS Would Like Format, low groups have higher correlations than high groups for Promotion only; and for total GNS, low groups have higher correlations than high groups for Technology Use only.) and are statistically significant (except for Work Load for fresh graduates with high and low total GNS and GNS Would like Format, for Promotion for fresh graduates with high and low total GNS and GNS Job Choice Format, for Working Conditions for fresh graduates with high and low GNS Job Choice Format and for Technology Use for fresh graduates with high and low GNS Job Choice Format). The bottom group of Table 5.24 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for high and low GNS fresh graduates including Job Choice Format and Would Like Format. Once again, all differences between high and low GNS fresh graduates are in the expected direction (except for both GNS Would like Format and total GNS, low groups have higher correlations than high groups and both exceptions involved High Work Effectiveness and High Commitment only; while for GNS Job Choice Format, low groups have higher correlations than high groups for High Growth Satisfaction only) and are significant (except for High Work Effectiveness for fresh graduates with high and low GNS Job Would Like Format).

Table 5.24: Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales for Fresh Graduates High and Low in Growth Need Strength (GNS)

	Correlations		Z	Correlations		Z	Correlations		Z
	Low GNS – Job Choice Format ²	High GNS- Job Choice Format ³		Low GNS – Would Like Format ⁴	High GNS- Would Like Format ⁵		Low GNS ⁶	High GNS ⁷	
Experienced Psychological States with:									
High Internal Work Motivation	.352**	.560**	2.28*	.301**	.627**	3.78**	.445**	.614**	2.03*
High General Job Satisfaction	.135*	.491**	3.45**	.213**	.457**	2.46**	.389**	.512**	2.27*
High Growth Satisfaction	.326**	.538**	2.26*	.275**	.477**	2.29*	.371**	.559**	2.07*
High Work Effectiveness	.354**	.664**	3.70**	.213**	.433**	2.19*	.207**	.458**	2.44**
High Commitment	.240**	.485**	2.45**	.225**	.454**	2.31*	.409**	.580**	1.95*
Job Dimensions with Corresponding Psychological States:									
MMPS with Experienced Psychological States	.285**	.522**	2.46**	.363**	.597**	2.73**	.329**	.570*	2.62**
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.203**	.441**	2.30*	.212**	.636**	4.76**	.210**	.454**	2.37**
Task Identity with Knowledge of Results and Self-confidence ¹	.170*	.386**	2.02*	.177*	.475**	3.00**	.166*	.387**	2.06**
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence & Prestige Inside Outside ¹	.219**	.459**	2.35**	.240**	.496**	2.66**	.267**	.478**	2.11*
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.270**	.467**	1.97*	.170*	.380**	2.03*	.210**	.430**	2.11*
Work Load with Experienced Responsibility	.128*	.360**	2.13*	.162*	.179*	0.16	.051	.148	0.84
Work Benefits with Experienced Responsibility	.148*	.367**	2.03*	.130*	.460**	3.25**	.178*	.395**	2.04*
Physical Effort with Knowledge of Results	-.228**	-.452**	-2.19*	-.204**	-.485**	-2.86**	-.172*	.249**	3.66*
Technology Use with Self-confidence	-.105	-.243	-1.23	.110*	.448**	3.30**	.397**	.173*	-2.10*
Promotion with Experienced Meaningfulness & Knowledge of Results ¹	.360**	.390**	0.30	.475**	.243**	-2.38**	.259**	.276**	0.16
Social Environment with Experienced Responsibility &Self-confidence ¹	.243**	.483**	2.40**	.212**	.570**	3.84**	.245**	.576**	3.48**
Working Conditions with Experienced Meaningfulness & Self-confidence ¹	.361**	.211**	-1.41	.210**	.600**	4.26**	.164*	.394*	2.15*
Modified Motivating Potential Score with:									
High Internal Work Motivation	.331**	.581**	2.75**	.325**	.607**	3.26**	.272**	.479**	2.08*
High General Job Satisfaction	.209**	.457**	2.42**	.290**	.483**	2.03*	.190**	.399**	1.97*
High Growth Satisfaction	.631**	.360**	-3.15**	.464**	.670**	2.62**	.468**	.653**	2.34**
High Work Effectiveness	.261**	.527**	2.74**	.342**	.279**	-0.62	.477**	.272**	-2.05**
High Commitment	.140*	.353**	1.96*	.388**	.179*	-2.03*	.370**	.151*	-2.02*

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for high and low GNS subjects was determined by combining the p values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). ²n= 147. ³n= 155. ⁴n=162. ⁵n= 159. ⁶n= 150. ⁷n= 149.

* p < .05; ** p < .01

In sum, the correlations between the core job dimensions and the corresponding experienced psychological states in both low and high groups in Skill & Knowledge, Context Satisfactions and Growth Need Strength show that of the possible 108 comparisons ((11 core job dimensions + MMPS) x 9 individual difference subscales), only 14 differences were not statistically significant (Work Benefits for fresh graduates with high and low Skill & Knowledge, with high & low Context Satisfactions and with high and low Satisfaction with Compensation; Decision Making & Autonomy with high and low Satisfaction with Co-workers; Promotion with high and low Satisfaction with Compensation, with high and low Satisfaction with Co-workers, with high and low total GNS and with high and low GNS Job Choice Format ; Task Identity with high and low Satisfaction with Job Security, Working Conditions with high and low Satisfaction with Job Security and with high and low GNS Job Choice Format; Work Load for fresh graduates with high and low total GNS and with high and low GNS Would Like Format; and Technology Use for fresh graduates with high and low GNS Job Choice Format) and only five correlations in the low groups were stronger than those in the high groups (Task Identity for fresh graduates with high and low Satisfaction with Job Security and with high & low Satisfaction with Supervision; Technology Use for fresh graduates with high and low total GNS; Promotion for fresh graduates with high and low GNS Would Like Format; and Working Conditions for fresh graduates with high and low GNS Job Choice Format). The correlations between the scale of experienced psychological states and personal/work outcomes' subscales in both high and low groups show that of the possible 45 comparisons (five personal/work outcomes' subscales x 9 individual differences), all differences were significant and all correlations in the high groups were stronger than those in the low groups as expected. The correlations between MMPS and the personal/work outcomes' subscales in both high and low groups show that out of the possible 45 comparisons (five personal/work outcomes' subscales x 9 individual differences), only four differences were not statistically significant (High General Job Satisfaction for fresh graduates with high and low Context Satisfactions and for fresh graduates with high and low Satisfaction with Compensation; High Commitment for fresh graduates with high and low Satisfaction with Job Security; and High Work Effectiveness for fresh graduates with high and low GNS Would Like Format) and only six correlations in the low group were stronger than those in the high group (High Work Effectiveness for fresh graduates with high and low Satisfaction with Compensation, for fresh graduates with high and low GNS Would Like Format and with high

and low total GNS; High Growth Satisfaction for fresh graduates with high and low GNS Job Choice Format; and High Commitment for fresh graduates with high and low GNS Would Like Format and with high and low total GNS). Knowing that all the other differences were statistically significant, some trends can be detected. For Skill & Knowledge, Context Satisfactions and Satisfaction with Co-workers in all comparisons, those in the high groups had stronger correlations than those in the low groups as expected. For Satisfaction with Job Security, Satisfaction with Compensation and Satisfaction with Supervision in 21 out of 22 comparisons for each individual difference, those in the high groups had higher correlations than those in the low groups as expected. For GNS Job Choice Format in 20 out of 22 comparisons, those in the high groups had stronger correlations than those in the low groups and for GNS Would Like Format and total GNS in 19 out of 22 comparisons for each, those in the high groups had stronger correlations than those in the low groups as expected. Thus the present outcomes provide strong statistical support for the role of Skill & Knowledge, Context Satisfactions and Growth Need Strength as moderators in the relationships among core job dimensions, experienced psychological states and personal/work outcomes. When all comparisons are considered together, 94.44% of the comparisons (187 out of 198 comparisons) of corresponding correlations between high and low groups on individual differences were in the expected direction where high groups had stronger correlations than low groups and 90.90% (180 out of 198 comparisons) of the comparisons were significant.

5.12.2 Personal Characteristics as Moderators

MJCM-R notes that fresh graduates' personal characteristics (Age, Gender, Education (Level of Education, Type of Education (Subject of Study), Language of Instruction, Type of the Educational Institution, Social Class (Upper, middle and Lower Class), and Culture (Power Distance, Individualism versus Collectivism, Masculinity versus Feminism, Pragmatic versus Normative, Indulgence versus Restraint)) moderate fresh graduates' responses toward their jobs at two points in the motivational sequence presented in Figure 3.6.

More specifically, it is predicted that:

- (a) The relationship between the core job dimensions and their corresponding psychological states is expected to be stronger (1) for young fresh graduates than for much aged ones, (2) for females than for males, (3) for fresh graduates with low (Bachelor Degree) than for those

with high (PhD Degree) educational level, (4) for fresh graduates earning their degrees from a public than from a private educational institution, (5) for fresh graduates who belong to the lower social class than those who belong to the upper social class, (6) for fresh graduates with high power distance culture than for those with low power distance culture, (7) for fresh graduates with individualism culture than for those with collectivism culture, (8) for fresh graduates with feminism culture than for those with masculinity culture, (9) for fresh graduates with restraint culture than for those with indulgent culture and (10) for fresh graduates with pragmatic culture than for those with normative culture, with significant differences between the correlation coefficients of the components or subgroups of each of these personal characteristics; and is expected to show significant differences between the correlation coefficients of fresh graduates with different majors of study (Business Studies, Medical Studies, Sciences Studies, Engineering Studies, Technology Studies and Arts and Social Sciences Studies) and between the correlation coefficients of fresh graduates whose language of instruction (Arabic, French, English) is different;

- (b) The relationship between the five Experienced Psychological States and each of the Personal/Work Outcomes' subscales is expected to be stronger (1) for young fresh graduates compared to older ones, (2) for females than for males, (3) for fresh graduates with low (Bachelor Degree) than for those with high (PhD Degree) educational level, (4) for fresh graduates earning their degrees from a public than from a private educational institution, (5) for fresh graduates who belong to the lower social class than those who belong to the upper social class, (6) for fresh graduates with high power distance culture than for those with low power distance culture, (7) for fresh graduates with individualism culture than for those with collectivism culture, (8) for fresh graduates with feminism culture than for those with masculinity culture, (9) for fresh graduates with restraint culture than for those with indulgent culture and (10) for fresh graduates with pragmatic culture than for those with normative culture, with significant differences between the correlation coefficients of the components or subgroups of each of these personal characteristics; and is expected to show significant differences between the correlation coefficients of fresh graduates with different majors of study (Business Studies, Medical Studies, Sciences Studies, Engineering Studies, Technology Studies and Arts and Social Sciences Studies) and between the correlation

coefficients of fresh graduates whose language of instruction (Arabic, French, English) is different;

In other words, it is expected that fresh graduates of different ages, different gender, different levels of education, different subjects of study, different languages of instruction, different educational institutions' types, different social classes and different cultural backgrounds are able to experience the psychological states of a well designed job in a significantly different way and are more likely to react differently to that experience.

Based on the fresh graduates' answers in the personal characteristics' section of MJDS-R, age groups, gender groups, level of education groups, subject of study groups, language of study groups, educational institution groups, social class groups and cultural background groups were identified, and correlations were computed separately for each group. For each of the tested relationships, the correlation was expected to be higher for younger fresh graduates compared to older fresh graduates (Holloway, 1996), to be higher for females than for males (Keith, et al., 2005; McDuff, 2001), to be higher for low (Bachelor Degree) educational level than for high (PhD Degree) educational level (Carell & Elbert, 1974; DeSantis & Durst, 1996; Shah et al., 2012), to be higher for public institutions' degrees than for private institutions' degrees (Tett et al., 2003), to be higher for lower social class than for upper social class (Fontinatos-Ventouratos & Cooper, 1998, 2005), to be higher for high power distance than for low power distance (Hofstede, 2001), to be higher for individualism than for collectivism (*ibid.*), to be higher for feminism than for masculinity (*ibid.*), to be higher for restraint than for indulgent (*ibid.*), and to be higher for pragmatic than for normative (*ibid.*) (see Chapter 2 part 2.5 for further details); and it was also expected that results would show a significant difference among the various subjects of study groups (Business Studies, Medical Studies, Sciences Studies, Engineering Studies, Technology Studies and Arts and Social Sciences Studies), and among the various languages of instruction (Arabic, French and English) groups (Shah et al., 2012).

To test the moderating effects of these personal characteristics on the relationship between Experienced Psychological States and Personal/Work Outcomes subscales, the single scale that summarizes the extent to which all five psychological states simultaneously are present is correlated with each Personal/Work outcome subscale, separately for each of the fresh graduates personal characteristics' groups. To test the moderating effects of the personal characteristics on the relationship between Core Job Dimensions and Experienced Psychological States, the

relationships between the Core Job Dimensions and the Experienced Psychological States for each of the fresh graduates' personal characteristics' groups are then computed. This includes the relationship between the overall MMPS and the scale of the Experienced Psychological States in addition to the relationships between each Core Job Dimension and its related psychological states. In case a core job dimension affects more than one psychological state, correlations were computed separately for each of the corresponding psychological states and medians were reported. Statistical significance of the differences between the correlations within each of the personal characteristics groups was determined by combining the p-values according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Finally, the relationship between the overall MMPS and the personal/Work Outcomes' subscales is computed, in effect bridging the mediating role of the Experienced Psychological States. The significance of the difference between the correlation coefficients of the groups of each personal characteristic was tested through conducting Fisher's z-test.

Table 5.25 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for young (18 – 23 years old) and older (over 40 years old) fresh graduates in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.25 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for young and older fresh graduates. All differences are statistically significant (except for High Growth Satisfaction) and are in the predicted direction. The middle group of Table 5.25 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for young and older fresh graduates. All differences between correlations are in the predicted direction (except for Decision Making & Autonomy and Technology Use) and are statistically significant (except for Task Identity, Work Load, Work Benefits and Promotion). The bottom group of Table 5.25 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for young and older fresh graduates. Once again, all differences between young and older fresh graduates are in the expected direction and are statistically significant (except for High Growth Satisfaction).

Table 5.25: Testing the Moderating Effect of Age in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	18-23 Years Old	Over 40 Years Old	
Experienced Psychological States with:			
High Internal Work Motivation	.734**	.239*	2.05*
High General Job Satisfaction	.732**	.248*	2.01*
High Growth Satisfaction	.542**	.368*	0.65
High Work Effectiveness	.785**	.343**	2.07*
High Commitment	.722**	.227**	2.01*
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.397**	-.243*	1.97*
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.239**	-.497**	2.33**
Task Identity with Knowledge of Results and Self-confidence ¹	.022	-.015	0.11
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.482**	-.302*	2.48**
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	-.253*	.400**	-2.02*
Work Load with Experienced Responsibility	.060	-.087	0.44
Work Benefits with Experienced Responsibility	-.058	.008	-0.20
Physical Effort with Knowledge of Results	-.260**	.500**	-2.41**
Technology Use with Self-confidence	.535**	-.237*	2.48**
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	-.098	.152	-0.74
Social Environment with Experienced Responsibility and Self-confidence ¹	.353**	-.555**	2.94**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.460**	-.385**	2.67**
Modified Motivating Potential Score with:			
High Internal Work Motivation	.847**	.272*	2.86**
High General Job Satisfaction	.723**	.230*	2.01*
High Growth Satisfaction	.786**	.576**	1.20
High Work Effectiveness	.669**	-.241*	3.12**
High Commitment	.562**	-.278*	2.72**

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for more than 18 – 23 years old and 40 years old groups was determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n= 316 (304 and 12, respectively, in the 18 – 23 years old and the more than 40 years old groups and; ns are unequal because of tied scores).

* p < .05; ** p < .01

Table 5.26 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for male and female fresh graduates in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.26 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for male and female fresh graduates. All differences are statistically significant and are in the predicted direction (except for High Internal Motivation). The middle group of Table 5.26

shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for male and female fresh graduates. All differences between correlations are in the predicted direction (except for Decision Making & Autonomy) and are statistically significant (except for Task Identity, Work Load, Work Benefits and Physical Effort). The bottom group of Table 5.26 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for male and female fresh graduates. Once again, all differences between male and female fresh graduates are in the expected direction (except for High Growth Satisfaction) and are statistically significant (except for High Work Effectiveness).

Table 5.26: Testing the Moderating Effect of Gender in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Male	Female	
Experienced Psychological States with:			
High Internal Work Motivation	.572**	.312**	-4.02**
High General Job Satisfaction	.346**	.505**	2.31**
High Growth Satisfaction	.307**	.511**	3.03**
High Work Effectiveness	.303**	.637**	5.4**
High Commitment	.331**	.748**	7.66**
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.275**	.437**	2.29**
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.313**	.513**	2.98**
Task Identity with Knowledge of Results and Self-confidence ¹	-.177**	-.063	1.42
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	-.177**	.145**	3.99**
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.342**	.145**	-2.58**
Work Load with Experienced Responsibility	.120	.085	-0.43
Work Benefits with Experienced Responsibility	-.066	-.053	1.46
Physical Effort with Knowledge of Results	-.242**	-.147**	1.21
Technology Use with Self-confidence	-.189**	.011	2.48**
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	-.246**	.242**	6.11**
Social Environment with Experienced Responsibility and Self-confidence ¹	-.242**	.214**	5.7**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.270**	.414**	2.01*
Modified Motivating Potential Score with:			
High Internal Work Motivation	.323**	.461**	2.01*
High General Job Satisfaction	.298**	.509**	3.12**
High Growth Satisfaction	.719**	.486**	-4.6**
High Work Effectiveness	.271**	.251**	-0.26
High Commitment	.198**	.363**	2.21*

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for Male and Female groups was determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n= 630 (257 and 373, respectively, in the male and female groups; ns are unequal because of tied scores).

* p < .05; ** p < .01

Table 5.27 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for low (Bachelor Degree) and High (PhD Degree) fresh graduates' educational level in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.27 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for low and high educated fresh graduates. All differences are statistically significant (except for High Commitment) and are in the predicted direction (except for High Work Effectiveness). The middle group of Table 5.27 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for low and high educated fresh graduates. All differences between correlations are in the predicted direction (except for Technology Use and Social Environment) and are statistically significant (except for Skill Variety, Work Load, Work Benefits and Technology Use). The bottom group of Table 5.27 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for low and high educated fresh graduates. Once again, all differences between low and high educated fresh graduates are in the expected direction and are statistically significant (except for High Growth Satisfaction).

Table 5.27: Testing the Moderating Effect of Education Level in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Bachelor Degree	PhD Degree	
Experienced Psychological States with:			
High Internal Work Motivation	.613**	-.158	4.82**
High General Job Satisfaction	.516**	-.200	4.27**
High Growth Satisfaction	.406**	-.164	3.29**
High Work Effectiveness	.396**	.727**	-2.78**
High Commitment	.526**	.500**	0.19
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.372**	.033	1.97*
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.302**	.221*	0.48
Task Identity with Knowledge of Results and Self-confidence ¹	.315**	-.085	2.27*
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.301**	-.138*	2.48**
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.102*	-.250*	1.97*
Work Load with Experienced Responsibility	.079	-.055	0.74
Work Benefits with Experienced Responsibility	-.113*	-.124	0.06
Physical Effort with Knowledge of Results	-.248**	-.266	0.11
Technology Use with Self-confidence	-.088	-.268	-1.03*
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	-.179*	-.521**	2.19*
Social Environment with Experienced Responsibility and Self-confidence ¹	-.134*	.247	-2.14*
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.254**	-.224*	2.69**
Modified Motivating Potential Score with:			
High Internal Work Motivation	.384**	.048	1.97*
High General Job Satisfaction	.492**	.175*	2.00*
High Growth Satisfaction	.604**	.544**	0.49
High Work Effectiveness	.425**	.051	2.22*
High Commitment	.356**	.018	1.96*

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for PhD Degree and Bachelor Degree groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 436 (36 and 400, respectively, in the PhD Degree and Bachelor Degree groups; ns are unequal because of tied scores).

* p < .05, ** p < .01

Table 5.28 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for the various fresh graduates' majors of study and Table 5.29 shows the Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.29 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for the various fresh graduates' majors of study. Out of the possible 75 comparisons, only 20 differences are statistically significant. Three of these differences are between Business and Engineering studies, two of these differences are between

Business and Sciences studies, two of these differences are between Business and Technology Studies, two of these differences are between Medical and Engineering studies, two of these differences are between Engineering and Technology studies, two of these differences are between Engineering and Sciences studies, two of these differences are between Engineering and Arts & Social Sciences studies, two of these differences are between Technology and Arts & Social Sciences studies, one of these differences is between Business and Medical Studies, one of these differences is between Medical and Social Sciences studies and one of these differences is between Technology and Arts & Social Sciences studies. Although none of the other differences is statistically significant, a look at the direction of the differences shows some trends. In the majority of the comparisons, correlations are stronger for Arts & Social Sciences studies than for the other majors of study and Engineering Studies show the lowest correlations among the other majors of study. The middle group of Table 5.29 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for the six various fresh graduates' majors of study. Out of the possible 180 comparisons, only 25 differences are statistically significant. Four of these differences are between Medical and Technology Sciences studies, three of these differences are between Engineering and Arts & Social Sciences studies, three of these differences are between Business and Medical Studies, three of these differences are between Business and Technology studies, two of these differences are between Sciences and Arts & Social Sciences studies, two of these differences are between Business and Sciences Studies, two of these differences are between Medical and Sciences studies, one of these differences is between Business and Engineering Studies, one of these differences is between Business and Arts & Social Sciences studies, one of these differences is between Medical and Arts & Social Sciences studies, one of these differences is between Engineering and Sciences studies, one of these differences is between Sciences and Technology Sciences studies and one of these differences is between Technology and Arts & Social Sciences studies. Although none of the other differences is statistically significant, a look at the direction of the differences shows some trends. In the majority of the comparisons, correlations are stronger for Arts & Social Sciences studies than for the other majors of study and Business Studies show the lowest correlations among the other majors of study. The bottom group of Table 5.29 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for the various fresh graduates' majors of study. Once again,

out of the possible 75 comparisons, only 11 differences are statistically significant. Two of these differences are between Medical and Engineering studies, two of these differences are between Engineering and Sciences Studies, two of these differences are between Engineering and Technology studies, one of these differences is between Business and Engineering Studies, one of these differences is between Business and Arts & Social Sciences studies, one of these differences is between Medical and Arts & Social Sciences studies, one of these differences is between Engineering and Arts & Social Sciences studies, one of these differences is between Sciences and Arts & Social Sciences studies and one of these differences is between Technology and Arts & Social Sciences studies. Although none of the other differences is statistically significant, a look at the direction of the differences shows some trends. In the majority of the comparisons, correlations are stronger for Arts & Social Sciences studies than for the other majors of study and Technology Studies show the lowest correlations among the other majors of study.

Table 5.28: Testing the Moderating Effect of Fresh Graduates' Major of Study in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales – Part I

	Correlations					
	Business Studies ²	Medical Studies ³	Engineering Studies ⁴	Sciences Studies ⁵	Technology Studies ⁶	Arts & Social Sciences Studies ⁷
Experienced Psychological States with:						
High Internal Work Motivation	.569**	.664**	.271*	.390**	.749**	.700**
High General Job Satisfaction	.457**	.195	.308**	.366**	.166	.543**
High Growth Satisfaction	.470**	.345**	.223**	.595**	.140	.577**
High Work Effectiveness	.428**	.348**	.266**	.318**	.358*	.501**
High Commitment	.498**	.498**	-.061	.600**	.583**	.604**
Job Dimensions with Corresponding Psychological States:						
MMPS with Experienced Psychological States	.440**	.383**	.291**	.465**	.260	.336**
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.290**	.458**	.260*	.358**	.554**	.150
Task Identity with Knowledge of Results and Self-confidence ¹	-.180*	.127	-.061	-.195	.175	.274*
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.146*	.276*	-.012	.141	.275	.300**
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	-.193**	-.233*	-.306**	.231*	-.313*	-.312**
Work Load with Experienced Responsibility	.080	-.207	-.010	.044	.327**	.356**
Work Benefits with Experienced Responsibility	-.114	-.156	-.103	-.119	-.009	.199
Physical Effort with Knowledge of Results	-.369**	.114	.017	-.033	-.363**	-.110
Technology Use with Self-confidence	-.065	-.172	.022	-.032	-.143	-.107
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.233**	.272**	.213*	.023	-.265**	.300**
Social Environment with Experienced Responsibility and Self-confidence ¹	.326**	.424**	.335**	.175	.027	.056
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.331**	.192	.391**	.492**	.191	.301**
Modified Motivating Potential Score with:						
High Internal Work Motivation	.290**	.297**	.329**	.285*	.210	.415**
High General Job Satisfaction	.349**	.157	.479**	.160	.035	.575**
High Growth Satisfaction	.550**	.509**	.680**	.537**	.668**	.710**
High Work Effectiveness	.334**	.175	.276*	.154	.183	.299**
High Commitment	.264**	.289*	-.231*	.189	.168	.260*

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for high and low Social Class groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). ²n= 264. ³n= 58. ⁴n=86. ⁵n= 69. ⁶n= 45. ⁷n= 28.

* p < .05, ** p < .01

Table 5.29: Testing the Moderating Effect of Fresh Graduates' Major of Study in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales – Part II

	Z														
	a-b	a-c	a-d	a-e	a-f	b-c	b-d	b-e	b-f	c-d	c-e	c-f	d-e	d-f	e-f
Experienced Psychological States with:															
High Internal Work Motivation	-1.04	2.92**	1.70	-1.95	-1.06	3.00**	2.13*	-0.83	-0.28	-0.81	-3.66**	-2.58**	-2.83**	-1.94	0.41
High General Job Satisfaction	1.99**	1.39	0.80	1.96*	-0.55	-0.69	-1.02	0.15	-1.70	-0.40	0.80	-1.27	1.10	-0.96	-1.75
High Growth Satisfaction	1.01	2.25*	2.06**	2.22*	-0.71	0.76	-1.78	1.07	-1.24	-2.78**	0.45	-1.89	2.76**	0.12	-2.05**
High Work Effectiveness	0.64	1.47	1.34	0.50	-0.45	0.52	0.18	-0.06	-0.78	-0.62	-0.54	-1.22	-0.23	-1.57	-0.70
High Commitment	0.00	4.82**	4.41**	-0.72	-0.73	7.22**	-0.80	-0.59	-0.63	-4.57**	-3.84**	-3.33**	0.13	-0.03	-0.13
Job Dimensions with Corresponding Psychological States:															
MMPS with Exp. Psychological States	0.46	1.37	-0.23	1.24	0.59	0.60	-0.55	0.67	0.22	-1.24	0.18	-0.22	1.20	0.66	-0.33
Skill Variety with Exp. Meaningfulness, Exp. Responsibility & Prestige Inside Outside ¹	-1.32	0.26	-0.55	-1.96*	0.70	1.32	0.66	-0.63	1.42	-0.66	-1.89	0.50	-1.26	0.95	1.87
Task Identity with Knowledge of Results & Self-confidence ¹	-2.09*	-0.96	0.11	-2.16*	-2.21*	1.09	1.78	-0.24	-0.64	0.83	-1.26	-1.50	-1.90	-2.04**	-0.41
Job Significance & Feedback with Exp. Meaningfulness, Exp. Responsibility, Knowledge of Results, Self-confidence & Prestige Inside Outside ¹	-0.92	1.26	0.04	-0.81	-0.78	1.70	0.77	0.01	-0.11	-0.93	-1.55	-1.41	-0.71	-0.71	-0.11
Decision Making & Autonomy with Exp. Responsibility, Knowledge of Results & Self-confidence ¹	0.28	0.96	-3.13**	0.77	0.61	0.45	-2.59**	0.42	0.35	-3.34**	-3.38**	0.03	2.83**	2.38**	0.00
Work Load with Exp. Responsibility	1.96**	0.72	0.26	-1.56	-1.40	-1.15	-1.39	-2.68**	-2.41**	-0.33	-1.85	-1.68	-1.50	-1.40	-0.13
Work Benefits with Exp. Responsibility	0.29	-0.09	0.04	-0.63	-1.51	-0.31	-0.21	-0.72	-1.49	0.10	-0.50	-1.34	-0.56	-1.37	-0.83
Physical Effort with Knowledge of Results	-3.38**	-3.21**	-2.57**	-0.04	-1.32	0.56	0.81	2.41**	0.93	0.30	2.10*	0.56	1.76	0.33	-1.07
Technology Use with Self-confidence	0.73	-0.61	-0.24	0.47	0.20	-1.13	-0.78	-0.15	-0.27	0.33	0.88	0.57	0.57	0.32	-0.14
Promotion with Exp. Meaningfulness & Knowledge of Results ¹	-0.28	0.17	1.56	3.06**	-0.34	0.36	1.40	2.69**	-0.13	1.17	2.58**	-0.41	1.49	-1.22	-2.30**
Social Environment with Exp. Responsibility & Self-confidence ¹	-0.77	-0.91	1.17	1.87	1.35	0.60	1.51	2.08*	1.64	1.04	1.70	1.28	0.76	0.51	-0.12
Working Conditions with Exp. Meaningfulness & Self-confidence ¹	1.01	1.19	-1.41	0.91	0.16	-1.26	5.75**	0.01	-0.48	-0.76	1.16	0.45	1.75	0.97	-0.46
Modified Motivating Potential Score with:															
High Internal Work Motivation	-0.05	-0.34	0.04	0.51	-0.68	-0.20	0.07	0.45	-0.56	0.29	0.68	-0.44	0.41	-0.63	-0.90
High General Job Satisfaction	1.39	-1.25	1.47	0.98	-1.39	-2.09*	-0.02	0.60	-2.06**	2.18*	2.57**	-0.58	0.64	-2.10*	-2.45**
High Growth Satisfaction	0.38	-1.67	0.13	-1.14	-1.28	-1.54	-0.21	-1.20	-1.35	1.39	0.12	-0.25	-1.05	-1.22	-0.32
High Work Effectiveness	1.15	0.51	1.39	0.98	0.19	-0.61	0.12	-0.04	-0.55	0.78	0.52	-0.11	-0.15	-0.65	-0.49
High Commitment	-0.18	4.01**	0.57	0.61	0.02	3.06**	0.58	0.62	0.13	-2.59**	-2.14**	-2.20*	0.11	-0.32	-0.38

a= Business Studies; b= Medical Studies; c= Engineering Studies; d= Sciences Studies; e= Technology Studies; f= Arts and Social Sciences Studies

Table 5.30 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for the various fresh graduates' languages of instruction in addition to the Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.30 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for the various fresh graduates' language of instruction. Out of the possible 15 comparisons, only three differences are statistically significant. These differences are all between English and French language of instruction. A look at the direction of the differences shows some trends. In all the significant comparisons, correlations are stronger for fresh graduates whose language of instruction is French than for those whose language of instruction is English. The middle group of Table 5.30 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for the three various fresh graduates' languages of instruction. Out of the possible 36 comparisons, only 14 differences are statistically significant. Two of these differences are between French and Arabic languages of study, five of these differences are between English and Arabic languages of study, while seven of these differences are between French and English languages of study. Although none of the other differences is statistically significant, a look at the direction of the differences shows some trends. In all of the significant comparisons between French and English languages of study, correlations are stronger for fresh graduates whose language of study is French than for those whose language of study is English. The bottom group of Table 5.30 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for the various fresh graduates' languages of instruction. Once again, out of the possible 15 comparisons, only three differences are statistically significant. These differences are all between French and English languages of instruction. Although none of the other differences is statistically significant, a look at the direction of the differences shows some trends. In the majority of the comparisons, correlations are stronger for French language of instruction groups than for English ones.

Table 5.30: Testing the Moderating Effect of Fresh Graduates' Language of Instruction in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations			Z (French with Arabic)	Z (French with English)	Z (English with Arabic)
	Arabic	French	English			
Experienced Psychological States with:						
High Internal Work Motivation	.765**	.488**	.566**	-1.84	-1.29	-1.30
High General Job Satisfaction	.561**	.613**	.330**	0.28	4.41**	-1.03
High Growth Satisfaction	.522**	.488**	.324**	-0.16	2.35**	-0.86
High Work Effectiveness	.255	.449**	.370**	1.01	1.13	0.45
High Commitment	.633**	.640**	.339**	0.04	4.82**	-1.39
Job Dimensions with Corresponding Psychological States:						
MMPS with Experienced Psychological States	.731**	.407**	.340**	-1.75	0.93	-2.04*
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.567*	.274**	.297**	-1.27	-0.30	-1.19
Task Identity with Knowledge of Results and Self-confidence ¹	.541*	.198*	.116*	-1.45	1.00	-1.73
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.564*	.134*	.150**	-1.77	-0.19	-1.73
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.439	.210*	-.108**	-0.90	3.82**	-2.05*
Work Load with Experienced Responsibility	.646**	.158*	.117*	-2.14*	3.29**	-2.31*
Work Benefits with Experienced Responsibility	.904**	.285**	-.122**	-4.21**	4.94**	-5.73**
Physical Effort with Knowledge of Results	-.230	-.031	-.254**	0.71	2.72**	-1.75
Technology Use with Self-confidence	.233	-.067	-.090	-1.07	0.28	-1.16
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.703**	.353**	.190*	-1.77	2.10*	-2.41**
Social Environment with Experienced Responsibility and Self-confidence ¹	-.167	.018	-.193*	0.65	2.54**	-0.10
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	-.163	.087	-.108*	0.88	2.33**	0.20
Modified Motivating Potential Score with:						
High Internal Work Motivation	.506*	.388**	.196*	-0.52	2.51**	-1.27
High General Job Satisfaction	.582*	.399**	.205**	-0.85	1.28	-1.62
High Growth Satisfaction	.721**	.690**	.525**	-0.22	3.15**	-1.14
High Work Effectiveness	.274	.336**	.283**	0.24	0.70	0.03
High Commitment	.295	.365**	.179**	0.28	2.40**	-0.44

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for Arabic, French and English Language of Study groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 624 (16, 230 and 378, respectively, in the Arabic, French and English Language of Study groups; ns are unequal because of tied scores). * p < .05, ** p < .01

Table 5.31 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates earning their degrees from private and public universities in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.31 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for these two groups of fresh graduates. All differences are statistically significant (except for High Internal Motivation and High Work Effectiveness) and are in the predicted direction. The middle group of Table 5.31 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for fresh graduates earning their degrees from private and public universities. Out of the 12 comparisons, only three differences are statistically significant (Job Significance & Feedback, Decision Making & Autonomy and Social Environment) and are in the predicted direction. The bottom group of Table 5.31 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for fresh graduates earning their degrees from private and public universities. Out of five comparisons, none of the differences is statistically significant.

Table 5.31: Testing the Moderating Effect of Fresh Graduates' Type of Educational Institution in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Private	Public	
Experienced Psychological States with:			
High Internal Work Motivation	.539**	.501**	-0.50
High General Job Satisfaction	.371**	.630**	3.35**
High Growth Satisfaction	.337**	.647**	3.99**
High Work Effectiveness	.351**	.367**	0.17
High Commitment	.447**	.634**	2.54**
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.337**	.462**	1.42
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.303**	.277**	-0.27
Task Identity with Knowledge of Results and Self-confidence ¹	-.063	.135	1.89
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.120**	.442**	3.37**
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	-.212**	.366**	5.70**
Work Load with Experienced Responsibility	.075	.093	0.17
Work Benefits with Experienced Responsibility	-.071	-.075	-0.04
Physical Effort with Knowledge of Results	-.207**	-.094	1.10
Technology Use with Self-confidence	-.094*	-.017	0.74
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.167**	.161	-0.06
Social Environment with Experienced Responsibility and Self-confidence ¹	-.163**	.236**	3.86**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.290**	.133	-1.57
Modified Motivating Potential Score with:			
High Internal Work Motivation	.282**	.361**	0.84
High General Job Satisfaction	.328**	.237**	-0.94
High Growth Satisfaction	.601**	.563**	-0.55
High Work Effectiveness	.271**	.230*	-0.42
High Commitment	.192**	.206*	0.14

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for private and public sector groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 630 (517 and 113, respectively, in the Private and Public Sector groups; ns are unequal because of tied scores).

* p < .05, ** p < .01

Table 5.32 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for lower and upper fresh graduates' social class in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.32 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for lower and upper fresh graduates' social class. All differences are statistically significant and are in the predicted direction. The middle group of Table 5.32 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for lower and upper fresh graduates' social class. All differences between correlations are

in the predicted direction and are statistically significant (except for Work Load, Work Benefits and Promotion). The bottom group of Table 5.32 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for lower and upper fresh graduates' social class. Once again, all differences between Upper and lower fresh graduates' social class are in the expected direction (except for High General Satisfaction) and are statistically significant.

Table 5.32: Testing the Moderating Effect of Fresh Graduates' Social Class in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Upper Class	Lower Class	
Experienced Psychological States with:			
High Internal Work Motivation	.486**	.780**	2.93**
High General Job Satisfaction	.258*	.650**	2.91**
High Growth Satisfaction	.145	.499**	2.29*
High Work Effectiveness	.264*	.570**	2.14*
High Commitment	.346**	.641**	2.27*
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.257*	.550**	2.02*
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.117	.601**	3.28**
Task Identity with Knowledge of Results and Self-confidence ¹	.123	.752**	4.85**
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.261*	.578**	2.23*
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.194*	.650**	3.29**
Work Load with Experienced Responsibility	.175	.080	-0.55
Work Benefits with Experienced Responsibility	-.237	.041	1.61
Physical Effort with Knowledge of Results	-.455**	-.089	2.28*
Technology Use with Self-confidence	-.100	-.071	0.17
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	-.266**	.454*	4.33**
Social Environment with Experienced Responsibility and Self-confidence ¹	.120	.470**	2.21*
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.198*	.534**	2.25*
Modified Motivating Potential Score with:			
High Internal Work Motivation	.302*	.668**	2.82**
High General Job Satisfaction	.579**	.298**	-2.01*
High Growth Satisfaction	.518**	.776**	2.62**
High Work Effectiveness	.237*	.594**	2.51**
High Commitment	.273*	.562**	2.02*

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for Upper and lower Social Class groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 137 (61 and 76, respectively, in the Upper and Lower Social Class groups; ns are unequal because of tied scores).

* p < .05, ** p < .01

Table 5.33 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates with high

and low power distance in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.33 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for fresh graduates with high and low power distance. All differences are statistically significant (except for High Work Effectiveness) and are in the predicted direction. The middle group of Table 5.33 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for fresh graduates with high and low power distance. All differences between correlations are in the predicted direction (except for Technology Use, Physical Effort and Working Conditions) and are statistically significant (except for Skill Variety, Work Load and Work Benefits). The bottom group of Table 5.33 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for fresh graduates with high and low power distance. Once again, all differences between high and low power distance fresh graduates are in the expected direction and are statistically significant.

Table 5.33: Testing the Moderating Effect of Fresh Graduates' Culture – Power Distance in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Low Power Distance	High Power Distance	
Experienced Psychological States with:			
High Internal Work Motivation	.406**	.576**	2.77**
High General Job Satisfaction	.312**	.613**	4.79**
High Growth Satisfaction	.411**	.585**	2.86**
High Work Effectiveness	.383**	.323**	-0.84
High Commitment	.402**	.587**	3.03**
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.317**	.473**	2.28*
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.290**	.291**	0.01
Task Identity with Knowledge of Results and Self-confidence ¹	.037	.242**	2.57**
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	-.109*	.329**	5.53**
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	-.207**	.191**	4.95**
Work Load with Experienced Responsibility	.116*	.104	-0.15
Work Benefits with Experienced Responsibility	-.055	-.028	0.33
Physical Effort with Knowledge of Results	-.189**	-.411	-3.01**
Technology Use with Self-confidence	-.267**	.087	-4.43**
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	-.197**	.269**	5.83**
Social Environment with Experienced Responsibility and Self-confidence ¹	-.213**	.139*	4.37**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.324**	.159*	-2.16*
Modified Motivating Potential Score with:			
High Internal Work Motivation	.263**	.410**	2.04*
High General Job Satisfaction	.218**	.372**	2.08*
High Growth Satisfaction	.406**	.563**	2.53**
High Work Effectiveness	.221**	.371**	2.02*
High Commitment	.102*	.366**	3.45**

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for high and low Power Distance groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 630 (256 and 374, respectively, in the High and Low Power Distance groups; ns are unequal because of tied scores). * p < .05, ** p < .01

Table 5.34 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates with Individualism and Collectivism culture in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.34 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for fresh graduates with Individualism and Collectivism culture. Out of five comparisons, none of the differences is statistically significant. The middle group of Table 5.34 shows the relationship between the Core Job Dimensions and their related

Experienced Psychological States for fresh graduates with Individualism and Collectivism culture. Out of the 12 comparisons, only four differences are statistically significant (MMPS, Decision Making & Autonomy, Promotion and Working Conditions) and are in the predicted direction. The bottom group of Table 5.34 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for fresh graduates with Individualism and Collectivism culture. Once again, out of five comparisons, only one difference is statistically significant (High Internal Motivation) and is in the predicted direction.

Table 5.34: Testing the Moderating Effect of Fresh Graduates' Culture – Individualism versus Collectivism in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Individ- ualism	Collecti- vism	
Experienced Psychological States with:			
High Internal Work Motivation	.553**	.470**	1.35
High General Job Satisfaction	.394**	.378**	0.22
High Growth Satisfaction	.422**	.339**	1.16
High Work Effectiveness	.371**	.313**	0.79
High Commitment	.456**	.522**	-1.04
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.426**	.225**	2.70**
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.325**	.225**	1.30
Task Identity with Knowledge of Results and Self-confidence ¹	-.054	.017	-0.85
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.091	.161*	-0.85
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.411**	-.142*	3.51**
Work Load with Experienced Responsibility	.080	.059	0.25
Work Benefits with Experienced Responsibility	-.082	-.040	-0.50
Physical Effort with Knowledge of Results	-.249**	-.186	-0.79
Technology Use with Self-confidence	-.089	-.070	-0.23
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.233**	-.247**	5.85**
Social Environment with Experienced Responsibility and Self-confidence ¹	.297**	.281**	0.13
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.354**	.152*	2.59**
Modified Motivating Potential Score with:			
High Internal Work Motivation	.379**	.116	3.38**
High General Job Satisfaction	.360**	.218**	1.86
High Growth Satisfaction	.633**	.533**	1.82
High Work Effectiveness	.294**	.207**	1.11
High Commitment	.167**	.229**	-0.77

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for Collectivism and Individualism Social Class groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 630 (225 and 405, respectively, in the Collectivism and Individualism groups; ns are unequal because of tied scores).

* p < .05, ** p < .01

Table 5.35 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates with Masculinity and Feminism culture in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.35 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for fresh graduates with Masculinity and Feminism culture. Out of five comparisons, none of the differences is statistically significant. The middle group of Table 5.35 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for fresh graduates with Masculinity and Feminism culture. Out of the 12 comparisons, only four differences are statistically significant (Job Significance & Feedback, Promotion, Social Environment and Working Conditions) and only two of these differences are in the predicted direction. The bottom group of Table 5.35 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for fresh graduates with Masculinity and Feminism culture. Once again, out of five comparisons, none of the differences is statistically significant.

Table 5.35: Testing the Moderating Effect of Fresh Graduates' Culture – Masculinity versus Feminism in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Masculinity	Feminism	
Experienced Psychological States with:			
High Internal Work Motivation	.630**	.519**	-1.47
High General Job Satisfaction	.287**	.429**	1.45
High Growth Satisfaction	.373**	.396**	0.24
High Work Effectiveness	.360**	.352**	-0.08
High Commitment	.573**	.469**	-1.27
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.217**	.387**	1.66
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.133	.289**	1.45
Task Identity with Knowledge of Results and Self-confidence ¹	.256*	.088*	-1.54
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.384**	.103*	-2.67**
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	-.204*	-.171*	0.30
Work Load with Experienced Responsibility	.136	.067	-0.62
Work Benefits with Experienced Responsibility	-.041	-.072	-0.28
Physical Effort with Knowledge of Results	-.313**	-.166**	1.38
Technology Use with Self-confidence	-.045	-.085*	-0.36
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.210*	-.222*	-3.89**
Social Environment with Experienced Responsibility and Self-confidence ¹	-.211*	.321**	4.84**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.063	.356**	2.74**
Modified Motivating Potential Score with:			
High Internal Work Motivation	.254*	.299**	0.43
High General Job Satisfaction	.329**	.316**	-0.13
High Growth Satisfaction	.534**	.605**	0.93
High Work Effectiveness	.101	.288**	1.73
High Commitment	.215*	.191**	-0.22

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for Feminism and Masculinity groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 630 (535 and 95, respectively, in the Feminism and Masculinity groups; ns are unequal because of tied scores).

* p < .05, ** p < .01

Table 5.36 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates with indulgent and Restraint culture in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.36 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for fresh graduates with indulgent and Restraint culture. All differences are statistically significant (except for High Commitment) and are in the predicted direction. The middle group of Table 5.36 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for fresh graduates with

indulgent and Restraint culture. All differences between correlations are in the predicted direction (except for Decision Making & Autonomy and Physical Effort) and are statistically significant (except for Task Identity, Job Significance & Feedback, Work Load, Work Benefits and Technology Use). The bottom group of Table 5.36 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for fresh graduates with indulgent and Restraint culture. Once again, all differences between fresh graduates with indulgent and Restraint culture are in the expected direction and are statistically significant (except for High General Satisfaction and High Commitment).

Table 5.36: Testing the Moderating Effect of Fresh Graduates' Culture – Indulgence versus Restraint in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Indulgence	Restraint	
Experienced Psychological States with:			
High Internal Work Motivation	.375**	.563**	2.95**
High General Job Satisfaction	.248**	.398**	2.04*
High Growth Satisfaction	.276**	.442**	2.32*
High Work Effectiveness	.249**	.395**	1.98*
High Commitment	.465**	.493**	0.44
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.242**	.478**	3.32**
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.125	.336**	2.72**
Task Identity with Knowledge of Results and Self-confidence ¹	.150	.077	-0.90
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige InsideOutside ¹	.180**	.085	-1.17
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.165*	-.170*	-4.10**
Work Load with Experienced Responsibility	.095	.055	-0.49
Work Benefits with Experienced Responsibility	-.101	-.097	0.05
Physical Effort with Knowledge of Results	.034	-.226**	-3.20**
Technology Use with Self-confidence	.019	-.112*	-1.60
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.136*	.341**	2.65**
Social Environment with Experienced Responsibility and Self-confidence ¹	.152*	.366**	2.80**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.155*	.341**	2.41**
Modified Motivating Potential Score with:			
High Internal Work Motivation	.198**	.348**	1.97*
High General Job Satisfaction	.304**	.323**	0.26
High Growth Satisfaction	.497**	.639**	2.56**
High Work Effectiveness	.185**	.302**	1.51*
High Commitment	.242**	.173**	-0.88

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for Restraint and Indulgent groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 630 (389 and 241, respectively, in the Restraint and Indulgent groups; ns are unequal because of tied scores).

* p < .05, ** p < .01

Table 5.37 shows the relationships among the Core Job Dimensions, The Experienced Psychological States, and the Personal/Work Outcomes' subscales for fresh graduates with Pragmatic and Normative culture in addition to Fisher's Z values associated with the comparison of corresponding correlations. The top group of Table 5.37 shows the differences in the magnitude of the correlations between Experienced Psychological States and each Personal/Work Outcome subscale for fresh graduates with Pragmatic and Normative culture. Out of five comparisons, only one difference is statistically significant (High Commitment) and is in the predicted direction. The middle group of Table 5.37 shows the relationship between the Core Job Dimensions and their related Experienced Psychological States for fresh graduates with Pragmatic and Normative culture. Out of the 12 comparisons, only five differences are statistically significant (Decision Making & Autonomy, Technology Use, Promotion and Social Environment) and are in the predicted direction. The bottom group of Table 5.37 shows the results for correlations computed between MMPS and each of the Personal/Work Outcome subscales for fresh graduates with Pragmatic and Normative culture. Once again, out of five comparisons, only one difference is statistically significant (High Growth Satisfaction) and is in the predicted direction.

Table 5.37: Testing the Moderating Effect of Fresh Graduates' Culture – Pragmatic versus Normative in the Relationships among Job Dimensions, Psychological States, and Personal/Work Outcome subscales

	Correlations		Z
	Pragmatic	Normative	
Experienced Psychological States with:			
High Internal Work Motivation	.468**	.572**	-1.73
High General Job Satisfaction	.451**	.401**	0.74
High Growth Satisfaction	.362**	.420**	-0.83
High Work Effectiveness	.309**	.378**	-0.95
High Commitment	.577**	.426**	2.46**
Job Dimensions with Corresponding Psychological States:			
MMPS with Experienced Psychological States	.374**	.366**	0.11
Skill Variety with Experienced Meaningfulness, Experienced Responsibility and Prestige Inside Outside ¹	.264**	.329**	-0.87
Task Identity with Knowledge of Results and Self-confidence ¹	.129*	.098	0.38
Job Significance & Feedback with Experienced Meaningfulness, Experienced Responsibility, Knowledge of Results, Self-confidence and Prestige Inside Outside ¹	.204**	.118*	1.07
Decision Making & Autonomy with Experienced Responsibility, Knowledge of Results and Self-confidence ¹	.149*	-.259*	5.04**
Work Load with Experienced Responsibility	.087	.081	0.07
Work Benefits with Experienced Responsibility	-.090	-.070	-0.24
Physical Effort with Knowledge of Results	-.213**	-.164**	-0.62
Technology Use with Self-confidence	.143*	-.183**	3.99**
Promotion with Experienced Meaningfulness and Knowledge of Results ¹	.212**	-.221**	5.34**
Social Environment with Experienced Responsibility and Self-confidence ¹	.178**	-.126**	3.72**
Working Conditions with Experienced Meaningfulness and Self-confidence ¹	.262**	.315**	-0.70
Modified Motivating Potential Score with:			
High Internal Work Motivation	.262**	.313**	0.67
High General Job Satisfaction	.260**	.329**	0.92
High Growth Satisfaction	.493**	.637**	2.59**
High Work Effectiveness	.263**	.265**	0.03
High Commitment	.227**	.194**	-0.42

¹ Correlations were computed separately for each of the corresponding psychological states and medians are reported here. Statistical significance of the differences between correlations for Normative and Pragmatic groups were determined by combining the p-values obtained according to Fisher's Product Method (Fisher, 1925; Mosteller& Bush, 1954, p. 329). Total n = 630 (391 and 239, respectively, in the Normative and Pragmatic groups; ns are unequal because of tied scores).

* p < .05, ** p < .01

In sum, for age, out of 22 comparisons only 6 differences were not statistically significant and young fresh graduates had stronger correlations than older ones as expected for the majority of the significant differences (14 out of 16 significant differences). For gender, out of 22 comparisons only 5 differences were not statistically significant and female fresh graduates had stronger correlations than male ones as expected for the majority of the significant differences (14 out of 17 significant differences). For educational level, out of 22 comparisons only 6 differences were not statistically significant and fresh graduates with low educational level (Bachelor degree) had stronger correlations than those with high educational level (PhD degree) as expected for the majority of the significant differences (13 out of 16 significant differences).

For majors of study, out of 180 comparisons only 54 differences were statistically significant while high correlations were noticed for Arts and Social Sciences major and low correlations were noted for Business major. As for the language of study, out of 22 comparisons between French and English languages of study only 8 differences were not statistically significant while out of 22 comparisons between French and Arabic languages of study only 2 differences were statistically significant and out of 22 comparisons between English and Arabic languages of study only 5 differences were statistically significant. For the type of the educational institution, out of 22 comparisons only 6 differences were statistically significant and fresh graduates coming from a public educational institution had stronger correlations than those coming from a private educational institution as expected for all the significant differences. For social class, out of 22 comparisons only 3 differences were not statistically significant and fresh graduates coming from a lower social class had stronger correlations than those coming from an upper social class as expected for the majority of the significant differences (18 out of 19 significant differences). Finally for the fresh graduates' culture, (1) out of 22 comparisons between high and low power distance groups only 4 differences were not statistically significant and fresh graduates with high power distance had stronger correlations than those with low power distance as expected for the majority of the significant differences (15 out of 18 significant differences), (2) out of 22 comparisons between individualism and collectivism groups only 5 differences were statistically significant and fresh graduates with individualism culture had stronger correlations than those with collectivism culture as expected for all the significant differences, (3) out of 22 comparisons between feminism and masculinity groups only 4 differences were statistically significant and fresh graduates with feminism culture didn't show a majority of stronger correlations than those with masculinity culture as expected (2 out of 4 significant differences), (4) out of 22 comparisons between restraint and indulgent groups only 8 differences were not statistically significant and fresh graduates with restraint culture had stronger correlations than those with indulgent culture as expected for the majority of the significant differences (12 out of 14 significant differences), and (5) out of 22 comparisons between pragmatic and normative groups only 6 differences were statistically significant and fresh graduates with pragmatic culture had stronger correlations than those with normative culture as expected for all the significant differences.

Thus the present outcomes provide strong statistical support for the role of age, gender, educational level, English versus French language of study, social class, power distance and restraint versus indulgent culture as moderators in the relationships among core job dimensions, experienced psychological states and personal/work outcomes. When all comparisons are considered together, 75.75% (100 out of 132 comparisons) of the comparisons were significant and 88% of the significant comparisons (88 out of 100 comparisons) of corresponding correlations were in the expected direction. As for the moderating effects of the type of the educational institution, the major of study, the Arabic language of study versus other languages, individualism versus collectivism, feminism versus masculinity, and pragmatic versus normative, the present study provides very little statistical support for the role of these subscales as moderators in the relationships among core job dimensions, experienced psychological states and personal/work outcomes. Although when these comparisons are considered together there is some support based on the direction of the differences between the groups, only 76 out of 290 differences (26.20%) were statistically significant.

5.12.3 Conclusion

In sum, the outcomes of this section provide strong statistical support for the role of individual differences (skill and knowledge, context satisfactions, growth need strength, and personal characteristics) as moderators affecting the relationships among core job dimensions, critical psychological states and personal/work outcomes and thus for the validation of hypothesis H3 and its two hypotheses SH3.1 (individual differences moderate the relationship between core job dimensions and critical psychological states) and SH3.2 (individual differences moderate the relationship between critical psychological states and personal/work outcomes).

More particularly, as shown in Figure 5.7, individual differences provide strong statistical support for the role of skill and knowledge, context satisfactions, growth need strength, age, gender, educational level, English versus French languages of study, social class, power distance and restraint versus indulgent culture as highly influential on the relationships among core job dimensions, experienced psychological states and personal/work outcomes. As for the type of the educational institution, the major of study, the Arabic language of study versus other languages, individualism versus collectivism, feminism versus masculinity, and pragmatic versus normative,

the outcomes of the study provided very little statistical support for their effect on the aforementioned relationships.

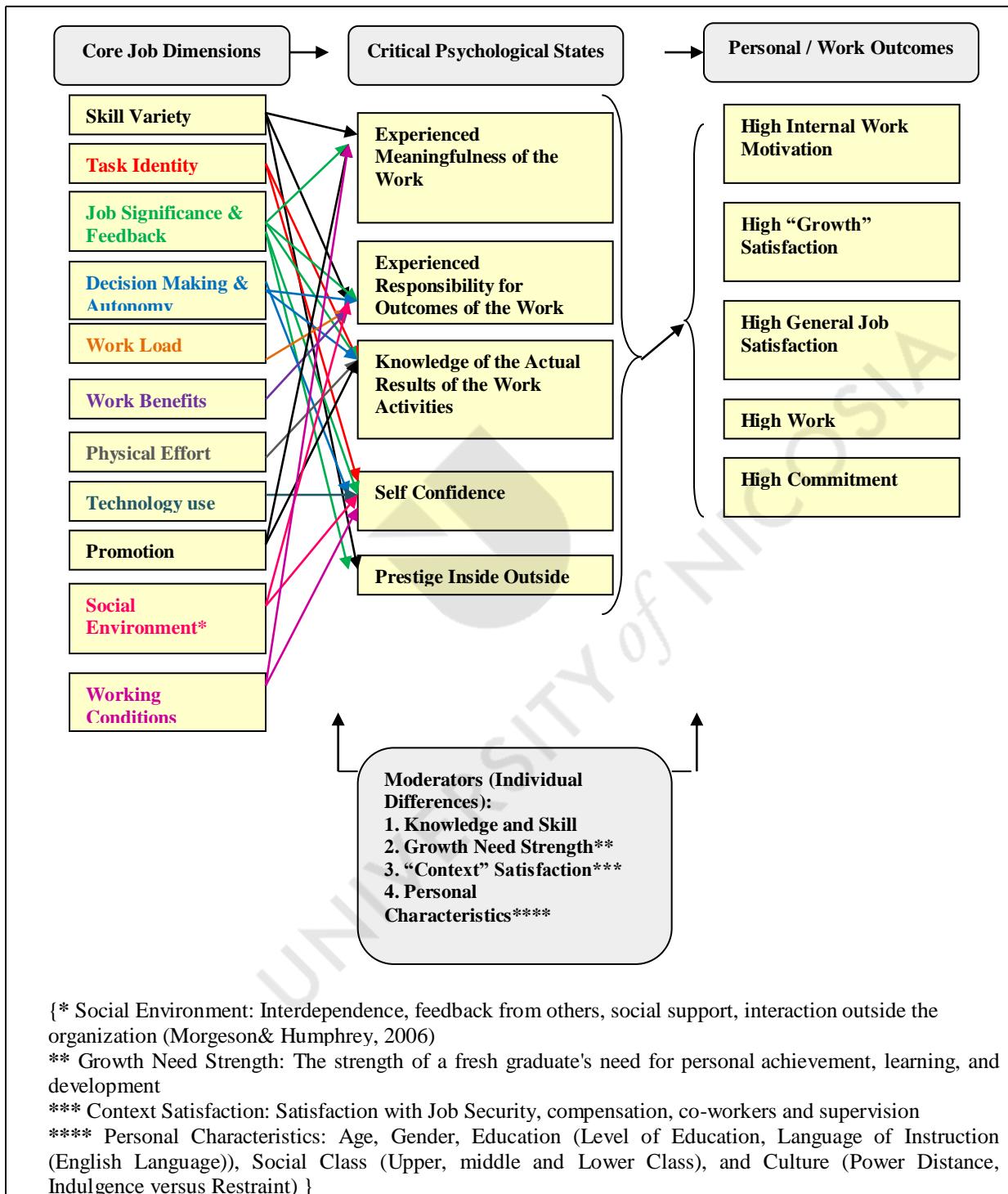


Figure 5.7: Individual Differences as Moderators Affecting the Relationships Between Core Job Dimensions and Personal/Work Outcomes

5.13 The Effect of Personal/Work Outcomes on Retention of Fresh Graduates

MJCM-R notes that Personal/Work Outcomes affect the retention of fresh graduates. A logistic regression analysis was conducted to predict fresh graduates' retention and test which of the five personal/work outcomes (High Internal Motivation, High General Satisfaction, High Growth Satisfaction, High Work Effectiveness and High Commitment) significantly affect it (Refer to Chapter 3 for the relevant theoretical details of logistic regression).

A test of the full model against a constant only model was statistically significant, as shown in Table 5.38, indicating that the personal/work outcomes as a set provided a better model for retention, compared to a model with only the constant and thus were a good choice of predictors ($\chi^2 = 29.798$, $p < .001$ with $df = 5$).

The Wald criterion demonstrated that four out of five personal/work outcomes made a significant contribution to prediction ((High Internal Work Motivation, $p = .017$); (High Growth Satisfaction, $p = 0.037$); (High Work Effectiveness, $p = 0.022$); (High Commitment, $p = 0.001$)). High General Satisfaction was not a significant predictor. Exp(B) value indicates that (1) when high work effectiveness is raised by one unit, fresh graduates are 1.485 more times likely to be retained, (2) when high growth satisfaction is raised by one unit, fresh graduates are 0.799 more times likely to be retained, (3) when high internal work motivation is raised by one unit, fresh graduates are 0.645 more times likely to be retained and (4) when high commitment is raised by one unit, fresh graduates are 0.552 more times likely to be retained. Results are presented in Table 5.41. In sum, results show that the full model has a good predicting ability; thus confirming the hypothesis (H5) that personal/work outcomes are a good predictor for fresh graduates' retention. In particular, as shown in Figure 5.8, High Internal Work Motivation, High Growth Satisfaction, High Work Effectiveness and High Commitment are good predictors for fresh graduates' retention.

These relationships can be further explained by the following formula taking into consideration the Unstandardized coefficients (B) and showing the strength of the personal/work outcomes in predicting the labor market outcome. The independent variables being the various personal/work outcomes are considered significant when the corresponding p-value is less than the level of significance, α , 5% (Tsangari, 2017).

- Labor Market Outcome = $1/(1+e^{-(1.129 - 0.439 \text{ High Internal Work Motivation} - 0.224 \text{ High Growth Satisfaction} + 0.395 \text{ High Work Effectiveness} - 0.594 \text{ High Commitment})})$

First, concerning high internal work motivation effect on fresh graduates' retention as per the above mentioned formula, the logit $b = -0.439$ is extracted from the **B** column of the Table 5.41, then the corresponding odds ratio (**exp(B)**) quoted in the same table is 0.645 meaning that when high internal work motivation increases by one unit, the odds of fresh graduates' retention decrease by a factor of around 0.645 times, when other variables are controlled (i.e. there is around 35% decrease in the odds of fresh graduates' retention, for a one-unit increase in high internal work motivation).

Second, concerning high growth satisfaction effect on fresh graduates' retention as per the above mentioned formula, the logit $b = -0.224$ is extracted from the **B** column of the Table 5.41, then the corresponding odds ratio (**exp(B)**) quoted in the same table is 0.799 meaning that when high growth satisfaction increases by one unit, the odds of fresh graduates' retention decrease by a factor of around 0.799 times, when other variables are controlled (i.e. there is around 20% decrease in the odds of fresh graduates' retention, for a one-unit increase in high growth satisfaction).

Third, concerning high work effectiveness effect on fresh graduates' retention as per the above mentioned formula, the logit $b = 0.395$ is extracted from the **B** column of the Table 5.41, then the corresponding odds ratio (**exp(B)**) quoted in the same table is 1.485 meaning that when high work effectiveness increases one unit, the odds of fresh graduates' retention increase by a factor of around 1.485 times, when other variables are controlled (i.e. with an increase of one unit in work effectiveness, retention becomes 1.485 times or 48.5% more likely).

Fourth, concerning high commitment effect on fresh graduates' retention as per the above mentioned formula, the logit $b = -0.594$ is extracted from the **B** column of the Table 5.41, then the corresponding odds ratio (**exp(B)**) quoted in the same table is 0.552 meaning that when high commitment increases by one unit, the odds of fresh graduates' retention decrease by a factor of around 0.552 times, when other variables are controlled (i.e. there is around 45% decrease in the odds of fresh graduates' retention, for a one-unit increase in high commitment).

Finally, a few measures for the logistic model fit and significance were examined. Nagelkerke's R^2 of 0.206 indicated a moderately strong relationship between prediction and grouping (Table 5.39). Prediction success overall was 88.9% (99.8% for YES answers i.e. fresh graduates

showing their willingness to be retained when personal/work outcomes exist and 2.8% for NO answers i.e. fresh graduates who are not willing to stay at work though they experience personal/work outcomes), as shown in Table 5.40.

Table 5.38: Omnibus Tests of Model Coefficients

	Chi-square	Df	Sig.
Model	29.798	5	.000

Table 5.39: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square	
			YES	NO
1	413.210 ^a	.111		.206

Table 5.40: Classification Summary of Percentage Correct for Retention ^a

Step 1	Retention	Overall Percentage	Predicted		Percentage Correct	
			Retention			
			YES	NO		
			558	1	99.8	
			69	2	2.8	
					88.9	

a. The cut value is .500

Table 5.41: Logistic Regression Analysis for Personal/Work Outcomes Prediction of Fresh Graduates' Retention

	B	S.E.	Wald	Df	Sig.	Exp(B)
High General Satisfaction	.227	.163	1.946	1	.163	1.255
High Internal Work Motivation	-.439	.185	5.654	1	.017	.645
High Growth Satisfaction	-.224	.108	4.329	1	.037	.799
High Work Effectiveness	.395	.172	5.270	1	.022	1.485
High Commitment	-.594	.173	11.754	1	.001	.552
Constant	1.129	1.071	1.111	1	.292	3.092

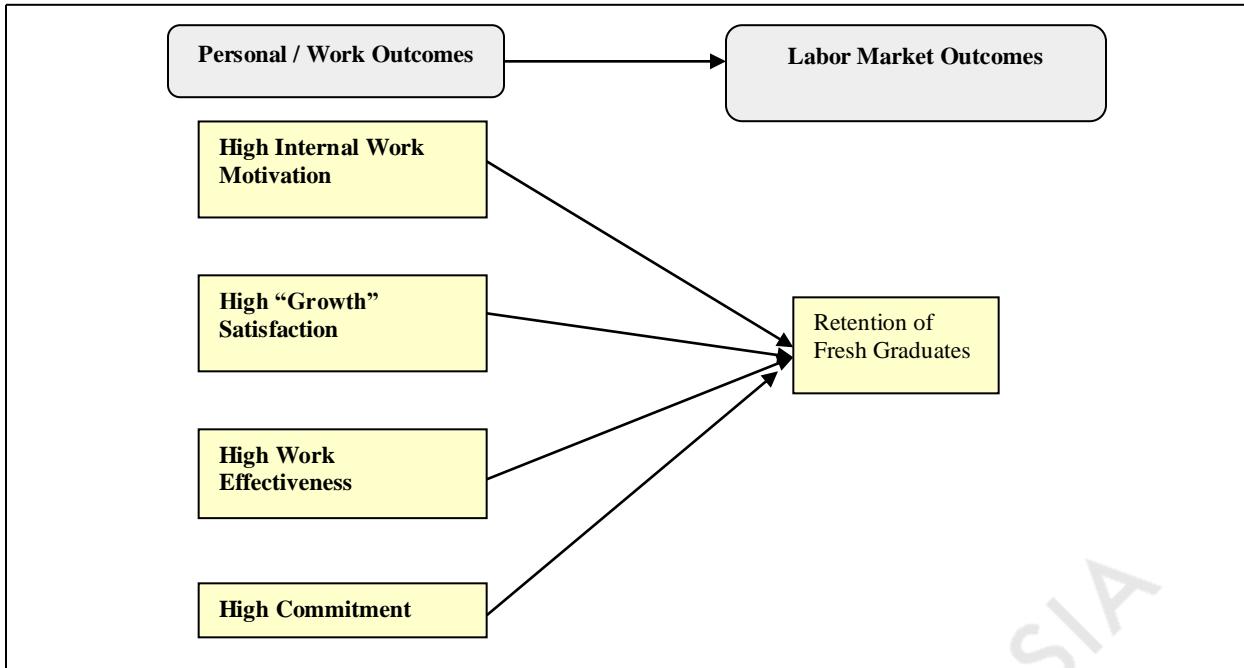


Figure 5.8: Personal/Work Outcomes Predicting Labor Market Outcome (Fresh Graduates Retention)

5.14 Chapter Summary

This chapter tested MJCM-R which supposes that fresh graduates' retention is affected by various personal/work outcomes which in turn are affected by core job dimensions and labor market conditions as deducted from literature review taking into consideration the experienced psychological states as mediators and the individual differences as moderators between core job dimensions and personal/work outcomes and presented the results. To do so, various analytic steps were set which helped to accept or reject the related hypotheses and subhypotheses.

1) descriptive statistics were conducted. Results showed that all scales and subscales are normally distributed. In addition, some preferences for fresh graduates were detected: (1) high interest in jobs which meet their expectations in terms of pay, (2) high concern about their experienced psychological states and work motivation and satisfaction as predictors of retention, (3) high tendency towards jobs where the pay is good, where responsibilities are given to those who performs the best rather than working with pleasant people and having lot of vacation time, and (4) high preference for jobs where the least physical effort is required.

2) the relationships among the various subscales of each of the five scales were tested. Zero-order correlations among the various subscales showed that there is a high level of significant

intercorrelation among the various core job dimensions, experienced psychological states, labor market conditions, individual differences and personal/work outcomes each apart. This result was previously found while testing JDS and was extremely expected knowing that good jobs are frequently good in many ways and bad ones are bad in general and good feelings come all together and bad feelings are bad in general.

3) through zero order correlation, the relationships among the various scales including the relationships of the core job dimensions and experienced psychological states with personal/work outcomes, the relationships of core job dimensions with experienced psychological states, the relationships of labor market conditions with personal/work outcomes, and the relationships of individual differences with core job dimensions, experienced psychological states and personal/work outcomes were assessed. Results showed that core job dimensions are positively related to personal/work outcomes subscales. The subscales of the experienced psychological states are strongly related to core job dimensions as predicted by the model. They also are very highly significantly related to personal/work outcomes subscales. Moreover, most labor market conditions achieve moderate to high levels of statistical significant correlations with personal/work outcomes subscales with correlations varying from negative to positive. Thus the subhypotheses that there is a significant and positive relationship between core job dimensions and personal/work outcomes (SH1.1), between core job dimensions and critical psychological states (SH1.2), and between critical psychological states and personal/work outcomes (SH1.3) and that there is a significant relationship between labor market conditions and personal/work outcomes (SH2.1) were verified.

4) through regression analysis, there were a strong support for the subhypothesis SH1.4 (in the presence of all five psychological states, personal/work outcomes maximize) and thus it was confirmed that personal/work outcomes maximize in the presence of all five experienced psychological states.

5) multiple regression helped to determine which specific core job dimension relates to which experienced psychological state as this was extremely needed in order to test the mediating role of experienced psychological states. Results showed that core job dimensions predict psychological states. More specifically, Experienced Meaningfulness was predicted from Skill Variety, Working Conditions, Promotion and Job Significance & Feedback; Experienced

Responsibility was predicted from Job Significance & Feedback, Social Environment, Decision Making & Autonomy, Work Load, Skill Variety and Work Benefits; Knowledge of Results was predicted from Promotion, Job Significance & Feedback, Physical Effort, Decision Making & Autonomy and Task Identity; Self Confidence was predicted from Decision Making & Autonomy, Job Significance & Feedback, Working Conditions, Technology Use, Social Environment and Task Identity; and Prestige Inside Outside was predicted from Skill Variety and Job Significance & Feedback.

- 6) through using partial correlation and multiple regression, the degree to which experienced psychological states mediate core job dimensions and personal/work outcomes was verified. Results showed that for the core job dimensions which affect all personal/work outcomes, it is verified that experienced psychological states mediate between core job dimensions and personal/work outcomes, thus confirming the hypothesis H4 (experienced psychological states have a mediating role between core job dimensions and personal/work outcomes). Besides, through multiple regression, it was confirmed that core job dimensions affect personal/work outcomes and thus hypothesis H1 (personal/work outcomes are influenced by core job dimensions) was verified.
- 7) MMPS, the summary subscale for core job dimensions, was determined for its need in testing the individual differences moderating role.
- 8) multiple regression helped to determine which specific labor market condition relates to which personal/work outcome. Through this, it was determined that labor market conditions predict personal/work outcomes and thus the hypothesis H2 (Personal/Work Outcomes are influenced by labor market conditions) was validated. More specifically, Internal Work Motivation was predicted from Job Matching, Educational & Labor Market Gap and Geographical Location; General Satisfaction was predicted from Job Matching, Foreign & National Workers and Geographical Location; Growth Satisfaction was predicted from Private & Public Sector, Foreign & National Workers and Geographical Location; High Work Effectiveness was predicted from Job Matching and Labor Status; and High Work Commitment was predicted from Educational & Labor Market Gap, Job Matching, Formal & Informal Jobs and Unionization.

9) through regression analysis, there were a strong support for the subhypothesis SH2.2 (personal/work outcomes maximize in the presence of labor market conditions) and thus it was confirmed that personal/work outcomes maximize in the presence of labor market conditions.

10) using zero-order correlation and Fisher's Z test, it was confirmed that individual differences moderate the relationships between core job dimensions and experienced psychological states and between experienced psychological states and personal/work outcomes and thus hypothesis H3 (individual differences are moderators affecting the relationships among core job dimensions, critical psychological states and personal/work outcomes), subhypothesis SH 3.1 (individual differences moderate the relationship between core job dimensions and critical psychological states), and subhypothesis SH 3.2 (individual differences moderate the relationship between critical psychological states and personal/work outcomes) were verified. More particlyarly, individual differences provide strong statistical support for the role of skill and knowledge, context satisfactions, growth need strength, and personal characteristics (age, gender, educational level, English versus French languages of study, social class, power distance and restraint versus indulgent culture) as highly influential on the relationships among core job dimensions, experienced psychological states and personal/work outcomes. However, the type of the educational institution, the major of study, the Arabic language of study versus other languages, individualism versus collectivism, feminism versus masculinity, and pragmatic versus normative provided very little statistical support for their effect on the aforementioned relationships.

11) binary logistic regression was used to test the relationships between personal/work outcomes and labor market outcome (fresh graduates' retention). Results showed that fresh graduates retention is impacted by four (Internal Motivation, Growth Satisfaction, Work Effectiveness and Work Commitment) out of five Personal/Work Outcomes and thus the hypothesis H5 (personal/work outcomes are a good predictor of labor market outcomes (Retention of Fresh Graduates)) was verified.

Chapter 6

Qualitative Data Analysis

6.1 Introduction

This qualitative data analysis chapter complements the quantitative component in the previous chapter. It involves detailed exploration of the results of the quantitative approach so as to allow various learning facets, create an in-depth understanding of the results received from the quantitative research and give more support to the previous findings with various methods (Tashakkori & Teddlie, 1998). This guarantees that the issue is not examined from one point of view, but instead a variety of standpoints are investigated which allows for various sides of the issue under examination to be discovered and comprehended. This chapter describes the adopted method of data analysis and presents the findings. First, it explains and justifies the selection of template analysis through including details of the techniques used in planning data analysis and the procedures applied in analyzing qualitative data. Second, it presents, interprets and analyzes the collected data.

6.2 The Template Analysis

Template analysis (King et al., 2004; Zarifis, 2014) is the set of techniques that organize textual data into themes. Basically, it is the structured approach which summarizes and arranges qualitative data (*ibid.*). It entails developing a group of codes or templates for each main theme which could stand for a certain idea or an act (*ibid.*). These themes can be mainly developed prior to the data gathering and analysis phase, but are then customized while reviewing and interpreting the collected data. The template is characterized by its structure which highlights the relations between the themes and their corresponding subthemes (King, 2004; Lowery, 2012) and is mainly used for analyzing interview transcripts. Once theoretical based themes are defined, the textual data should be examined vigilantly in order to mark any text sections that are related to the research questions of the study (Lowery, 2012). If any of these text sections is related to any of the theoretical based themes, it is then coded. In case a text section appears not to be related to any of these already set themes, new themes are then defined allowing the inclusion of the related material. In general, the preliminary template is formed after the primary reading and coding of the first few transcripts in a study (*ibid.*). In this research, the preliminary

template was partially developed with the first two interviews. Then, it is applied to the collected data and adjusted according to cautious reflection of every interview transcript. While coding the data, some codes appear to be common to most of the interviewees while others are only observed in few interview transcripts. Once this coding data process is accomplished, the final version of the template is then defined. This final version in which all the transcripts of the research have been coded, is the basis for interpreting the data and writing the findings of this study.

The template analysis is the best choice for this study for many reasons: First, it matches perfectly with the epistemological approach of this research for it allows a rich description of the findings through examining and interpreting the gathered data (King et al., 2004). Besides, the other available approaches such as content analysis and grounded theory do not fit the present study since the first aims to statistically analyze the data and the second uses predetermined codes only. However, through using the template analysis, the use of the existing knowledge as a basis and then the incorporation of the new codes that are derived from the gathered data allow an in-depth understanding which is needed in this case of study, as opposed to content analysis and to the assessment of the predetermined codes (*ibid.*).

Furthermore, the selected approach in this study for examining the collected data aligns with the critical realist epistemological point of view through assuming that there exist various ways to examine, interpret and analyze an observable fact, according always to the stance of the examiner and the background or the situation in which the study is carried out. As aforementioned in this study, the present research is founded on the epistemology of critical realism. Thus, the template analysis approach is the best fit in this epistemological standpoint for it is applied above all when the aim of the study is to interpret and analyze the textual data of various interviewees within a specific single context (Lowery, 2012), a characteristic that matches with this research aim.

Additionally, template analysis is the most appropriate approach for this study for it is known by its high flexibility in defining themes all through the process, its less required procedures thus facilitating the development of new themes and the adjustment of template if needed, and its less time consuming, a consideration that is essential when facing time limits, which is the case of this current research study.

6.3 The Process of Template Development

The preliminary template was developed based on the literature review, the interview guide and the first two conducted interviews as suggested by King et al. (2004). Themes were formulated along the lines of the research objectives and the research questions of this research study, as presented in the table below (Figure 6.1: Preliminary Template).

Theme 1
1. Core Job Dimensions
1.1 Importance of Core Job Dimensions
1.2 Employers' Viewpoint
Theme 2
2. Experienced Psychological States
2.1 Understanding of Experienced Psychological States
2.2 Employers' Viewpoint
Theme 3
3. Personal / Work Outcomes
3.1 Perceiving Personal / WorkOutcomes
3.2 Employers' Viewpoint
Theme 4
4. Labor Market Conditions
4.1 Identifying Labor Market Conditions
4.2 Employers' Viewpoint
Theme 5
5. Individual Differences
5.1 Recognizing the importance of Individual Differences
5.2 Employers' Viewpoint
Theme 6
6. Labor Market Outcome
6.1 Importance of Fresh Graduates' Retention as a Labor Market Outcome
6.2 Importance of Fresh Graduates' Retention as a Result of Personal/Work Outcomes
6.3 Employers' Viewpoint

Figure 6.1: Preliminary Template

Besides, knowing that a theoretical framework helps in defining predefined codes (*ibid.*), the preliminary template was also based on the initial conceptual framework of this study. The formulation of the preliminary template was a product of the analysis of the 630 questionnaires conducted with fresh graduates. Thus, the preliminary template included themes and subthemes based mainly on literature, initial framework, outcomes of the quantitative study and subjects emerging from the research objectives and questions. The themes were associated to the initial framework components, as well as the quantitative study results which allow a better comprehension of the previous study findings. For example, themes 1 to 4 relate and answer the first research question, completely fulfill the first and second objective of this research and partly fulfill the fifth objective. Theme 5 relates to the third objective and theme 6 relates and fulfills

the fourth objective and both answer the second research question and fulfill partly the fifth objective. Each of the six themes link and analyze the relevant construct in relation to the findings of the previous quantitative research conducted.

Once the first two interviews were performed and analyzed, new themes and sub-themes were further added. Additionally, a continuous revision of the template took place till getting to a saturation point exactly as recommended by King (2004), taking into consideration the ultimate link to the research questions and objectives. Indeed, an accurate process for themes' amendments and revisions was carried out so as to finalize the development of the final template.

Besides, the recommendations of supervisors and academic colleagues who were qualified in the field of business helped to increase the overall reflexivity and validity of the research (Lincoln & Guba, 2000; Li, 2014). Figure 6.2 illustrates the final template.

Theme 1

1. Core Job Dimensions

- 1.1 The Impact of Core Job Dimensions on Fresh Graduates' Psychological States
- 1.2 The Impact of Core Job Dimensions on Fresh Graduates' Personal/Work Outcomes

Theme 2

2. Experienced Psychological States

- 2.1 The Impact of Fresh Graduates' Experienced Psychological States on Personal/Work Outcomes
- 2.2 The Mediating role of Psychological States between Core Job Dimensions and Personal/Work Outcomes

Theme 3

3. Personal/Work Outcomes

Theme 4

4. Labor Market Conditions

Theme 5

5. Individual Differences

- 5.1 The Impact of Skill and Knowledge, Growth Need Strength and Context Satisfaction on the Relationship between Core Job Dimensions and Experienced Psychological States and between Experienced Psychological States and Personal/Work Outcomes
- 5.2 The Impact of Personal Characteristics on the Relationship between Core Job Dimensions and Experienced Psychological States and between Experienced Psychological States and Personal/Work Outcomes

Theme 6

6. Labor Market Outcome

- 6.1 Fresh Graduates' Expectations from Work
- 6.2 Increasing Fresh Graduates' Retention

Theme 7

7. Perspectives within the Lebanese Context

- 7.1 Visualization of Core Job Dimensions in the Lebanese Organizations
- 7.2 Evaluation of Noticed Experienced Psychological States in the Lebanese Context
- 7.3 Assessment of the Lebanese Fresh Graduates' Current Personal/Work Outcomes
- 7.4 Review of Current Labor Market Conditions in Lebanon
- 7.5 Overview of the Individual Differences in the Lebanese Cultural Context
- 7.6 Perceptions of the Most Needed Steps to Increase the Stay of Fresh Graduates in Lebanon

Figure 6.2: Final Template

Themes and subthemes are illustrated by extracts from the interviewees' narrative quotes. Moreover, each theme findings are the basis for subsequent discussions allowing the comparison of these findings with the existing theories and frameworks reviewed in the literature review. The relation between these findings and the theories and frameworks is discussed consequently. Some findings are similar to previous researchers while others are pretty new ones allowing the contribution to knowledge which enlarges the theoretical and practical understanding of fresh graduates' retention for both researchers and practitioners. In general, this chapter discusses the abovementioned seven main themes.

6.4 Data Analysis and Discussion

The interview transcripts' findings are classified into seven main themes. The first theme focuses on employers' beliefs towards: a) the impact of core job dimensions on fresh graduates' psychological states (partly answers RQ1 / RO1, RO2, RO4, RO5) and b) the impact of core job dimensions on fresh graduates' personal/work outcomes (partly answers RQ1 / RO1, RO2, RO4, RO5). The second theme deals with employers' attitudes: a) towards the impact of fresh graduates' experienced psychological states on personal/work outcomes (partly answers RQ1 / RO1, RO2, R04, RO5) and b) towards the mediating role of experienced psychological states between core Job dimensions and personal/work outcomes (partly answers RQ1 / RO1, RO2, R04, RO5). The third theme analyzes employers' beliefs towards the importance of personal/work outcomes as major determinants of fresh graduates' retention (partly answers RQ1 / RO1, RO2, RO4, RO5) and the fourth theme discusses the impact of labor market conditions on fresh graduates' personal/work outcomes (partly answers RQ1 / RO1, RO2, RO4, RO5). The fifth theme analyzes employers' beliefs towards: a) the impact of skill and knowledge, growth need strength and context satisfactions on the relationship between core job dimensions and experienced psychological states, between experienced psychological states and personal/work outcomes and between core job dimensions and personal/work outcomes (partly answers RQ2 / RO3, RO4, RO5) and b) the impact of personal characteristics on the relationship between core job dimensions and experienced psychological states, between experienced psychological states and personal/work outcomes and between core job dimensions and personal/work outcomes (partly answers RQ2 / RO3, RO4, RO5). Theme 6 analyzes employers' beliefs and attitudes towards: a) fresh graduates' expectations from work (partly answers RQ2 / RO4, RO5) and b) increasing fresh graduates' retention. Finally, theme 7 analyzes employers' beliefs and attitudes

towards: a) the core job dimensions in the Lebanese Organizations (partly answers RQ1, RQ2 / RO6), b) the noticed experienced psychological states in the Lebanese context (partly answers RQ1, RQ2 / RO6), c) the Lebanese fresh graduates' current personal/work outcomes (partly answers RQ1, RQ2 / RO6), d) the current labor market conditions in Lebanon (partly answers RQ1, RQ2 / RO6), e) the individual differences in the Lebanese Cultural Context (partly answers RQ1, RQ2 / RO6), and f) the most needed steps to increase the stay of fresh graduates in Lebanon (partly answers RQ1, RQ2 / RO6). In other words, the findings are broken down per structural elements (Themes 1, 2, 3, 4, 5 and 6). A discussion of the findings is carried out for each theme.

6.4.1 Theme 1: Core Job Dimensions

- *Sub-theme 1: Impact of Core Job Dimensions on Fresh Graduates' Psychological States*

According to the employers' perspective, core job dimensions provoke psychological states that can be determinant to the development of personal/work outcomes. The analysis of the interviews revealed that interviewees reported perceiving various positive fresh graduates' psychological states as a result of core job dimensions. Some participants reported feelings of self-confidence, prestige inside outside, adequacy, comfort, pleasure, pride, meaningfulness of the work, responsibility for the outcomes of the work and knowledge of the actual results of the work activities. However, most of the participants highlighted self-confidence, prestige inside outside, meaningfulness of the work, responsibility for the outcomes of the work and knowledge of the actual results of the work activities.

An illustrative example of self-confidence, one of the most commonly highlighted psychological states, is the one expressed by respondent #1. This employer was convinced that the reason for fresh graduates' self confidence was mainly the autonomy and decision power allowed at work in addition to good social relationships at work. He exposed that:

"Managing fresh graduates with attention on details give the feeling that you don't trust them to do the job right, which as a result decreases their self-confidence. Once the right training is provided along with trust, fresh graduates will recognize you believe in them and will in turn have faith in themselves... Team work increases internal social relationships and is considered as a motivational instrument which enable increasing fresh graduates' sense of worth, thus ameliorating the company's efficiency." R#1

Another core job dimension that provoked fresh graduates' self-confidence is the one described by respondent#2. This employer was completely sure that the reason for fresh graduates' self confidence was the feeling of comfort at work mainly due to good working conditions.

"...fresh graduates prefer working conditions which are safe and pleasant. They favor working conditions which resemble to their homes' conditions. It is usually noticed that fresh graduates' self-confidence is higher in the case of those who work in the administration than in the case of those who work in difficult, dangerous or unsafe working conditions..." R#2

The next quotation describes respondent #3 viewpoint who believed that the most self-confident fresh graduates were those who were recognized for their efforts at work:

"...In general, fresh graduates who are recognized for their hard work experience better self-confidence than fresh graduates who are unnoticed, apart from their hard work. Receiving an award or a certificate for a well accomplished job makes everyone aware of their achievement and is considered as an appreciation for their efforts and in turn increases their self-confidence..." R#3

Another respondent, #4, elaborated respondent #3 ideas. She describes:

"It is very hard when someone comes up with a new idea and the manager steals the idea. This ends up by causing fresh graduates to stop to share their ideas. Thus, it is very important to make sure to give credit for fresh graduates' new ideas and to pass it along. Preferably, let the fresh graduate attend a meeting where his or her effort is appreciated in front of all colleagues. Otherwise, a memo can be shared around once the implementation of the idea is accomplished, giving credit to the fresh graduate for the idea... this should boost his or her self-confidence".

R#4

One can observe that the interviewee repeated the term "idea" six times. This was obvious in other transcripts as well. This repetition shows that the respondents wanted to stress the importance of giving credit to fresh graduates' new ideas which should end up by increasing their self-confidence. Even though this core job dimension which is closely related to work social environment was not clearly included in the initial conceptual framework, it emerged frequently. Respondent #5 stressed the importance of teamwork and social relationship and explained how he feels: "When you encourage fresh graduates to be the best of themselves, even

if this might end up by transferring them to other departments in the organization, their self-esteem is boosted no doubt. As a result, they will tell about how encouragement you provided for them and this will encourage others to join your department. The objective of any organization is the teamwork of its employees in general and fresh graduates more particularly which should end up by increasing self-confidence and boosting the success of the business". R#5

Besides, he stressed the importance of a positive work environment in boosting fresh graduates' self-confidence.

"...to hire team building trainers to hold seminars, training sessions and further activities facilitate building fresh graduates' self-esteem. A qualified trainer knows how to inspire fresh graduates and encourage them to be part of the organization. These seminars will increase their self-esteem, which in turn help to create a positive work environment and better organizational efficiency". R#5

Prestige inside outside, another most commonly highlighted psychological state, is expressed by respondent #1 as well. This employer was convinced that fresh graduates' feeling of prestige inside outside was mainly due to pay and education. He revealed that:

"Different fresh graduates seem to view issues differently in understanding prestige. Most of them seem to value prestige as a result of the combination of income and education..." R#1

As aforementioned, respondent #2 shared respondent #1 perception and stated that a lot of fresh graduates experienced prestige inside outside due to income and degree level.

However respondent #3 asserted that prestige inside outside is mainly due to the job position and to how much a job helps society no matter of income: "Many fresh graduates (especially those in the working class) value the degree to which a job helps society and would, for example, consider some jobs such as doctors as high and other jobs such as lawyers as low although both jobs get high incomes". R#3

Respondents #4 and #5 stated that most fresh graduates care for how much significant is their job and consider this as the most important reason behind the feeling of prestige inside outside.

"... The significance of their job is a key reason for the feeling of prestige whether inside or outside..." R#4

“... Fresh graduates whose jobs are considered as significant are the most ones to enjoy prestige...” R#5

Meaningfulness of the job is one of the most commonly highlighted psychological states and is expressed by respondents #1, #3 and #5. Respondent #1 was convinced that fresh graduates' feeling of meaningfulness of work was mainly due to competencies' development and skill variety. He revealed that:

“Fresh graduates prefer to increase the amount of positive indications and signs figured out from work in order to give meaning to their work. The most relevant way to increase the amount of positive signs is to develop competencies through providing training sessions and seminars and allowing the fresh graduates to contribute to a variety of different activities so they can use various skills and talent so as to experience positive personal/work outcomes and positives psychological states”. R#1

Respondent #2 considered task significance as having a great impact on fresh graduates' meaningfulness of work and declared:

“... in order to create a sense of meaningfulness, fresh graduates should understand how the tasks they perform support the organization's mission, objectives and goals...” R#2

However, respondent #5 considered the work social environment and interactions with employees and supervisors as the only contributor to the feeling of meaningfulness of job. He stated:

“Communications with colleagues promote fresh graduates' dignity and sense of value, and contribute to boosting the sense of meaningfulness, and eventually increasing the level of work commitment”.

Responsibility for the work is another most commonly highlighted psychological state and is expressed by respondents #2, #3 and #4. The three Respondents were convinced that fresh graduates' feeling of responsibility for the work was mainly due to the level of autonomy allowed.

Respondent #2 revealed: “... when fresh graduates have freedom, independence and carefulness in setting up work, and autonomy, their responsibility for the work increase”. R#2

Respondent #3 shared the same point of view of respondent #2 and declared: "... when fresh graduates are encouraged to take decisions and are allowed to have a direct contact with clients and customers without a total direct control of managers, their sense of responsibility toward their tasks and duties increase". Respondent #4 stressed the importance of allowing fresh graduates to decide on their work methods, to check on how to assign priorities and when to start or stop work improves autonomy and by this increase their job control and responsibility for the work.

Knowledge of results is mentioned by respondents #3, #4, and #5 as one of the most common psychological states that fresh graduates experience as a result of various core job dimensions. Respondent #3 considered feedback as a major reason allowing fresh graduates to learn about their performance directly as they finish the work.

Respondent #4 confirmed the same idea and added: "Feedback is very important for fresh graduates' knowledge of result... this feedback is not limited to supervision but can be automatically generated by computer software or can come naturally from customers...this enable fresh graduates to verify their own errors and correct them". R#4

Respondent #5 stressed the importance of feedback as well but considered task identity as another core job dimension that can add to the fresh graduate's knowledge of result enabling the completion of a whole and identifiable piece of work from beginning to end. This permits a visible outcome and allows an easier responsibility determination and a better knowledge of results.

Next, a presentation for the results from the employers' perspective concerning the impact of core job dimensions on fresh graduates' personal/work outcomes is accomplished.

- *Sub-theme 2: Impact of Core Job Dimensions on Fresh Graduates' Personal/Work Outcomes*

As aforesaid, according to the employers' standpoint, core job dimensions provoke psychological states which affect the development of personal/work outcomes. The analysis of the interviews revealed that interviewees reported perceiving various positive fresh graduates' personal/work outcomes as a result of core job dimensions. Most of the participants highlighted internal motivation, job satisfaction, work commitment and work effectiveness as personal/work outcomes affected by core job dimensions.

All respondents agreed on describing the internal motivation of fresh graduates as one of the most important duties of employers. One of the most important factors being core job dimensions which have a great control on fresh graduates' motivation and are extremely essential for boosting organizational productivity. As per their opinion, these dimensions include: skill variety, job significance, and feedback.

An illustrative example of internal motivation is the one expressed by respondent #1. He exposed that:

"Skill variety, job significance and job feedback are good predictors for fresh graduates' internal motivation and perception of these core job dimensions by fresh graduates affects their internal motivation". R#1

This conclusion was very similar to various researchers' findings, e.g., Bakhshi et al. (2008) and Kianian (2009). In their research, it was verified that there is a significant relationship between skill variety, job significance and job feedback and internal motivation.

Job satisfaction is one of the most commonly highlighted personal/work outcomes and is described by all respondents as being influenced by various core job dimensions which all together a great impact on the company's success. Respondent #1 was convinced that fresh graduates' job satisfaction was mainly due to decision-making and autonomy, job significance and feedback. He revealed that:

"The level of job satisfaction increases proportionally with the increase in the level of participation in decision-making and the amount of feedback provided for fresh graduates.... Job importance as well is of a great interest to fresh graduates affecting their job significance". R#1

However, respondent #2 believed that fresh graduates' satisfaction is the result of the combination of promotion and work benefits (mostly pay), social environment and working conditions. More particularly, respondent #2 stressed the importance of extrinsic rewards in increasing fresh graduates' job satisfaction and the role of good working conditions as being a stimulator for job satisfaction as well. He revealed:

"As noticed in the workplace, fresh graduates who work in normal working conditions experience a higher job satisfaction than fresh graduates who work under difficult working conditions... Generally, and for a long time, job satisfaction has been considered as a very

multifaceted bunch of feelings and thoughts towards different facets of the work. For that reason, the studies related to fresh graduates' job satisfaction should include various factors such as salary, working conditions, colleagues, supervisors, working hours etc."R#2

The remaining respondents shared both previous respondents' standpoints and believed additionally that the combination of work load and work benefits has the highest magnitude on fresh graduates' job satisfaction, especially that fresh graduates consider work load and work benefits as work/life balance. Extra work load in almost all cases results in low job satisfaction and generous pay accompanied with balanced work load is always a key stimulator for fresh graduates' high job satisfaction.

All respondents agreed on describing work commitment as an evident result of the combination of various core job dimensions. As per their opinion, these dimensions include: skill variety, work benefits and decision making and autonomy.

Respondents considered that work commitment is facilitated by: 1) participating in important work decisions, 2) sharing the benefits of the team accomplishments, and 3) contributing to group performance significantly through having or acquiring high variety of skills. At this point, it is important to mention that respondent #3 stressed the importance of distinguishing between the job commitment and the organization commitment and explained:

"Some fresh graduates are likely to identify themselves with the organization and prefer to change jobs within the organization rather than changing the organization... This is mainly due to the organization's understanding of the fresh graduates' needs and expectations especially with regards to pay and power". R#3

Furthermore, interviews reveal that a variety of core job dimensions has been found to be related to work effectiveness. For example, a positive relationship has been noticed between task identity, decision making and autonomy and fresh graduates' work effectiveness.

Respondent #1 declared:

"... when a fresh graduate completes a whole and well identified piece of work, an increase in work effectiveness is always the result". R#1

Respondent #2 shared the same viewpoint and added:

“When a problem is new or unique, it requires problem solving. This represents a special form of decision making which requires developing and creating new solutions. Indeed, participating in problem solving is of a great interest for fresh graduates who as long as they feel they are participating and are being consulted, their work effectiveness increase”. R#2

- *Discussion: Theme 1 (Core Job Dimensions)*

As mentioned in the Literature Review Chapter and tested in the quantitative research part of this study, MJCM-R is the adopted model for testing fresh graduates' job satisfaction and retention. This first theme presents the first branch of this model, which is the “Core Job Dimensions”. This branch refers to the various core job dimensions which are identified to affect fresh graduates' psychological states which in turn develops personal/work outcomes (Hackman and Oldham, 1976; 1980).

The aforementioned narrations illustrate that the provoked psychological states have been the result of various core job dimensions. These findings are in line with the literature which suggests that core job dimensions are very important because they impact the psychological state of a job holder (Hackman & Oldham, 1975; 1976; 1980).

What is interesting is the fact that most of the findings are very similar to MJDS-R findings. Based on the above interviews, fresh graduates seem to experience “self-confidence”, “prestige inside outside”, “meaningfulness of the work”, responsibility for the work”, and “knowledge of results” during work as a result of various core job dimensions. This tendency was also detected by MJDS-R.

As per employers' perception, fresh graduates self-confidence seem to be mainly affected by decision making & autonomy, teamwork & social environment, working conditions and efforts recognition. This finding is very similar to MJDS-R findings except for efforts recognition which was included in the initial framework but didn't show a significant effect on fresh graduates' self-confidence. Besides, MJDS-R noticed the effect of task identity, job significance & feedback and technology use on fresh graduates' self-confidence.

Prestige inside outside is affected by work benefits, job position and how much the job helps society, and job significance. This finding is similar to MJDS-R findings in considering job significance as having a major effect on fresh graduates' prestige. However, work benefits and

social environment were included in the initial framework but didn't show a significant effect on fresh graduates' feeling of prestige inside outside. Besides, MJDS-R noticed the effect of skill variety and feedback on fresh graduates' prestige inside outside.

Meaningfulness of the work is affected by competencies' development, skill variety and job significance. This finding is similar to MJDS-R findings in considering skill variety and job significance as major determinant of meaningfulness of the work. However, competencies' development was not included in the initial framework. Besides, MJDS-R noticed the effect of working conditions, promotion and feedback on meaningfulness of the work.

Fresh graduates' responsibility for the work is affected by the level of autonomy as per employers' perception. This finding is confirmed by MJDS-R findings. However, MJDS-R, in addition to autonomy, noticed the effect of other core job dimensions (skill variety, job significance & feedback, work load, work benefits and social environment).

Knowledge of results is affected by feedback and task identity. This finding is confirmed by MJDS-R findings. However, MJDS-R, in addition, noticed the effect of other core job dimensions (decision making & autonomy, physical effort and promotion).

Furthermore, the abovementioned narrations show that various core job dimensions affect personal/work outcomes as well. These findings are consistent with the literature which suggests that personal/work outcomes of a job holder are the result of various core job dimensions (Bakhshi et al, 2008; Hackman & Oldham, 1975; 1976; 1980; Kianian, 2009).

It is very remarkable that most of the findings are in line with MJDS-R findings as well. Based on the above interviews, fresh graduates seem to experience "internal motivation", "job satisfaction", "work effectiveness", and "work commitment" as a result of various core job dimensions. This tendency was also detected by MJDS-R with only one exception - interviews notice job satisfaction as one outcome while MJDS-R divides it into two outcomes (growth satisfaction and general satisfaction).

As per employers' perception, fresh graduates' internal motivation seem to be mostly affected by skill variety and job significance and feedback. This finding is very similar to MJDS-R findings except for physical effort which was included in the initial framework but wasn't noticed in interviews.

Job satisfaction is affected by decision making and autonomy, job significance and feedback, promotion, work benefits, work load, social environment and working conditions. This finding is similar to MJDS-R findings except for physical effort and technology use which were included in the initial framework but were not noticed in interviews and working conditions which was found to have an effect as per the interviews but didn't show a significant effect as per MJDS-R.

Work effectiveness is affected by task identity and decision making and autonomy. This finding is very similar to MJDS-R findings except for physical effort which was included in the initial framework but wasn't noticed in interviews.

Work commitment is affected by skill variety, work benefits and decision making and autonomy. This finding is very similar to MJDS-R findings except for task identity and working conditions which were included in the initial framework but were not noticed in interviews.

From the analysis of the first theme, it was noticed that there is a great similarity among the literature, the quantitative research outcomes and the findings of the interviews. The next theme, elaborates on the second branch of the model, which refers to the "Experienced Psychological States".

6.4.2 Theme 2: Experienced Psychological States

- *Sub-theme 1: Impact of Fresh Graduates' Experienced Psychological States on Personal/Work Outcomes*

Employers have argued that the best way to increase fresh graduates' personal/work outcomes is by giving greater opportunity for experiencing positive psychological states at work. Indeed, respondent #1 exposed:

"When fresh graduates experience job responsibility, they become proud of what they do and feel happy at work. This leads to job satisfaction which can be seen through the attention they show to their work and to work effectiveness which can be noticed through a better performance". R#1

Respondent #2 stressed the importance of fresh graduates' self-confidence in increasing work effectiveness, internal motivation and job satisfaction. He revealed:

“As fresh graduates become more confident in what they are doing, they tend to put their heart and soul into the job which results in a better work effectiveness... in this context, the more the self-confidence, the more the job motivation and satisfaction”. R#2

Respondent #4, in addition to what was aforementioned by the first two respondents, explained the importance of meaningfulness of the work in increasing fresh graduates’ loyalty and commitment to work which is considered as a cornerstone to any company’s success. Besides, he stressed the importance of internal motivation and work commitment in achieving companies’ missions, visions and goals.

Knowledge of results has been considered by all respondents as a major reason behind fresh graduates’ motivation, job satisfaction and work effectiveness. Knowledge of results being the consequence of feedback plays a major role in developing fresh graduates’ general satisfaction. Indeed, respondent #5 declared:

“Knowledge of results is fundamental to the realization of how well a job has been accomplished and to subsequent feelings of satisfaction, motivation and work effectiveness”. R#5

And respondent #3 added:

“Fresh graduates needs job feedback the most in order to learn from their mistakes. This creates a feeling of knowledge of results which in turn plays an important part in increasing their motivation, satisfaction and effectiveness at work”. R#3

All respondents confirmed the importance for fresh graduates to experience self-esteem which help increasing personal/work outcomes. Indeed, according to their perception, there is a meaningful and significant relationship between fresh graduates’ self-esteem and the degree of job satisfaction, including satisfaction with salary, wages and promotion. In this context, respondent #1 revealed:

“Self-esteem is one of the most important components of fresh graduates’ identity. It refers to how fresh graduates think of themselves and how they perceive and evaluate their worthiness. All of this has a big effect on their behavior, happiness, level of satisfaction and work effectiveness”. R#1

Respondent #2 added:

“Having high self-esteem is very beneficial for fresh graduates as it is the predictor of many outcomes. It is an influential factor for work effectiveness; it is strongly related to happiness, well being, motivation and job satisfaction”. R#2

And respondent #4 exposed:

“Fresh graduates experiencing a proper level of self-esteem are the most to enjoy feelings of self-worth and self-confidence. The combination of these feelings increases the probability for a fresh graduate to enjoy higher levels of motivation, satisfaction and commitment at work. Low self-esteem results in feelings of weakness, helpless and inferiority”. R#4

- *Sub-theme 2: Mediating role of Psychological States between Core Job Dimensions and Personal/Work Outcomes*

All of the employers that participated in the present research shared their confirmation regarding the mediating effect of psychological states. They admitted that the perception fresh graduates have about their employers, their jobs, their colleagues, wages, recognition or promotion potential has a great effect on their level of motivation, satisfaction, work effectiveness and commitment through provoking feelings of responsibility for the work, meaningfulness of the work, knowledge of results, self-confidence and self-esteem. Respondent #1 described how he perceives the fact that experienced psychological states mediates core job dimensions and personal/work outcomes:

“Whenever fresh graduates are experiencing greater feelings of responsibility toward their jobs and greater feelings of meaningfulness of the job due to fair core job dimensions, their chances for acquiring personal/work outcomes increase...The more the knowledge of results the more the work effectiveness and the more the self-esteem and self-confidence the more the motivation and job satisfaction...” R#1

Similarly, respondent #2 also confirmed the same perception:

“The mediating role of psychological states between core job dimensions and personal/work outcomes has been proved daily through examining fresh graduates’ reactions to working activities... fresh graduates tend to let their emotions control them. Their mood changes very

easily... their job satisfaction is easily affected by their psychological states which in turn can be easily affected by any change in core job dimensions". R#2

Moreover, respondent #3 explained how psychological states play a mediating role:

"The psychological state of a fresh graduate represents the generative mechanism through which the core job dimensions are able to influence the personal/work outcomes". R#3

In addition, respondent #4 admitted:

"The relation between core job dimensions and fresh graduates' personal/work outcomes cannot be understood without passing through their psychological states..." R#4

Based on the aforementioned quotations, one can easily observe, that employers are convinced about the mediating role of psychological states. During the interviews, one can realize that they are totally aware of the importance of understanding fresh graduates' psychological states as a way through which core job dimensions can provoke greater personal/work outcomes.

- *Discussion: Theme 2 (Experienced Psychological States)*

This second theme presents the second branch of this model, which is the "Experienced Psychological States". This branch refers to the ability to identify fresh graduates' psychological states as a result of a variety of core job dimensions which in turn develops personal/work outcomes (Hackman & Oldham, 1976; 1980). Hackman and Oldham (1980) suggest that the ability to perceive positive psychological states in work is the major reason behind positive personal/work outcomes. This ability is much influenced by core job dimensions and cultural and personal constructs because it is in individuals' emotion system. The findings of this research are in line with the literature review as well as with the quantitative study, since employers were able to perceive the importance of fresh graduates' psychological states as a stimulus to personal/work outcomes and confirmed the major effect of core job dimensions on these psychological states.

Literature Review revealed that experienced psychological states play a mediating role between core job dimensions and personal/work outcomes (Hackman & Oldham, 1976; 1980) and quantitative research confirmed this hypothesis. As discussed above, most of the respondents admitted that mediating role.

The data analysis introduces a slightly new psychological state which can be provoked during work, which is “self-worth”; however it is very similar to the psychological state “self-confidence”. One of the respondents reported perceiving this psychological state at the fresh graduates’ level as a result of achievement recognition at work. This is reasonable, because self-worth can be the primary cause of fresh graduates’ motivation, satisfaction and commitment at work. More precisely, self-worth is defined by Bandura’s social cognitive theory as the “ability to deal with challenging encounters” (Bandura, 1991) while according to self-worth theory proposed by Martin Covington (Covington, 1984), self-worth is defined as “the appraisal of one’s value as a person”. Thus, this finding is in line with the literature review as well but was not noticed and proved in the quantitative part.

From the analysis of the second theme, it was noticed that keeping respondents’ anonymity was very essential as this encouraged them to speak freely and express themselves without being worried of representing their organizations or damaging their organizations’ images. The next theme, elaborates on the third branch of the model, which refers to the “Personal/Work Outcomes”.

6.4.3 Theme 3: Personal/Work Outcomes

- *Importance of Personal/Work Outcomes as major determinants of Fresh Graduates’ Retention*

According to the employers’ perspective, fresh graduates’ personal/work outcomes are provoked by their experienced psychological states at work as a result of various core job dimensions and are the major determinants for their retention. The analysis of the interviews revealed that interviewees reported perceiving various positive fresh graduates’ personal/work outcomes that are identified to increase their stay at work. Most of the participants highlighted internal motivation, job satisfaction, work effectiveness and commitment as the most observed personal/work outcomes to have an effect on fresh graduates’ decision to stay at work.

Respondent #1 considered personal/work outcomes as one of the organization’s greatest challenges for ensuring the retention of its fresh graduates. He revealed:

“Fresh graduates’ level of job satisfaction is not only important to their wellbeing, but also to companies’ goals for it ensures their long stay at the company. The combination of job

satisfaction, internal motivation, and work effectiveness along with commitment is important since it helps to create competent and motivated personnel and allows for a company to retain them". R#1

In addition, respondent #2 explained that there are many factors that could influence fresh graduates' retention such as job satisfaction, internal motivation and work involvement. He exposed:

"For employers to guarantee fresh graduates' stay at the organization, they must first ensure employment fundamentals such as clear job description and understand their performance history though it might be short due to their little or no experience available. Besides, employers may maximize the retention of these fresh graduates by noticing and reacting to those factors responsible for building motivation, satisfaction and commitment". R#2

Furthermore, Respondent #3 declared:

"One of the most common ways employers can find out how to maximize the stay of their fresh graduates is by communicating with them so as to understand what are the factors that have the biggest effect on their motivation, job satisfaction and commitment and what contributes the most to their work effectiveness. It would be very difficult for employers to pretend a total understanding of the complex composition of these personal/work outcomes without communicating with them". R#3

Respondent #4 and respondent #5 confirmed the same perception regarding personal/work outcomes and their effect on retention but considered that it is not always the responsibility of the employers to communicate with fresh graduates in order to understand their needs and expectations but in the contrary, fresh graduates can take the initiative as well.

"Sometimes, especially in big companies, where employers don't have time to communicate with their fresh graduates, these latter are urged to initiate communications. Fresh graduates should construct a record of their professional competencies and motivational factors to submit to their employers to initiate discussions regarding their interests and expectations about rewards or advancement within the organization". R#4

"...motivated and satisfied fresh graduates are the least ones to look for a work change... most fresh graduates who feel happy at work take the initiative to discuss their perceptions and

expectations with employers and do not wait for employers to ask them. These are the ones who are easily retained". R#5

- *Discussion: Theme 3 (Personal/Work Outcomes and Labor Market Conditions)*

This third theme is related to the third branch of MJCM-R, which is the "Personal/Work Outcomes".

Personal work Outcomes refer to high work motivation, high satisfaction and high work performance which are affected by psychological states of experienced meaningfulness, responsibility and knowledge of results as explained by Hackman and Oldham (1980). According to them, the ability to perceive high personal/work outcomes is mainly due to the combination of positive psychological states that employees experience as a result of various job characteristics. Besides, this branch takes into consideration the extent literature which considered high commitment as an additional personal/work outcome and which was tested and proved in the quantitative part of this research. The findings of these interviews are in line with the literature review as well as with the quantitative study, since employers were able to perceive the importance of fresh graduates' personal/work outcomes as a stimulus to retention and confirmed the major effect of experienced psychological states on these personal/work outcomes.

The data analysis reflects completely and perfectly the quantitative research outcomes. No new ideas were deducted from the interviews but a total confirmation of what was proved in the aforementioned quantitative part. This is reasonable, because fresh graduates' motivation, satisfaction, effectiveness and commitment at work were subject of study for long years and some of them were confirmed by various researchers such as Hansen, Smith, & Hansen (2002), Herzberg (1974) and Lunenburg & Ornstein (2004). More precisely, Herzberg linked motivation to factors that generally add to the good feelings attributed to the job such as responsibility, achievement, and the position itself in addition to others. Hansen, Smith, & Hansen and Lunenburg & Ornstein linked motivation to aspects such as organizational policies, salaries, and relations with colleagues. Thus, these findings in relation personal/work outcomes are in line with the literature review as well and were noticed and proved in the quantitative part.

6.4.4 Theme 4: Labor Market Conditions

- *Impact of Labor Market Conditions on Fresh Graduates' Personal/Work Outcomes*

According to the employers' point of view, labor market conditions affect the development of various personal/work outcomes in the same way as core job dimensions. The analysis of the interviews revealed that interviewees reported perceiving fresh graduates' motivation, job satisfaction, work effectiveness as well as commitment as a result of various labor market conditions; these labor market conditions being geographical location, unionization, labor status, job matching, foreign and national workers and educational and labor market gap.

An illustrative example of motivation and job satisfaction, the most commonly highlighted personal/work outcomes, is the one expressed by respondent #1. This employer was convinced that the reason for motivation and job satisfaction is geographical location and job matching in addition to various core job dimensions. He revealed:

"As long as fresh graduates are being paid fairly and totally enough to cover their expenses, they favor working at long distances from home... indeed, they prefer being far from home so as to feel the freedom of life far from parents' protection... this feeling of freedom mixed with job matching is likely to increase their motivation and job satisfaction...". R#1

In the same context, respondent #2 added:

"I was totally surprised when one of the fresh graduates asked me for a meeting so as to ensure that her work will be in the main office at the city knowing that she comes from the mountains... she insisted that the location of the job is very important for her to be happy, motivated and satisfied at work". R#2

Besides, respondent #3 described:

"When conducting interviews with fresh graduates, I noticed that one of the most important issues they ask about is the geographical location of the job... the link that fresh graduates build between their work and their outside life is much affected by the place and has a great effect on their motivation at work as well as their job satisfaction". R#3

In addition to geographical location and job matching, respondent #4 stressed the issue of foreign workers which in most cases is having a negative effect on motivation and job satisfaction. He stated:

“Due to the fact that my business relies on foreign workers for non-degree jobs, I noticed lately some changes in the work environment...a lack of communication between foreign and national employees resulted in a lack of motivation and job satisfaction for foreign employees as well as for national employees including fresh graduates...add to this, differences in culture and in background...however, I cannot but hire foreign employees since otherwise I cannot ensure the continuity of my business”.

Furthermore, respondent #5 considered job matching as a major reason behind all personal/work outcomes stressing more particularly work effectiveness and work commitment. He exposed:

“In large companies as mine, sometimes it is difficult to take the time to carefully match each fresh graduate with the right position and the right offer; however, I do always make sure to do my best to afford this balance as much as I can since I believe that it is the major reason behind work effectiveness... high levels of commitment cannot be perceived without an adequate job match...” R#5

Regarding work effectiveness, respondent #2 believed that fresh graduates building their own business are more efficient at work than those employed at various businesses due to (1) their availability at work for long hours, (2) the business security and continuity they aim to ensure, and (3) the feeling of belonging.

Concerning commitment, respondent #3 stressed the important role that unionization play in building a feeling of commitment for work at the fresh graduate level for they increase their feeling of protection through securing their rights for vacations, for sick leave, for adequate pay and others. However, respondent #1 focused on the importance of academic programs prepared by universities and academic institutions which is noticed to have a great impact on fresh graduates' motivation and commitment to work. He believed that:

“The more fresh graduates are prepared academically to fit into the labor market the more they feel motivated and committed to their job”. R#1

Respondent #4 shared respondent #1 standpoint regarding the importance of the academic skills match with the labor market needs and discussed the importance of unions in increasing the commitment of fresh graduates as well. He revealed:

“High levels of commitment are perceived when fresh graduates are well prepared to fit into the jobs they handle... sometimes, we face difficulties with fresh graduates who lack many skills; do not understand English or French, are not computer friendly and others... Unions as well help increase the commitment level of fresh graduates as they feel more secured when unions protect their rights”. R#4

- *Discussion: Theme 4 (Labor Market Conditions)*

This fourth theme is related to the fourth branch of MJCM-R, which is “Labor Market Conditions”.

“Labor Market Conditions”, according to the literature review, refer to the geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap which are highlighted by various researchers (Abbas et al., 2010; Agrifoglio & Metallo, 2010; Aguilar et al., 2013; Falco et al., 2010; Keane et al., 2012; Phelps & Zoega, 2013; Rocio et al., 2013) as being influential for the development of personal/work outcomes. According to them, the ability to perceive high personal/work outcomes is mainly due to the combination of various advantageous labor market conditions that employees benefit from. Besides, as mentioned before this branch takes into consideration the extent literature which considered the effect of labor market conditions on high commitment being an additional personal/work outcome (Cho et al., 2013; Karavas, 2010; Qamar & Baloch, 2011) and which was tested and proved in the quantitative part of this research as well.

The findings of these interviews are in line with the literature review as well as with the quantitative study, since employers were able to perceive the importance of fresh graduates’ labor market conditions as a stimulus to the development of personal/work outcomes.

The data analysis reflects the quantitative research outcomes. It is very remarkable that most of the findings are in line with MJDS-R findings as well. Based on the above interviews, fresh graduates seem to experience “internal motivation”, “job satisfaction”, “work effectiveness”, and

“work commitment” as a result of labor market conditions as well as various core job dimensions. This tendency was also detected by MJDS-R with only one exception - interviews notice job satisfaction as one outcome while MJDS-R divides it into two outcomes (growth satisfaction and general satisfaction).

According to employers’ viewpoint, fresh graduates’ internal motivation seems to be mostly affected by geographical location, job matching, foreign and national workers status and educational and labor market gap. This finding is very similar to MJDS-R findings except for foreign and national workers status which was found to have an effect as per the interviews but didn’t show a significant effect as per MJDS-R.

Job satisfaction is affected by geographical location, job matching and foreign and national workers. This finding is similar to MJDS-R findings except for private and public sector which was included, tested and proved in the initial framework but was not noticed in interviews.

Work effectiveness is affected by job matching and labor status. This finding is totally similar to MJDS-R findings.

Work commitment is affected by job matching, unionization and educational and labor market gap. This finding is very similar to MJDS-R findings except for formal and informal jobs which were included, tested and proved in the initial framework but were not noticed in interviews. Indeed, it was totally expected that employers would not be ready to discuss the issue of informal jobs as they all confirmed that their personnel are all employed as per the Lebanese policies including the Syrian ones as well.

From the analysis of this fourth theme, it was noticed that there is a great similarity among the literature, the quantitative research outcomes and the findings of the interviews. The next theme, elaborates on the fifth branch of the model, which refers to the “Individual Differences”.

6.4.5 Theme 5: Individual Differences

- *Sub-theme 1: Impact of Skill and Knowledge, Growth Need Strength and Context Satisfactions on the Relationship between Core Job Dimensions and Experienced Psychological States and between Experienced Psychological States and Personal/Work Outcomes*

According to the employers' standpoint, skill and knowledge, growth need strength and context satisfactions affect the strength of the relationship between core job dimensions and personal/work outcomes through having an impact on the relationship between core job dimensions and experienced psychological states and between experienced psychological states and personal/work outcomes.

The analysis of the interviews revealed that interviewees reported perceiving higher levels of fresh graduates' motivation, job satisfaction, work effectiveness as well as commitment and higher levels of experienced psychological states as a result of core job dimensions for fresh graduates' high in skill and knowledge, high in growth need strength and high in various context satisfactions.

An illustrative example of skill and knowledge is the one expressed by respondent #1. This employer was totally convinced that knowledge is acquired through experience while skill comes from the knowledge of doing something right. Thus, skill and knowledge correspond to the set of information that one can act on it through experience or interaction with others. From his experience, respondent #1 noticed that the more the willingness to acquire knowledge and practice it, the more the effect of core job dimensions on job satisfaction and other personal/work outcomes. However acquiring knowledge and developing skills are not easy tasks and need the efforts of the organizations. Fresh graduates need to do a task many times in order to become easy done. This means that it is almost impossible for a fresh graduate to come back from a training session and become immediately skilled at a certain task without encouraging him and giving him the needed time to practice.

Regarding fresh graduates' growth need strength, respondent #2 highlighted that fresh graduates have different needs for growth, accomplishment and development and these needs vary from low to high. Usually, this growth need strength appears to be higher at the fresh graduate level than at the experienced employee level. Their young age and big ambition are likely to boost this need. For this, the effect that growth need strength has on the relationship between core job dimensions and personal/work outcomes is perceived to be higher at the fresh graduate level. He revealed:

"Fresh graduates with high growth need strength are most likely to respond in a more positive way to positions that are high on the core job dimensions since these positions offer chances for

progress and development at work while those with low growth need strength are most likely to be little motivated since they don't appreciate the value of these chances". R#2

Concerning context satisfactions, employers were asked about the four types of satisfaction that were studied in the quantitative part of this research: (1) satisfaction with job security (2) satisfaction with pay, (3) satisfaction with co-workers, and (4) satisfaction with supervision. All respondents believed that the relationship between core job dimensions and personal/work outcomes is shaped by the level of each of these context satisfactions. In other words, fresh graduates experiencing high context satisfactions are supposed to be happy and enjoy their job and thus are more likely to experience higher levels of motivation and other personal/work outcomes and higher positive psychological states as a result of a job that is high on the core job dimensions.

- *Sub-theme 2: Impact of Personal Characteristics on the Relationship between Core Job Dimensions and Experienced Psychological States and between Experienced Psychological States and Personal/Work Outcomes*

The analysis of the interviews revealed that interviewees reported perceiving higher levels of fresh graduates' motivation, job satisfaction, work effectiveness as well as commitment and higher levels of experienced psychological states as a result of core job dimensions for young energetic fresh graduates, for bachelor degrees' holders, for public universities' graduates, for those belonging to the lower social class, and for those with culture of low power distance, collectivism, feminism, pragmatism, and indulgence. However, no effect was perceived at the level of gender difference, type of education and language of study.

Furthermore, regarding age and gender, it was remarkable that all employers shared the same viewpoint. Fresh graduates with young ages experience higher levels of fresh graduates' motivation, job satisfaction, work effectiveness as well as commitment and higher levels of experienced psychological states as a result of a job that is high on the core job dimensions. However, older fresh graduates experience lower levels of fresh graduates' personal/work outcomes and lower levels of experienced psychological states as a result of the same core job dimensions. This fact is explained by some young age characteristics such as: (1) not being afraid to question employers, (2) continuously looking for new challenges, (3) wanting a meaningful job (4) asking for attention, feedback and supervision, and (5) valuing teamwork. As

for gender, no differences in the relationships among core job dimensions, experienced psychological states and personal/work outcomes were noticed between men and women fresh graduates. All respondents claimed no indication that either men or women respond better or worse to core job dimensions, psychological states or personal/work outcomes. This fact is mainly due to most organizations' culture which encourages gender diversity and support males and females equally allowing both the same rights to make decisions and to receive promotional offers.

However, fresh graduates' education was subject of debate as not all respondents shared the same opinion regarding its effect on the aforementioned relationships. It was first divided into various parts (level of education (Bachelor, Master or PhD degree), type of education (major of study or specialization), language of education (Arabic, French or English), and type of the institution (private or public)) where each part was discussed apart so as to allow a better understanding of the subject. The first discussion concerned the level of education. Fresh graduates holding bachelors' degrees were deemed to be experiencing higher levels of motivation and other personal/work outcomes and higher positive psychological states as a result of a job that is high on the core job dimensions. Although fresh graduates with higher degrees (Master or PhD degree) provide a better understanding of the work context and have high communication and problem-solving skills, their expectations from work are high as well and for this reason their motivation and satisfaction levels are hard to be boosted in contradiction to lower degrees such as bachelor degrees. Second, concerning the type of education, employers' perceptions were contradicted. Two employers confirmed noticing a higher effect for fresh graduates holding arts and humanities degrees for they believed the choice of such degrees is driven by interest regardless of the future carrier and thus are more able to experience positive psychological states and higher levels of personal/work outcomes. However, the three remaining employers confirmed that they couldn't notice any indication that a specific major of study respond better or worse than another one to core job dimensions, psychological states or personal/work outcomes. For them, it is not the major of study that counts but it is the major reason behind their selection of majors. These reasons include: (1) the fresh graduate's interest in the selected major, (2) family or colleagues pressures, (3) talent and academic abilities, and (4) job opportunities. As for the language of study, all respondents stressed the importance of fresh graduates being trilingual in a country where Arabic, French and English are a must in order to

be efficient at work. Thus, the difference among fresh graduates is not by what is language that has the more effect on the aforementioned relationships but by how much efficient is a fresh graduate in mastering these degrees. Concerning, the type of the academic institution where the fresh graduates continued their studies and got their degrees, there were a total confirmation from all respondents that fresh graduates from the public university have lower academic standards, lower achievement goals, and lower expectations in terms of pay and working environment as they are more likely to belong to the low social class of the country compared to fresh graduates from private universities. Thus, they experience higher levels of personal/work outcomes (except for work effectiveness) and higher levels of experienced psychological states as a result of core job dimensions. Similarly, as all employers confirmed, the majority of fresh graduates belonging to the low social class also showed the same lower academic standards, lower achievement goals, and lower expectations in terms of pay and working environment as they have more likely continued their education at the public university.

Finally, concerning the fresh graduates' culture effect, respondents revealed that fresh graduates with culture of low power distance, collectivism, feminism, pragmatism, or indulgence are more likely to experience higher levels of fresh graduates' motivation, job satisfaction, work effectiveness as well as commitment and higher levels of experienced psychological states as a result of core job dimensions than are those with culture of high power distance, individualism, masculinity, normative and restraint respectively. An illustrative example of power distance effect is the one revealed by respondent #1:

"People with less power distance are those who are used to accept the power of others and thus to take commands without being bothered or asking for autonomy... Fresh graduates with this character are mainly more likely to experience higher levels of personal/work outcomes as a result of a job high on the core job dimensions as for them this exceeds their expectations and what they were raised on". R#1

Besides, respondent #1 highlighted the issue of fresh graduates' collectivism culture. He noted:

"People with collectivism culture are those who are open to friendships and communicate easily with others and thus are more likely to enjoy teamwork and to communicate with their co-workers... Fresh graduates with this character experience higher levels of personal/work outcomes as a result of a job high on the core job dimensions more than individualistic ones for

they know how to feel happy at work and their friendly character will facilitate their communication with others". R#1

Furthermore, respondents were able to differentiate fresh graduates with feminism culture from those with masculinity culture and to notice a difference in their reactions toward jobs high on the core job dimensions. Indeed, fresh graduates with masculinity culture prefer their achievements to be declared in meetings and their success to be rewarded materialistically through bonus, pay increase or others; while those with feminism culture prefers cooperation, are modest and caring. Experiencing both kinds of fresh graduates at work, respondent #3 was able to confirm that fresh graduates with feminism culture are more likely to enjoy higher personal/work outcomes at work and higher positive psychological states as a result of core job dimensions as their cooperative character and modesty enable them to have good communication skills and build a cooperative environment in their workplace.

On the other hand, respondent #4 highlighted the issue of fresh graduates' pragmatism culture versus indulgence. He noted:

"People with pragmatism culture are those who are open for change and believe in nonstop efforts at work and continuous education as a way to prepare for a better future and thus they have an energetic and ambitious character... Fresh graduates with this character also experience higher levels of personal/work outcomes as a result of a job high on the core job dimensions more than indulgence ones for they appreciate the value of education and change in work and for they are not stuck to traditions that shackle their success and are not afraid of change". R#4

Last, indulgence versus restraint culture was discussed. An illustrative example of their effects on the studied relationships is the one revealed by respondent #2:

"Indulgent people are those who work towards satisfying their needs and follow their dreams and thus like to enjoy life and have fun... Fresh graduates with this character are mainly more likely to experience higher levels of personal/work outcomes as a result of a job high on the core job dimensions as they are always ready to work hard, to be efficient and committed in order to satisfy their needs at work in contrast to the restraint ones where their strict social norms regulates their desires". R#2

- *Discussion: Theme 5 (Individual Differences)*

This fifth theme is related to the fifth branch of MJCM-R, which is the “Individual Differences”. According to the literature review, this branch refers to skill and knowledge, context satisfactions, growth need strength, age, gender, education, social class and culture which are highlighted by various researchers (DeSanis & Durst, 1996; Fontinatos-Ventouratos & Cooper, 1998, 2005; Hofstede, 2001; Hofstede et al., 2010; Holloway, 1996; Saner & Eyüpoğlu, 2012) as being influential for the relationships among core job dimensions, experienced psychological states and personal/work outcomes. According to literature, the ability to perceive higher personal/work outcomes and higher positive psychological states as a result of jobs high on the core job dimensions is mainly due to various individual differences. The effect of these individual differences was tested by statistics in the quantitative study of this research and outcomes provided strong statistical support for the role of skill and knowledge, context satisfactions, growth need strength, age, gender, educational level, French versus English language of study, social class, power distance and restraint versus indulgent culture as highly influential on the relationships among core job dimensions, experienced psychological states and personal/work outcomes. As for the type of the educational institution, the major of study, individualism versus collectivism, feminism versus masculinity, and pragmatic versus normative, the outcomes of the study provided very little statistical support for their effect on the aforementioned relationships.

The findings of these interviews are very close to the literature review as well as to the quantitative study, however slight differences exist. It is very remarkable that most of the findings are very close to MJDS-R findings as well. Based on the above interviews, higher levels of fresh graduates’ motivation, job satisfaction, work effectiveness as well as commitment and higher levels of experienced psychological states as a result of core job dimensions were noticed for fresh graduates’ high in skill and knowledge, high in growth need strength and high in various context satisfactions. This finding is similar to literature review, to MJDS-R, and to the outcomes of the quantitative research. Besides, higher levels were perceived as well for young energetic fresh graduates, for bachelor degrees’ holders, for public universities’ graduates, for those belonging to the lower social class, and for those with culture of low power distance, collectivism, feminism, pragmatism, and indulgence. This finding is similar to literature review, to MJDS-R, and to the outcomes of the quantitative research (except for the cultural effect of

collectivism, feminism, pragmatism which the study provided very little statistical support for their effect on the aforementioned relationships). Finally, no effect was perceived at the level of gender difference, type of education and language of study. This finding is mostly similar to the outcomes of the quantitative research (except for gender and French versus English language of study which the study provided strong statistical support for its effect on the aforementioned relationships).

From the analysis of the fifth theme, it was noticed that there is a great similarity among the literature, the initial framework, the quantitative research outcomes and the findings of the interviews. The next theme, elaborates on the sixth branch of the model, which refers to fresh graduates' retention being the final outcome of the study namely the "Labor Market Outcome".

6.4.6 Theme 6: Labor Market Outcome

- *Sub-theme 1: Fresh Graduates' Expectations from Work*

As per employers' perceptions, the majority of fresh graduates deep down inside have huge expectations mainly regarding pay and choice of job or company in addition to appreciation, respect, encouragement, recognition, adequate job responsibilities and flexible working hours.

Respondent #1 summarized their expectations in three words: "Dreaming too big..." R#1

While respondent #2 described fresh graduates as follows:

"They are beginners lacking much of communication skills, most probably with bad English or French language and asking for unrealistic benefits or positions..." R#2

In the same context, respondent #3 stated:

"Though fresh graduates understand bad economic situations and difficult financial conditions for organizations, they don't lose hope easily. They keep on trying and trying until they feel satisfied and their expectations met". R#3

In addition, respondent #4 revealed:

"Organizations invest hard in increasing their fresh graduates' skills and talents so as to set up a channel of success that will drive motivation, satisfaction, work effectiveness and commitment. However, fresh graduates' extensive wishes for more keep them moving on every few years and

weaken the employers' desires to put a lot of effort for building these skills and talents... this has a negative effect on the long-term efficiency and productivity of the organization". R#4

While the majority of the respondents considered fresh graduates as young people lacking lots of job requirements and asking for a lot, respondent #5 had a different opinion. For him some fresh graduates can be the best candidates for some positions and their skills can overcome much of the experienced employees' skills. He revealed:

"It is not the number of years of experience that counts but the individual characteristics and competencies... some fresh graduates' expectations cannot be described as high but could be totally deserved especially for those fresh graduates who had high academic scores, who have held leadership positions in their universities, who have done volunteer work or who have participated in additional activities such as sports or clubs". R#5

He then added:

"These distinguished fresh graduates are considered as lucky in that they deserve starting packages that are relatively high. Besides, through my experience I noticed that they have better chances to be promoted at work faster than their colleagues... and it is an honor for any organization to retain them... this is what I call "the talent retention". R#5

Furthermore and in order to better explain fresh graduates' expectations and attitudes at work, some respondents told stories from their daily experience with fresh graduates.

Respondent #1 told the story of a 25 years' old fresh graduate holding a mechanical engineering degree and who have changed three jobs in a period of two years. He revealed:

"Even though he had the chance to progress in his career, he was not totally satisfied with his position as mechanical coordinator in the customer service department of a car dealer. He felt he can achieve a better performance but never did an effort to do so because he knew in advance that his achievements won't be appreciated. Besides, in two out of three workplaces, he had unfriendly and aggressive supervisors who used to intimidate him. Only one supervisor encouraged him but the pay was not sufficient". R#1

Another story is the one told by respondent #4. He said:

"A 23 years' old fresh graduate got a good position at the accounting department of a famous company. However, she was struggling. All her colleagues were aged and had no more passion

or motivation left. All they were looking for was their wages for they need to live. She expected her job to be agreeable so that she can be motivated to work better. With time, she noticed that she lost the motivation she already had. There were no proper trainings and no good supervision". R#4

- *Sub-theme 2: Increasing Fresh Graduates' Retention*

Employment has become a one way process. Nowadays, it is no more the fresh graduate who needs to get the job but it is the organization which needs to convince fresh graduates to take this offer rather than another one. However, in comparison to earlier years, the labor market is much more competitive, there is huge rivalry and organizations need the best fresh graduates more than fresh graduates need the job which makes employing and retaining fresh graduates a necessity.

Organizations spend millions per year trying to attract the brightest fresh graduates. However, the problem remains in convincing them to stay since many fresh graduates leave for many job offers within a short period of time. Experience shows that one out of four fresh graduates spend less than one year in the same job. Other than core job dimensions, experienced psychological states and labor market conditions, respondents shared some perceptions and point of views which as per their experience should help increase employment retention.

Respondent #1 reported "Today's fresh graduates' employment market is in trouble," he said. "Fresh graduates are going from one job to another trying to find their way to the best job while organizations are spending millions pursuing fresh graduates who leave within the first year." R#1

Respondent #2 tried to configure how can organizations generate well-built fresh graduates retention strategies and ensure fresh graduates won't leave within the first year or even 2 years and declared: "Before joining the work, fresh graduates should be aware of what the daily job is for many fresh graduates who lack experience cannot figure out what does retailing on a daily basis means". R#2

In the same context, respondent #3 emphasized the importance of giving fresh graduates the opportunity to try the job for one to two days which is much more efficient than fresh graduates leaving the job after training them for a long time.

Respondent #4 considered frank and honest discussions between employers and fresh graduates as basics so as fresh graduates can share their concerns directly and employers don't get surprised by fresh graduates leaving the work.

Respondent #5 declared: "fresh graduates love new fields and are knowledgeable of new trends and mostly technology issues, thus giving them the freedom to exercise what they like is very important and help increasing their stay at work ... trusting them along with offering them good packages and allowing them career progression opportunities ranked high as well as major factors for fresh graduates' retention". R#5

Respondent #1 also configured the importance of rotating fresh graduates within the various departments of the company. "Rotating fresh graduates allows fresh graduates to show off their talents over various areas and to understand how each department works and how departments link to each other in an organization. This helps fresh graduates to discover what they like inside the organization". R#1

All respondents emphasized the importance of rewarding fresh graduates who decides to stay. Besides employers should make sure that no new entrants are parachuted in the organization at the same level of the fresh graduate, with less or same experience and pay them more money. In the same context, respondent #3 declared: "Sometimes fresh graduates insist that money is not very important for their decision to stay. This is mostly true when they still didn't start working. However, when they realize that life costs high and see their colleagues getting paid more, they are more probably going to change their mind". R#3

- *Discussion: Theme 6 (Labor Market Outcome)*

Fresh graduates' retention being the labor market outcome is the last branch of MJCM-R. According to the literature review, this branch refers to the retention of fresh graduates which has been identified as being a basic reason behind the success of an organization and is affected by various motivational factors such as pay, appreciation, career achievements, job characteristics and others (Aguenza & Som, 2012). The community life has proved to have an effect as well (Mitchell et al., 2001). Though many researchers and practitioners emphasize the importance of retaining fresh graduates in challenging labor markets, research related to the relations among fresh graduates, core job dimensions, labor market conditions and retention has failed to keep up and given the importance of this issue, a review of the extant literature on fresh graduates'

expectations and competencies was evident so as to understand how fresh graduates' retention can be affected by various practices, conditions and psychological states. For a better assessment of these relationships, MJCM-R was then created and tested. According to MJCM-R, fresh graduates' retention is the direct result of high levels of motivation, general and growth satisfaction, work effectiveness and commitment. This link was proved in statistics as aforementioned in the quantitative research part of this study.

According to the interviews' findings, respondents consider various steps to retain their fresh graduates. These steps being a mixture of various core job dimensions and labor market conditions along with individual differences aim to enhance the personal/work outcomes.

These findings are in line with the findings of the quantitative study, adds to the literature review and are very close to MJDS-R findings as well. Indeed, employers stressed the importance of core job dimensions and labor market conditions along with individual differences as an incentive to increase fresh graduates' retention through the development of work motivation, job satisfaction, work effectiveness and commitment.

The next theme, elaborates on the employers' perspectives within the Lebanese context.

6.4.7 Theme 7: Perspectives within the Lebanese Context

- *Sub-theme 1: Visualization of Core Job Dimensions in the Lebanese Organizations*

According to employers' perception, most jobs offered to fresh graduates in Lebanon lack skill variety opportunities due to the fact that most of them have no experience. Though skill variety is one of the most important determinants of job satisfaction and work productivity, employers prefer to hire experienced employees to handle jobs requiring skill variety for they trust more their abilities to use different valued skills and talents. Besides, most of the medium and small Lebanese companies don't have human resource departments and fail to provide clear job description which results in a lack of task identity where most employees including fresh graduates end up doing a part of the job rather than completing the job from beginning to end. Same goes to task importance and to decision making and autonomy. Most employers feel afraid to allow fresh graduates to handle important tasks, to take decisions or to determine how the work will be carried out. However, almost all fresh graduates' jobs are rich with training sessions so as to make them more prepared to handle bigger responsibilities as soon as they are ready. Feedback is available in most of the times so as to help fresh graduates to correct their mistakes

and learn from them. Work load differs from one job to another. Though employers understand the importance of offering balanced work load, they find themselves unable to maintain this strategy in most of the cases due to the difficult economic situation urging them to hire only few people and expecting them to accomplish different tasks. Although the high living costs, fresh graduates are offered low wages in Lebanon with few chances of promotion. Low wages are due to various reasons: 1) lack of experience, 2) lack of job opportunities, 3) bad economic situation, and 4) weak labor unions. Few chances of promotion are due to the saturation at work where all posts are being handled by employees who have no opportunities to move to other jobs. Physical effort is required for various fresh graduates' jobs for they are young and able to accomplish tasks which require physical effort such as door to door marketing, on site engineering tasks, night shifts and others. These tasks are the most available for fresh graduates. Technology use remains a sensitive issue where though all employers admit to understand its importance in daily work operations; its use is mostly limited for work and banned for social media. Lebanese people are known for their good social relationships in society and work is not different. Thus, almost all jobs in Lebanon offer a good social environment where employees including fresh graduates offer the opportunity to make friends, to build good relationships with colleagues, clients and even employers. Many events are handled for this reason. Finally, working conditions are critical. Not all companies respect the law with regards to working hours, sick leave, working women rights and especially maternity leave and vacations, thus showing an urgent necessity to reinforce the law in Lebanon.

- *Sub-theme 2: Evaluation of Noticed Experienced Psychological States in the Lebanese Context*

Almost all respondents confirmed the fact that though most employers understand the importance of a fresh graduate positive psychological state, only few in Lebanon work on creating a good work environment and a clear job description to stimulate these feelings so as to increase personal/work outcomes. Indeed, most employers in Lebanon continue the practice of classical management concepts. Thus, they pay little attention to work design. The result is most obviously a fresh graduate experiencing a near to the ground meaningfulness of the work, a low self-esteem and a little self-confidence; his or her responsibility for the work is reduced to the minimum and his or her knowledge of results is not on hand for most of the times. However, for

the majority of fresh graduates, these feelings are not dominant due to the fact that they are mostly young and ambitious by nature thus not easily deceived.

Respondent #1 argued that the classical management concepts applied in Lebanon can no more continue.

“Employers in Lebanon should give more attention to fresh graduates’ job re-designing which should be prepared in collaboration with them taking into consideration their career needs and aspirations”. R#1

Respondent #2 was very self-confident while discussing this issue.

“Most job models in Lebanon do not take into consideration fresh graduates’ needs (e.g., achievement needs, recognition needs, remuneration needs, etc.) which end up by creating feelings of distress, low self-confidence, low self-esteem, little meaningfulness of the work, dissatisfaction, bitterness, and alienation, which is most probably translated into low work effectiveness and low fresh graduates’ retention”. R#2

In addition, respondent #3 revealed:

“Fresh graduates in general are very sensitive to the characteristics of the job they handle due to the fact that this most probably represents their first work experience. In Lebanon, most of them experience more negative than positive psychological states due to their high sensitivity toward very high expectations that cannot be met due to severe economic difficulties”.

Findings from the remaining respondents also confirmed the aforementioned fresh graduates’ unbalanced psychological states stressing the difficulties employers face to create positive psychological states especially that fresh graduates’ expectations are tremendously high and much higher than what the Lebanese labor market can offer.

Thus, although most employers in Lebanon seemed to value the importance of positive psychological states for the development of fresh graduates’ personal/work outcomes, they had somewhat big difficulties to achieve this goal. To them, the bad economic situation seemed to be the key reason behind this failure. Besides, the obligation to fulfill management agenda at the expense of fresh graduates’ needs and aspirations is another reason. Many fresh graduates as a result feel that their efforts and participations are often left out and that their opinions are not appreciated. In other words, based on the results of the interviews, fresh graduates’ psychological

states in Lebanon are not constantly positive and the job design set by the employers appeared to be solely set by employers driven by business needs alone without taking into consideration fresh graduates' needs thus ending up with weak personal/work outcomes.

- *Sub-theme 3: Lebanese Fresh Graduates' Current Personal/Work Outcomes*

As explained by employers, Lebanese fresh graduates as a result of their job characteristics, ambitions, expectations and needs experience different psychological states which vary from negative to positive. These psychological states in their turn affect the level of motivation, job satisfaction, work effectiveness and commitment. The Lebanese fresh graduates experiencing positive psychological states are the most to enjoy high levels of personal/work outcomes and consequently are the most to be retained. However, from their experience, employers notice that although many fresh graduates are working in hard conditions, being low remunerated, having their efforts not recognized and having low chances for personal development and despite their extremely low positive psychological states as a result of these hard conditions and their low motivation, satisfaction and commitment level, retention level is kept to the minimum due to the fact that it is very hard to find other alternatives. Thus, a fresh graduate prefers staying in a job where he or she is neither motivated nor satisfied rather than being unemployed. Political instability, difficult economic situation and tough schedules are often the excuses of employers to explain their negligence for fresh graduates' expectations and needs though they show a total understanding of the importance of having motivated, satisfied, efficient and committed employees whether they are fresh graduates or experienced ones.

In this context, respondent #1 declared:

"Though I understand how much it is important for a fresh graduate to be motivated, satisfied, committed and efficient, I feel handless to secure good core job dimensions and to help provoke positive psychological states due to various barriers... the government fails to provide even low protection levels for local production which causes complex competitions with foreign products in addition to the low local demand due to the low purchasing power... this creates a very complex environment where it is very difficult to continue with insufficient funds to procure a near future continuity... and fresh graduates are frequently the most affected". R#1

In the same context, respondent #3 showed a little bit of more optimism and revealed:

“I have no problem with fresh graduates’ retention although the difficult conditions for the Lebanese economy and the difficult political situation that Lebanon is passing through... I know how to communicate with them... I explain the situation to them and most of the times they are ready to understand... in fact they have no other chances... however I can still notice high motivation and satisfaction levels and high commitment and efficiency at work as well...” R #3

However, respondent #4 agreed on the fact that most fresh graduates in Lebanon are weakly motivated and satisfied due to low positive psychological states. However their efficiency at work is acceptable and their commitment level is slightly above the average.

While respondent #5 stressed the importance of creating a bond between employers and fresh graduates which always has a positive effect on personal/work outcomes. He added:

“Knowing that the potential for building a link between fresh graduates and employers is greater when fresh graduates feel that the organization is listening carefully to their motivational needs and appreciating their knowledge and skills to help design a job, I always do my best to build such a link...the result is a fresh graduate who experiences higher levels of job satisfaction and who is less likely to leave a company”. R#5

Indeed, this latter standpoint confirms Frederick Herzberg theory which states that as long as the motivational needs of employees are understood, personal/work outcomes are more likely to increase.

- *Sub-theme 4: Review of Current Labor Market Conditions in Lebanon*

The employers shared stories of some fresh graduates who have graduated from various Lebanese universities with different specializations and who tried hard to get jobs within their specializations and ended up working as waiters or door to door salespersons to cover their life expenses. Some other fresh graduates chose forcibly to migrate to foreign countries if they found available opportunities which secure a decent life. Alternatively, employers took advantage from the availability of displaced fresh graduates who are ready to take any available opportunity and to accept low salaries. Respondent #1 said:

“When they were students, most fresh graduates started to work in restaurants or cafes to get pay while continuing their studies. Once graduated, they continued working at the same place for several years for they did not find other alternatives”. R#1

In the same context, respondent #2 noted:

“Many fresh graduates holding university degrees accept to take any work opportunity to secure their life no matter whether this meets their expectations or not”. R#2

According to respondent #3, there is a lack of communication between ministries and universities. He revealed:

“This situation is extremely disadvantageous to the fresh graduates as only few are being able to find jobs that meet their expectations... most fresh graduates earn business, law or literature degrees which are specializations that are no more in demand in the labor market of today due to the saturation of the market... however, technical degrees are needed in various specializations such as mechanics, electricity etc”. R#3

Respondent #5 explained the current the situation as follow:

“The Lebanese civil war has transformed the constituents of the Lebanese economy from being majorly dependent on productive sectors to real estates, financial markets (banks and other financial institutions) and additional similar sectors which do not generate enough work opportunities. Nowadays, productive sectors which can provide various work positions are being abandoned”. R#5

Consequently, respondent #4 noted the necessity for a serious communication between ministries and educational representatives allowing the government to set policies that aim to provide a balance between supply (education) and demand (labor market).

At last, respondent #1 once again highlighted the government lack of interest in setting humanitarian policies to deal with the problems caused by Syrians displaced forcibly from their country, consequently leaving Lebanese employees and fresh graduates more particularly to face severe foreign competition especially that displaced Syrian employees frequently are specialized in mechanics, electricity and other technical specializations which are in high demand in the Lebanese labor market and are ready to accept low salaries.

Finally, even though the Lebanese government has set labor laws which protect the workers' rights since 1964, regulations were hardly ever imposed, and the Lebanese working conditions are difficult. Although labor unions constantly prepare strikes to support labor complains pay in Lebanon remains quite low.

- *Sub-theme 5: Overview of the Individual Differences in the Lebanese Cultural Context*

Interviews with employers helped to create a better understanding of the fresh graduates' cultural context in Lebanon and thus to better identify the individual differences between them. According to employers' description, the Lebanese people are known for being friendly and generous. They like to greet warmly through shaking hands, kissing cheeks three times and saying "Hello". They like to ask about each other families and to invite each other and insist on paying the bills. They like to talk about politics a lot whether at work, in family reunions, gatherings and others. Affection between family members and friends is common in public while affection between couples is not commonly displayed in public. Anger is more acceptable in public as it is very common especially as a result of the civil war and the severe stress that the Lebanese suffer from. These characteristics mainly explain the fact that most of the Lebanese fresh graduates are strongly influenced by the norms of the collectivist society in which they were raised as compared to more individualistic societies found in the United States.

However, though Lebanon is a small country, it is known for having various cultures and traditions for it has many religions where the most popular being Christian and Muslim. Christians have historical ties with the western world and its unique openness while Muslims have historical ties with the Arab world. Verbal communications differ depending on to which region they belong. Ceremonies vary depending on to which religion they follow. Managerial styles as well depend on from which region the managers come and what level of education they have. Though Lebanon is considered on the top of the Arab countries in terms of education, the level of education of employers varies from low to high as most Lebanese organizations are family businesses with small to medium sizes. In family businesses, most of the employers prefer to have the final say in work decisions and don't accept others' opinion as they think this might threaten their positions. Employees' suggestions might be considered but never adopted and this is mainly due to the fact that upper level managers feel afraid if employees' ideas get noticed because this might oppose their ideas and might oblige them to promote the employee. However, in multinational enterprises which are few in Lebanon, feedback is very common and decision making is strengthened by the communication between employers and employees. Employees are sometimes given the power to take the decisions by themselves. In general, the Lebanese fresh graduates have the same equal rights and opportunities in job, education and skill and knowledge regardless of their gender as the Lebanese regulations and laws state. However, in

some specific areas, only few women are allowed to study and work because of strict norms and traditions. There are still some areas in Lebanon where women are considered as wife keepers and are not allowed to take decisions even at home and men are seen as more superior. In this context of work, women have to work harder than men to be respected and to have the chance to be promoted and thus should have higher growth need strength. In this context, it is important to mention that women in Lebanon are rarely found in political positions and the issue of quotas' insertions into the laws to preserve the women's rights in politics is still under discussion. As for social class, the Lebanese economical situation ranges from low to high. Differences in spending, educational level, life style, hobbies, thinking, attitudes and others between the various social classes are noticed. Fresh graduates from the low social class are mainly graduated from the Lebanese unique public university for its very low and affordable costs; however middle and high social class fresh graduates are mainly graduated from private universities inside Lebanon or abroad mainly in Europe or the United States. However, social class is not just determined by money but by the level of education, the job, the family history, the hometown and others. Knowing that Lebanon is the number one Middle Eastern country in religious diversity, fresh graduates' beliefs affect their chances to get hired for positions at the public sector as positions are divided among all existing religions and proportionally to their sizes. This happens in the private sector as well, for employers most of the time prefer to hire employees of the same religion or the same region but not as frequent as the public sector. When fresh graduates are asked from where they come from, this is usually a hidden question of religious beliefs. Gender, social class and religion are very sensitive issues in Lebanon. Employers and employees including fresh graduates avoid discussing such issues at work for this may cause problems at the workplace. When fresh graduates have connections and good relationships at work, they have the chance to achieve better in a short period of time. Context satisfactions are very important to fresh graduates as well for their satisfaction with pay is one of their most important motivators especially in the bad Lebanese economic situation. Besides, other motivators are promotion, closer relationships with colleagues or supervisors, being afraid of failing and thus disappointing the family, or job security if the situation of the job is not much stable.

- *Sub-theme 6: Perceptions of the Most Needed steps to increase the stay of Fresh Graduates in Lebanon*

Though their high expectations, fresh graduates are the fresh and sparkling spirit of any organization. Regardless of the size of the organization or the character of the fresh graduate, they are what make organizations flourish. Practically, it is acknowledged that loosing fresh graduates can diminish the knowledge base in any organization and reduce efficient productivity and morale. As a way to avoid this loss, the best solution remains in retaining these young generations or at least increasing their stay for the longest period possible. To do so, employers suggest multiple steps that should be taken into consideration while dealing with fresh graduates in Lebanon:

First of all, it is important to recognize fresh graduates' accomplishments.

An illustrative example is respondent #1 declaration:

"Employers have to recognize the accomplishments of their fresh graduates. Individuals by nature are happy when they feel their efforts are appreciated". R#1

In addition, respondent#2 highlighted:

"Appreciation is not always supposed to be monetary. It could be a thank you letter, a bonus or anything else". R#2

And respondent #5 completed the same idea as well and stated:

"One of the best ways to increase the stay of fresh graduates is to praise them for completing performance goals." R#5

Second, employers should know how to select fresh graduates when hiring.

In this context, respondent #3 revealed:

"What is more important than retaining fresh graduates is to make sure to have the right ones..."
R#3

Besides, respondent #1 stressed the importance of being very cautious when interviewing fresh graduates so as to make sure they have the right skills and to make certain they fit in well with the organization's culture, employers and colleagues". R#1

Third, the offered salary should be competitive.

This affirmation was confirmed by respondent #1 who declared that if an organization wishes to hire the best talented fresh graduates, then it has to offer competitive packages. As well, respondent #3 stated:

“Nowadays, to decide whether to take a job or not, fresh graduates are interested to know more about the wages offered. Knowing that life expenses are high, fresh graduates look for packages that have complete offers regarding health insurance and retirement benefits”. R#3

Fourth, a comfortable work environment is a must.

Regarding comfortable work environment, almost all respondents emphasized its importance in increasing fresh graduates' stay at an organization. Respondent #1 revealed:

“When fresh graduates are looking for a job and have the opportunity to choose among various opportunities, they look certainly for comfortable work”. R#1

To continue with the same idea, respondent #2 highlighted the fact that almost all jobs require long hours of work per day. Thus, for work to be accomplished in the easiest way, comfort is a must.

Indeed, fresh graduates need a feeling of safety in addition to a comfortable work. For this, organizations have to offer suitable facilities, good lightning and a refreshing temperature, as reported respondent #3.

In addition respondent #4 argued that when offices are designed in a way to provide a comfortable environment, the happiness of fresh graduates is boosted. In this context, it is important to emphasize the organization's culture which can give a boost as well through increasing the engagement and motivation level of the fresh graduates and through finding ways to communicate.

Fifth, listening to fresh graduates is essential.

Listening to others has always been one of the most effective ways of increasing mutual understandings for others' needs and expectations. Same goes to fresh graduates, as declared respondent #2. Besides, as per respondent #3 viewpoint, it is essential that fresh graduates experience the feeling of being part of the business or part of a certain project. This cannot be

accomplished but through communication and listening to their ideas. Moreover, sometimes through giving attention for fresh graduates' personal lives through asking about their families and participating in their life occasions such as weddings or funerals, their feeling of belonging to the organization increases and more likely their stay too.

Sixth, training sessions should be granted.

The majority of the respondents emphasized the importance of providing training sessions for fresh graduates for its extreme importance in enhancing their skills and knowledge.

Besides they all highlighted the fact that experienced employees would like to work with fresh graduates who know what they do. Thus, it is a must to train fresh graduates so as not to lose the workload balance and the happy co-worker atmosphere.

Seventh, continuous evaluations are a major assist.

Continuous evaluations for employees in general and fresh graduates in particular is a must allowing employers to assess the work of every worker and at the same time enabling workers to know how well they are contributing to the achievement of the organization's goal, as almost all respondents declared. In addition, evaluations' results should be discussed in private as these are conversations aiming to lift up and motivate fresh graduates. Thus, it is improper to punish or dispirit fresh graduates' attitudes or achievements in front of others in an embarrassing way. Preserving others' dignity and respect remains one of the most important features of a modernized organization's culture.

- *Discussion: Theme 7 (Perspectives within the Lebanese Context)*

This final theme discussed the employers' perspectives regarding fresh graduates' retention in the Lebanese context. According to the interviews' findings, respondents suggested various steps for fresh graduates' retention. These steps being a mixture of various core job dimensions and labor market conditions along with individual differences aim to boost the level of motivation, satisfaction, effectiveness and commitment at work. Though employers discussed the importance of multiple core job dimensions and labor market conditions, they considered that priorities might differ from one country to another and from one culture to another and thus summarized the most needed steps in the Lebanese context in seven: (1) recognizing fresh graduates' accomplishments, (2) being selective when hiring, (3) offering adequate salaries and good

packages, (4) providing a comfortable work environment, (5) listening to their needs and expectations, (6) granting training sessions, and (7) processing continuous evaluations. This variety of steps considered by employers as being the most essential for retaining their fresh graduates meet with most of the fresh graduates' expectations as well according to employers' standpoints except for adequate job responsibilities which match their competencies and flexible working hours. Although employers understand fresh graduates' desires for being in the right place where they fit, they didn't mention this issue among the most needed steps to retain them as they consider that this remains an internal organizational decision based on the work needs. As for flexible work hours, this mainly depends on the type of the work and is available mainly for part time job offers only.

Finally, the findings of these interviews are in line with the findings of the quantitative study and are considered as a contribution to knowledge (to literature and theory). Employers were able to perceive the importance of core job dimensions and labor market conditions along with individual differences as a stimulus to maximize fresh graduates' stay at their organizations through the development of multiple personal/work outcomes which confirms the quantitative research part of this study, confirms MJDS-R and adds to the literature review.

6.5 Chapter Summary

This chapter explored how employers perceive the role of core job dimensions, labor market conditions and individual differences for the development of fresh graduates' personal/work outcomes and retention in the labor market so as to enable a better understanding of the results received from the quantitative research and complement the previous findings. It first described the template analysis technique applied for data analysis. Second it illustrated and analyzed the findings of the research from the empirical data (five semi-structured interviews with two pilot interviews) divided into seven themes. The first theme illustrated and analyzed the core job dimensions being the first branch of the initial framework of this research. The second theme concerned the experienced psychological states which represents the second branch. The third theme was about the third branch of the initial framework and described and analyzed personal/work outcomes and the fourth theme was about the fourth branch and concerned labor market conditions. The fifth theme representing the fifth branch evaluated the effect of the individual differences on the various relations illustrated in the framework. The sixth theme

being the labor market outcome (fresh graduates' retention) examined and analyzed the sixth branch of the same framework. And finally the seventh theme discussed the employers' perspectives regarding the various branches of the initial framework within the Lebanese context. In doing so, an interpretation of the findings was conducted along with a comparison with the outcomes of the quantitative study as well as with the existing literature.



Chapter 7

Conclusions

7.1 Introduction

This chapter provides a summary of this study's main outcomes and illustrates the final framework as derived from the findings of both quantitative and qualitative research; presents the thesis' contribution to literature, theory, methodology, and practice along with concluding remarks and recommendations; explains the limitations of the study and the suggestions for additional research studies; and finally presents some reflections on this doctoral journey.

7.2 Summary of the Main Outcomes and Final Framework Development

Based on the outcomes of the critical narrative literature review along with findings of the gathered primary data from the quantitative and qualitative research, the initial framework for fresh graduates' retention was refined and finalized.

- ***Research Objective 1 (ROI):***

This study first examined the existing literature in relation to the theories related to the retention of fresh graduates so as to explore the extent knowledge related to fresh graduates, identify gaps and understand the context in which the framework was to be developed (answers RO1 and partly answers RQ1). More particularly, many theories have discussed the concept of motivation and job satisfaction as an important predictor of employee retention. These theories were mainly classified into need based theories, cognitive process based theories, behavioral theories and the job characteristics theory. Besides, it was noticed that factors that contribute to fresh graduates' satisfaction and retention in the labor market are not only factors related specifically to the job itself and the fresh graduate's personal needs, but also factors related directly to the job matching and to the labor market itself (Cassar, 2010; Serhan and Tsangari, 2015). Based on this, it was important to highlight the importance of job matching and labor market theories which contribute to the issue of fresh graduates' satisfaction and retention. Together, these theories represented the base of all work on motivation, job satisfaction and employment retention. This literature examination created a better understanding of the variables deemed to affect fresh graduates' retention and to incorporate them in the framework to be developed.

- ***Research Objective 2 (RO2):***

Second, according to the outcomes of the critical narrative review, this research explored the core job dimensions, the psychological states, the labor market conditions and the resulting personal/work outcomes that are deemed to influence fresh graduates' retention (answers RO2 and partly answers RQ1). In particular, notwithstanding the aforementioned theories concerning motivation, job satisfaction, labor market and their relation to retention, this study explored and examined a significant body of literature showing the various and sometimes contradictory point of views concerning the relationship of various factors and retention. The analysis allowed the categorization of the factors affecting fresh graduates' retention into five categories:

1. Core Job Dimensions being skill variety, task significance, task identity, autonomy, feedback from the job, participation, work load, working conditions, physical effort, technology use, promotion and social environment of the job;
2. Experienced Psychological States being experienced meaningfulness of the work, experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities, self-esteem and prestige inside outside;
3. Labor Market Conditions being geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap;
4. Individual Differences being knowledge and skill, growth need strength, context satisfactions (satisfaction with job security, with compensation, with co-workers and supervision), and personal characteristics (gender, education, marital status, age, social class and culture);
5. Personal/Work Outcomes being high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high involvement.

Based on the critical narrative review, there is a significant and positive relationship between core job dimensions and personal/work outcomes, between core job dimensions and critical psychological states, between critical psychological states and personal/work outcomes and between labor market conditions and personal/work outcomes. In addition, individual differences have a significant positive correlation with core job dimensions, critical psychological states and personal/work outcomes. Finally, personal/work outcomes affect fresh graduates' retention.

These relationships as extracted from the critical narrative review were subject of empirical examination in this research study and are discussed in detail in the research objectives three and four (RO3 + RO4) parts detailed below.

- ***Research Objective 3 (RO3):***

Third, this study investigated the effect of individual differences in moderating the relationship between core job dimensions and the affective and behavioral responses of fresh graduates (answers RO3 and partly answers RQ2) i.e. to test whether the individual differences affect the strength of the relation between core job dimensions and experienced psychological states and between experienced psychological states and personal/work outcomes. The individual differences being skill and knowledge, context satisfactions, growth need strength and personal characteristics moderate the relationships among core job dimensions, critical psychological states and personal/work outcomes. More particularly, the relation between the core job dimensions and their corresponding experienced psychological states and between the five experienced psychological states and the personal/work outcomes' subscales is stronger for high than for low (1) skill & knowledge fresh graduates, (2) context satisfactions fresh graduates, and (3) growth need strength fresh graduates with significant differences between the correlation coefficients of each low and high group. In other words, fresh graduates with high skill & knowledge, high context satisfactions or high growth need strength are better able to experience the psychological states of a well-designed job and are more likely to react positively to that experience. Besides, the relationship between the core job dimensions and their corresponding psychological states and between the five experienced psychological states and the personal/work outcomes' subscales is stronger (1) for young fresh graduates than for older ones, (2) for females than for males, (3) for fresh graduates with low (Bachelor Degree) than with high (PhD Degree) educational level, (4) for French speaking fresh graduates than for English speaking (4) for fresh graduates of lower social class than of upper social class, (5) for fresh graduates with high power distance culture than with low power distance culture, and (6) for fresh graduates with restraint culture than with indulgent culture, with significant differences between the correlation coefficients of the components or subgroups of each of these personal characteristics. In other words, fresh graduates of different ages, different gender, different education levels, different languages of study, different social classes, and different cultural backgrounds are able to experience the psychological states of a well-designed job in a

significantly different way and are more likely to react differently to that experience. Thus, empirical investigation provide strong statistical support for the moderating effect of skill and knowledge, context satisfactions, growth need strength, age, gender, educational level, French versus English language of study, social class, power distance and restraint versus indulgent culture on the relationships among core job dimensions, experienced psychological states and personal/work outcomes.

- ***Research Objective 4 (RO4):***

Fourth, this study modified the Job Diagnostic Survey (JDS) through synthesizing further core job dimensions, psychological states and individual differences and integrating labor market conditions to evaluate the influence of personal/work outcomes on labor market outcomes and by this answers RO4 and partly answers RQ2. The revised version of JDS was then customized by (1) adding questions in relation to participation, work load, working conditions, physical effort, technology use, promotion and social environment, (2) adding questions in relation to the additional critical psychological states which are self-confidence and prestige inside outside, (3) inserting questions in relation to the additional personal/work outcomes that is “high commitment with work”, (4) inserting statements in relation to labor market conditions (geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs, educational and labor market gap), (5) extending statements related to retention of fresh graduates and finally (6) integrating additional moderating variables mainly related to individual differences, such as age, gender, education, social rank and culture. All the above modifications were incorporated in the newly developed JDS, hereby called the “Modified Job Diagnostic Survey – for Retention” (MJDS-R) (refer to Appendix A).

- ***Research Objective 5 (RO5):***

Fifth, this study tested the internal consistency of the newly developed instrument as well as its content and construct validity. Besides the analysis from the quantitative and qualitative research were carried out thus answers RO5 and partly answers RQ2 by conducting an empirical exploration and finalizing the proposed conceptual framework for fresh graduates’ retention. The final framework is graphically illustrated in figure 7.1 below:

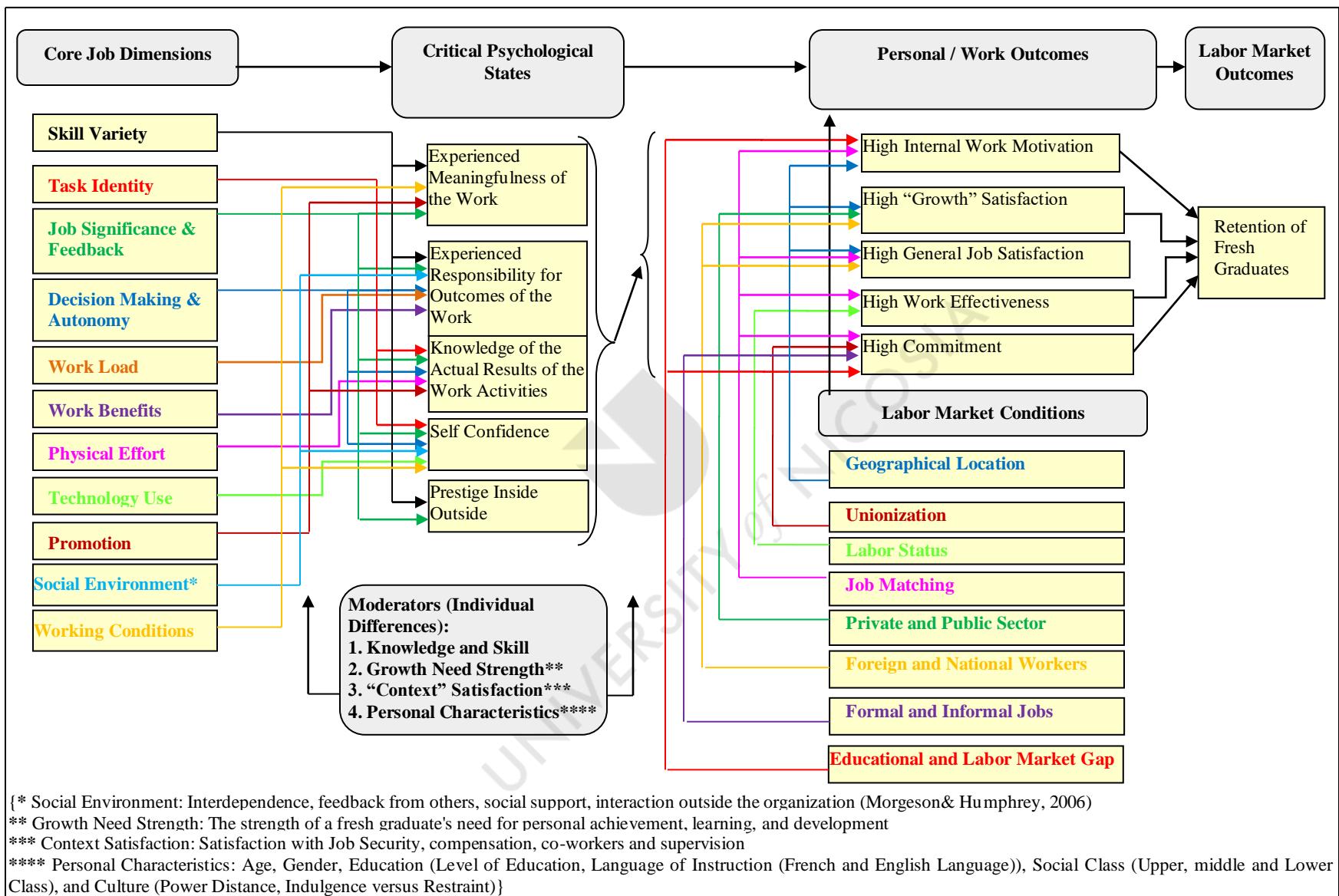


Figure 7.1: Final Version of MJCM-R

As per the final framework illustrated above, and according to the outcomes of the quantitative and qualitative research, the first part illustrates the finalized 11 core job dimensions that were deemed to affect experienced psychological states and personal/work outcomes. These core job dimensions are as follows: skill variety, task identity, job significance and feedback, decision making and autonomy, work load, work benefits, physical effort, technology use, promotion, social environment and working conditions. In particular, skill variety affects experienced meaningfulness of the work, experienced responsibility for outcomes of the work and prestige inside outside. Task identity affects knowledge of the actual results of the work activities and self-confidence. Job significance and feedback affects all the five experienced psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities, self-confidence and prestige inside outside). Decision making and autonomy affects experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities and self-confidence. Work load affects experienced responsibility for outcomes of the work. Work benefits affect experienced responsibility for outcomes of the work. Physical effort affects knowledge of the actual results of the work activities. Technology use affects self-confidence. Promotion affects experienced meaningfulness of the work and knowledge of the actual results of the work activities. Social environment affects experienced responsibility for outcomes of the work and self-confidence. Working conditions affect experienced meaningfulness of the work and self-confidence. The second part of the final framework is the experienced psychological states which are: experienced meaningfulness of the work, experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities, self-confidence and prestige inside outside. These experienced psychological states are the result of various core job dimensions and affects personal/work outcomes. Indeed, when all the five experienced psychological states are present, personal/work outcomes maximize, meaning that a fresh graduate who experiences all the five psychological states (experienced meaningfulness of the work, experienced responsibility for outcomes of the work, knowledge of the actual results of the work activities, self-confidence and prestige inside outside) is more able to show high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high commitment. Besides, there is a substantial support for the proposition that the psychological states mediate between the core job dimensions and the personal/work outcomes' subscales i.e. psychological

states explain why there is a relationship between core job dimensions and personal/work outcomes. Personal/work outcomes are the third part of the final framework and are five: high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high commitment. They are directly affected by experienced psychological states as already mentioned and labor market conditions. Indeed, labor market conditions are the fourth part of the final framework and are eight: geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap. In the presence of labor market conditions, personal/work outcomes maximize, meaning that a fresh graduate who enjoys positive labor market conditions (e.g. a fresh graduate who enjoys a strong labor union, whose job is far from home allowing discovering new areas and new cultures and who is concerned for the job offers rather than the type or the status of the job or the nationality of the colleagues) is more able to experience high internal work motivation, high growth satisfaction, high general job satisfaction, high work effectiveness and high commitment. In particular, geographical location affects high internal work motivation, high growth satisfaction and high general job satisfaction. Unionization affects high commitment. Labor status affects high work effectiveness. Job matching affects high internal work motivation, high general job satisfaction, high work effectiveness and high commitment. Private and public sector affect high growth satisfaction. Foreign and national workers affect high growth satisfaction and high general job satisfaction. Formal and informal jobs affect high commitment. Educational and labor market gap affect high internal work motivation and high commitment. The fifth part of the final framework illustrates individual differences which were finalized as follows: skill and knowledge, context satisfactions, growth need strength and personal characteristics. These individual differences moderate the relationships among core job dimensions, critical psychological states and personal/work outcomes. More particularly, individual differences provide strong statistical support for the role of skill and knowledge, context satisfactions, growth need strength, age, gender, educational level, French versus English language of study, social class, power distance and restraint versus indulgent culture as highly influential on the relationships among core job dimensions, experienced psychological states and personal/work outcomes. In other words, it is expected that fresh graduates with high Skill & Knowledge, high Context Satisfactions, high Growth Need Strength are better able to experience the psychological states of a well designed job and are

more likely to react positively to that experience and fresh graduates of different ages, different gender, different levels of education, different subjects of study, different languages of instruction, different educational institutions' types, different social classes and different cultural backgrounds are able to experience the psychological states of a well designed job in a significantly different way and are more likely to react differently to that experience. Finally, the sixth part of the final framework is the labor market outcome (retention of fresh graduates) which is affected by the personal/work outcomes. In particular, high internal work motivation, high growth satisfaction, high work effectiveness and high commitment affect fresh graduates' retention.

- ***Research Objective 6 (RO6):***

Finally, based on the outcomes of this research study, research objective six (RO6), that is, "To develop an understanding of the various practices and conditions affecting the fresh graduates' retention in the cultural context of Lebanon, and use these results to provide practical recommendations for the Lebanese government", was successfully achieved by offering suggestions for practitioners being the Lebanese employers, educational institutions' representatives and legal authorities assisting in setting effective employment retention strategies. In sum, knowing the importance of the psychological state of fresh graduates in guiding their future plans, effective employment retention strategies should aim to create and boost fresh graduates' positive psychological states as a first and primordial step toward retaining them. To do so, employers in order to retain their best fresh graduates should offer jobs rich on the core job dimensions, strengthen the technical and communication skills of their fresh graduates, create favorable working environments, improve remunerations, ensure job matching, understand the importance of unions and guarantee equal employment rights, in addition to applying the Lebanese labor laws so as to create affective personal and work outcomes. In the same context, Lebanese authorities should amend the Lebanese labor laws, support and finance employment in the most productive sectors and especially in the insurance, information technology, technical services and finance sectors where the highest demand for fresh graduates exist, listen to the labor unions' demands and work on enforcing the application of the extent laws. Besides, in collaboration with the academic institutions' representatives, legal authorities should work on reconsidering the already set curriculum of studies so as to take into consideration the labor market requirements and by this increasing the chance for a fresh

graduate to enter the labor market, allowing easier fresh graduate market integration and boosting growth opportunities at work; thus, increasing fresh graduates' stay at the Lebanese labor market.

More particularly, Legal authorities should enforce the application of the extent Lebanese labor laws especially those related to foreigners' employment rights in Lebanon. This means that the Lebanese authorities, as per the law, should not neglect the problem of Syrian employees replacing the Lebanese ones with much lower salaries where organizations prefer to hire them in informal jobs with no insurance and no transportation benefits or family allowances, knowing that this act is considered against the law. It should review and amend the Lebanese labor laws especially those related to yearly vacations (allowing 30 days of vacation per year similarly to most neighboring Arab countries instead of 15 days), to maternity leave (increasing women's maternity leave to more than 30 days for women working under contractual or part time jobs and to more than 98 paid days for full time working women knowing that the current maternity leave law of 10 weeks (70 days) of paid leave as amended on April 22, 2014 is below the International Labor Organization standard which is a minimum of 98 days of paid leave), to working hours (decreasing the number of working hours per week from 48 hours excluding overtime to 48 hours including overtime similarly to many neighboring countries as well knowing that in some countries such as Australia the weekly working hours cannot exceed 37 hours excluding overtime), to minimum wages and social security allowances (taking into consideration the Lebanese economic situation and the Lebanese purchasing power and ensuring that every employee whether working on part time basis or full time one has the right to be secured in regards to hospitality fees as a minimum) and to enforce their application. And finally, knowing that one major problem for the Lebanese labor market as per the World Bank publications (2013) is its deficiency in creating new jobs which should be much higher so as to absorb the fresh graduates, statistics showed that employment in the most productive sectors is decreasing mostly in the insurance, information technology, technical services and finance sectors (Atallah, 2013). Thus, encouraging and supporting new businesses especially those that the Lebanese labor market lack has become a necessity. Further, this has been identified as a main need for the Lebanese labor market by almost all respondents and especially for the technical services which are being delivered by Syrian employees as many respondents confirmed. This support can be mainly manifested through offering subventions, tax exemptions and credit facilities for new

business establishments and through collaborating with educational institutions so as to orient students toward these specializations of studies.

7.3 Knowledge Contributions

This study contributes to knowledge by developing an integrated fresh graduates' retention framework, as there is no direct framework that focuses on fresh graduates. The significance of this research lies in its importance for practitioners and managers allowing them to wisely plan and carry out their offered job designs, for legal authorities enabling them to reconsider their extant labor laws, for behavioral scientists facilitating their efforts to understand how job enrichment works and by this should help filling the void in research involving redesigning jobs while taking into consideration, for the first time, the effect of labor market conditions on fresh graduates' affective and personal work outcomes. This new contribution to knowledge can further be explained as a contribution to literature, theory, methodology and practice. These contributions are analyzed and evaluated below.

7.3.1 Contribution to Literature

First, this research study mapped the subject of fresh graduates' retention, organized the outcomes from the existing literature, and offered unique and inclusive implications, enabling to better understand the relevant literature. Second, through conducting a critical narrative literature review, the study identified a number of literature gaps, highlighted many inconsistencies, and noticed various conflicts in the predictions of some extent theories. Third, the critical narrative literature review (see in chapter 2) which represents the foundation for the development of the conceptual framework (see in chapter 3), offered an in-depth examination and identification of the various practices, conditions and psychological states that affect fresh graduates' personal/work outcomes and thus influence fresh graduates' retention. Finally, this examination provided a better and more global knowledge and understanding of the fresh graduates' attitudes toward the various core job dimensions and labor market conditions and encouraged conceptual development and empirical exploration in a field of study that had become more theoretically and practically relevant.

7.3.2 Contribution to Theory

In general, this research study contributes to theory by enhancing the knowledge and providing an in-depth understanding of the core job dimensions, psychological states, individual differences, labor market conditions and resulting personal and work outcomes affecting fresh graduates' retention. This contribution has been proved to be necessary for it fulfills the gap that was argued by Johson et al. (2012) who declared a great need for expanding available theories to compensate the existent lacks related to fresh graduates' retention.

Moreover, based on the results from the critical narrative literature review, this research study is the first to rationalize, conceptualize and empirically explore the joint effect of core job dimensions along with labor market conditions on fresh graduates' retention through testing their direct effect on personal/work outcomes.

Further, this contribution deepens the knowledge about the fresh graduates' attitudes in a non-western context. Towards this direction, another gap is fulfilled as various studies tested and validated JCM and JDS in western countries while many scholars and practitioners stressed on the big need to test and validate the model in other regions and different countries of the world (Abu Elanain, 2009).

This contribution can further be detailed as follows:

- (1) developing a new comprehensive model which examines the combined effect of labor market conditions, core job dimensions and psychological states on personal and work outcomes, together with the moderating role of individual differences;
- (2) integrating labor market outcomes (geographical location, unionization, labor status, job matching, private and public sector, foreign and national workers, formal and informal jobs and educational and labor market gap) into the validation of the model and assessing the influence of personal and work outcomes on labor market outcomes;
- (3) integrating additional moderating variables (age, gender, education, social rank, culture and commitment);
- (4) integrating new core job dimensions (participation, work load, working conditions, physical effort, technology use, promotion and social environment) into the validation of the framework;

- (5) integrating additional psychological states (self-esteem and prestige inside outside) into the validation of the framework and assessing their mediating role;
- (6) integrating additional personal and work outcomes (high involvement) into the validation of the framework;
- (7) Using binary logistic regression for measuring retention, so far not used in any other work;
- (8) Validating the model for idiosyncratic conditions in a non-western country.

By doing this, this research study fulfills the various gaps of knowledge (see chapter 2) in the scarce previous wisdom on the conditions, practices and psychological states affecting fresh graduates' attitudes and perceptions towards their organizations and labor markets.

7.3.3 Contribution to Methodology

The contribution to methodology is also achieved in this research study by introducing abductive research approach in examining the fresh graduates' retention. This provides a high level of in-depth theoretical understanding because it places equal weight to both theory and empirical data (Ryan et al., 2012), allowing for the incorporation of existing theories, to build a new theory or modify existing ones.

7.3.4 Contribution to Practice

In addition to the aforementioned contributions, this study significantly adds to practice through providing managers and business practitioners with an in-depth understanding of fresh graduates' thoughts, beliefs and attitudes regarding their jobs and the local labor market to which they belong and helps them to create a better awareness about the factors that should be particularly given a great attention in order to retain these fresh graduates.

Also, this study provides a guiding framework and operational guidance to managers and business practitioners for conducting successful organizational strategies, in terms of core job dimensions and labor market conditions so as to increase the personal, work and labor market outcomes.

Besides, this research study offers the chance to public and private forces to understand the great need to collaborate all together hand by hand for setting the rules that should be applied in both public and private organizations and which takes into consideration the understanding of the

labor force needs and expectations so as to increase the motivation, job satisfaction and retention of this labor force enabling an improved market efficiency and productivity.

7.3.5 Recommendations

More particularly, based on the evaluation of this research study's findings, and knowing that the aim and objectives of this study are not of academic significance only, but they also concern governments and organizational practitioners, allowing enhancing the extant knowledge of elaborating successful employment and investment strategies to retain fresh graduates and contributing to the extant knowledge in a real world context, various recommendations can be suggested for the legal authorities as well as for business practitioners aiming to improve the fresh graduates' retention in their labor market:

- Carrying out more comprehensive market analysis to clearly highlight the gaps in the fresh graduates' labour supply in order to set up a systemized program of action in collaboration with the academic institutions aiming to prepare the newly labor market entrants (fresh graduates) to the requirements of labor market access;
- Strengthening the technical skills of fresh graduates through designing specific technical training programs which should be provided by the hiring organization itself;
- Enhancing the communication skills of the fresh graduates (1) through designing specific business, verbal and nonverbal communication courses that should be obligatory in all majors' programs of study, and (2) through designing communications' training sessions at work (e.g., self-esteem at the workplace, communicating with diplomacy and finesse: what to say and how to say it, escaping anger at work, problem solving and others) all aiming to enable fresh graduates to acquire the know-how, manners and business etiquettes needed at work for better business interactions and healthier social work environment;
- Financing and supporting organizations to provide better working conditions such as air conditioning and seating;
- Supporting the labor unions and allowing them to work freely for this helps to create a feeling of protection for fresh graduates through securing their rights for vacations, for sick leave, for adequate pay and others.

- Ensuring equal fresh graduates' rights at work mostly in terms of promotion and pay. This requires setting clear promotion and wage scales planned according to degrees, experience and competencies, thus ensuring that two fresh graduates with the same degree and the same qualifications do not earn different salaries at the same organization and for doing the same tasks but instead benefit from equal and clear job growth opportunities;
- Encouraging fresh graduates towards the use of local job matching engines and making sure that these search engines present clear methodologies to perform job matching with the fresh graduates provided information known as parameters. These parameters for job matching should not be restricted to the academic degree alone but should include the domain of the job, the title of the job, the position, the knowledge, the experience, the location, the salary and others;
- Designing methodologies to ensure a clear circulation of information inside organizations based on continuous meetings allowing direct communications among fresh graduates, employees and employers and thus supporting the resolution of disputes where possible, as this has been noted as a key factor of interest for fresh graduates influencing the degree core job dimensions affect their personal/work outcomes.
- Encouraging female fresh graduates in various countries to work on themselves generating their own income through home-based economic activities due to socio-cultural factors which make it hard for them to access to employment opportunities though labor laws did not differentiate between males and females' rights;
- Finally, ensuring that employers apply the labor laws and offer jobs which match with the legal rights of fresh graduates thus providing jobs rich on the core job dimensions and taking into consideration the fresh graduates' perceptions and attitudes and especially their great interest in employers recognizing their achievements and giving them a space to prove themselves through allowing them some authority at work and strengthening their skills and knowledge at work.

In summary, organizations will be able to retain their best fresh graduates through offering jobs rich on the core job dimensions, strengthening the technical and communication skills of their fresh graduates, creating favorable working environments, improving remunerations, providing motivations, ensuring job matching, understanding the importance of unions and guaranteeing

equal employment rights, in addition to applying the labor laws. In the same context, Legal authorities should always update their labor laws, support and finance employment in the most productive sectors and especially in the productive sectors such as insurance, information technology, technical services and finance sectors where the highest demand for fresh graduates exist, listen to the labor unions' demands and work on enforcing the application of the extent laws. Furthermore, the educational representatives should reconsider their already set curriculum of studies so as to meet labor market requirements. In doing so, fresh graduates will be retained in their local labor market.

7.4 Limitations of the Study

The outcomes of this research add to both theory and practice on fresh graduates' retention and offer new insights in this area of study. However, there still exist few limitations that must be highlighted.

The first limitation is that the interrelationships among the various scales and subscales of MJCM-R were tested at a specific time. This cross-sectional analysis does not take into consideration the variance over time that might occur to these relationships due to a change in one or more of the core job dimensions or in the fresh graduates' motivation and job satisfaction as they gain more experience. By evaluating these interrelationships over an extended period of time, scholars may extend their knowledge about the causal patterns among the various variables. This gap was addressed by Griffin (1991) who tested the effect of job changes on motivation and job satisfaction over intervals of 6, 24 and 48 months and by Wright and Staw (1999) who carried out two longitudinal research studies, at different period of times to study the relationships between psychological states and work performance. Thus, it would be very interesting to conduct further longitudinal and experimental research to MJCM-R.

Another limitation is that MJCM-R was restricted to study the effect of core job dimensions and labor market conditions on the personal/work outcomes of fresh graduates which in turn affect their retention and didn't test the effect of life functioning (leisure time activities, neighborhood lifestyles, housing plans, day-care centers for babies, medical services, etc.) on these personal/work outcomes as well. Attractive outcomes might reveal if life functioning which are considered as non-work sources of satisfaction were to be incorporated into the model and could

further explain if a fresh graduate's intent to stay at work can be better predicted by testing these non-work sources of satisfaction in addition to core job dimensions and labor market conditions.

However, although some limitations exist, this study provides remarkable findings with significant insights for both scholars and practitioners, and offers some suggestions for additional research delineated in the next section.

7.5 Suggestions for Future Research

The outcomes of this research study provide various directions for additional future research in fresh graduates' retention.

First, the new model that was created in the current study, namely MJCM-R, was validated with fresh graduates of Lebanon, since it is an empirical setting which is characterized by its diversified cultural identity of various religious and ethical groups, having diverse values, customs and mentalities affecting the country's educational system, labor market, literature and others and could thus provide a holistic framework. In future research the new model could be tested in other contexts as well and with respondents from other countries so as to verify the validity and generalizability of the modeling framework.

Second, the study has examined the effect of various practices, conditions and psychological states on fresh graduates' retention. Future research could reproduce this work by exploring their effect on employees' retention (with more than two years of experience). This could offer a fruitful comparison between fresh graduates and employees in terms of attitude and affective response toward core job dimensions and labor market conditions.

Third, an additional research could be the comparison of employees', employers', educational institutions' representatives' and legal authorities' representatives' standpoints of the various factors affecting fresh graduates' retention. This could provide a comparison of the various expectations and perceptions regarding this issue of study and their impact on the development of fresh graduates' personal/work outcomes and subsequently on fresh graduates' decision to stay at the organization. This comparison may expose common points and dissimilarities on the causes and effects of fresh graduates' retention.

Fourth, the developed conceptual framework reveals the perceptions of fresh graduates who have graduated from university holding a Bachelor, Masters, PhD or other degrees. Future research

can investigate the developed conceptual framework with other categories of fresh graduates, like those graduating from technical institutions. This could reflect a different perspective of fresh graduates and might provide further insights in increasing the stay of fresh graduates in their labor markets.

Fifth, and as aforementioned in the previous section, it would very interesting if the developed conceptual framework incorporates the non-work satisfaction factors and allows testing their effect on the fresh graduates' personal/work outcomes. This could offer further research endeavors' opportunities.

Sixth, it would be significant as well to add the reputation of the university as a factor in the modeling framework, knowing that rankings of universities can be found in the form of indexes, so that reputation is a measurable variable. This could offer further research analyses.

And finally, it would be very interesting as well to conduct further longitudinal and experimental research to MJCM-R so as to allow testing the changes of fresh graduates' personal/work outcomes and intentions to stay at work as a result of changes in one or more core job dimensions or one or more labor market conditions.

To sum up, despite the existence of some limitations, this study has presented significant implications for researchers and practitioners alike, who might be involved in increasing the stay of fresh graduates in their labor markets.

7.6 Conclusion

This study uses both the quantitative and qualitative research to examine the effect of core job dimensions, labor market conditions, and personal/work outcomes along with the mediating role of experienced psychological states and the moderating role of individual differences on fresh graduates' retention where the qualitative research complements the quantitative one.

First, interesting results were obtained in relation to core job dimensions. Fresh graduates seem to experience "self-confidence", "prestige inside outside", "meaningfulness of the work", responsibility for the work", and "knowledge of results" during work as a result of various core job dimensions. Various core job dimensions affect personal/work outcomes. Fresh graduates' "internal motivation", "job satisfaction", "work effectiveness", and "work commitment" are affected by various core job dimensions.

Concerning experienced psychological states, results from both the employer and the fresh graduate point of view, agree on the importance of fresh graduates' psychological states as a stimulus to personal/work outcomes and confirmed the major effect of core job dimensions on these psychological states. The data analysis introduces a new psychological state which can be provoked during work, which is "self-worth"; however it is very similar to the psychological state "self-confidence".

The importance of fresh graduates' personal/work outcomes as a stimulus to retention was shown and the major effect of experienced psychological states on these personal/work outcomes was confirmed.

In addition, the results showed the importance of fresh graduates' labor market conditions as a stimulus to the development of personal/work outcomes.

Concerning individual differences, results from both the employer and the fresh graduate point of view, agree on the moderating role of "skill and knowledge", "context satisfactions", "growth need strength" and "personal characteristics" affecting the strength of the relationships among core job dimensions, experienced psychological states and personal/work outcomes.

Regarding the labor market outcome which refers to the retention of fresh graduates, fresh graduates' retention is the direct result of high levels of motivation, general and growth satisfaction, work effectiveness and commitment.

Finally, the results stressed the importance of core job dimensions and labor market conditions along with individual differences as a stimulus to maximize fresh graduates' stay at their organizations through the development of multiple personal/work outcomes.

In conclusion, this doctoral study presents a comprehensive framework that can guide practitioners and scholars into the research of fresh graduates' retention. In particular, the framework offers an in-depth exploration of the labor market conditions, core job dimensions and personal/work outcomes along with the mediating effect of experienced psychological states and the moderating effect of individual differences that affect fresh graduates' retention, and enables a complete understanding of the role of various practices, conditions and psychological states in the development of personal/work outcomes and sequentially in increasing the stay of fresh graduates in their labor markets. This is particularly important since fresh graduates

worldwide suffer from a combination of driving factors such as economic crisis, low wages, complexity of work integration and others and a set of motivating factors such as attractive remuneration, growth possibilities and others, which force thousands of fresh graduates to leave their jobs every year. Besides, this helps filling the void in research involving redesigning jobs while taking into consideration, for the first time, the effect of labor market conditions on fresh graduates' affective and personal work outcomes.

Further, this doctoral study provides a starting point and an incentive for more research on retaining fresh graduates, and especially on the emotional aspects of these fresh graduates. In particular, it facilitates the efforts of behavioral scientists to understand how job enrichment works. The contributions of this research are noteworthy for practitioners too being employers, educational institutions' representatives and legal authorities. Thus, it would be very significant and beneficial if this thesis can motivate employers to invest in hiring, training and motivating fresh graduates; can encourage educational institutions' representatives to collaborate with legal authorities so as to prepare and guide fresh graduates toward the needs and the requirements of the labor market; and can stimulate legal authorities to update their labor laws and exercise an effective control on the implementation of these laws so as to meet the minimum expectations of fresh graduates and to elaborate short and long run strategies aiming to create new job opportunities and by this to increase the stay of these fresh graduates in their labor markets.

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Appendix A

MODIFIED JOB DIAGNOSTIC SURVEY – for Retention

This questionnaire was developed as part of a University of Nicosia study of jobs and related labor markets and how fresh graduates react to them. The questionnaire helps to determine how jobs and labor markets can be better designed so as to retain fresh graduates, by obtaining information about how they react to different kinds of jobs and labor markets.

On the following pages you will find several different kinds of questions about your job and labor market. Specific instructions are given at the start of each section. Please read them carefully. It should take no more than 25 minutes to complete the entire questionnaire.

The questions are designed to obtain *your* perceptions of your job and your labor market and *your* reactions to them.

There are no trick questions. Your individual answers will be kept completely confidential. Please answer each item as honestly and frankly as possible.

Thank you for your cooperation.

SECTION ONE

Listed below are a number of statements which could be used to describe a job.

You are to indicate whether each statement is an *accurate* or an *inaccurate* description of *your* job.

Please try to be as objective as you can in deciding how accurately each statement describes your job – regardless of whether you like or dislike your job. Write a number in the blank for each statement, based on this scale:

1 Very Inaccurate	2 Mostly Inaccurate	3 Slightly Inaccurate	4 Uncertain	5 Slightly Accurate	6 Mostly Accurate	7 Very Accurate
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1. The job requires me to use a number of complex or high-level skills.
2. The job is arranged so that I can do an entire piece of work from beginning to end.
3. Just doing the work required by the job provides many chances for me to figure out how well I am doing.
4. The job requires me to perform a variety of tasks.
5. This job is one where a lot of other people can be affected by how well the work gets done.
6. The job gives me a chance to use my personal initiative and judgment in carrying out the work.
7. The job provides me a chance to completely finish the piece of work I begin.
8. After I finish a job, I know whether I performed well.
9. The job gives me considerable opportunity for independence and freedom in how I do the work.
10. The job itself is very significant and important in the broader scheme of things.
11. The job gives me a chance to participate in the decisions related to the work I do.
12. The job is structured so that it is easy for me to meet deadlines.
13. This job is one where health insurance is offered.
14. The job is one where physical effort is needed.
15. The job is arranged so that I need to use the computers.
16. The job provides me a considerable opportunity to contribute in daily decision-makings.
17. This job is one where a reasonable and balanced work load is offered.

1 Very Inaccurate	2 Mostly Inaccurate	3 Slightly Inaccurate	4 Uncertain	5 Slightly Accurate	6 Mostly Accurate	7 Very Accurate
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18. This job is one where on demand vacations and sick leave are allowed.
19. The job gives me the chance to be promoted.
20. The job is arranged so that I need to do a work that requires strength.
21. The job is one where there is a possibility to get a higher position or rank.
22. The job gives me the chance to interact with and get feedback from people from outside the organization.
23. The job gives me the chance to use high tech in daily work.
24. The job is one where a strong social support network is available to help through the stress of tough days.
25. The job is one where a good working environment (well equipped offices with good lighting, air conditioning and comfortable seating) is provided.
26. The job provides me many facilities (eating area, car parking, sports, library and WIFI access).

SECTION TWO

Now please indicate how *you personally feel about your job*.

Each of the statements below is something that a person may say about his or her job. You are to indicate your own personal *feelings* about your job by marking how much you agree with each of the statements.

Write a number in the blank for each statement, based on this scale:

How much do you agree with the statement?

1 Disagree Strongly	2 Disagree	3 Disagree Slightly	4 Neutral	5 Agree Slightly	6 Agree	7 Agree Strongly
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1. It's hard, on this job, for me to care very much about whether or not the work gets done right.
2. My opinion of myself goes up when I do this job well.
3. Generally speaking, I am very satisfied with this job.
4. Most of the things I have to do on this job seem useless or trivial.

1 Disagree Strongly	2 Disagree	3 Disagree Slightly	4 Neutral	5 Agree Slightly	6 Agree	7 Agree Strongly
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5. I usually know whether or not my work is satisfactory on this job.
6. I feel a great sense of personal satisfaction when I do this job well.
7. The work I do on this job is very meaningful to me.
8. I feel a very high degree of *personal* responsibility for the work I do on this job.
9. I frequently think of quitting this job.
10. I feel bad and unhappy when I discover that I have performed poorly on this job.
11. I often have trouble figuring out whether I'm doing well or poorly on this job.
12. I feel I should personally take the credit or blame for the results of my work on this job.
13. I am generally satisfied with the kind of work I do in this job.
14. My own feelings generally are *not* affected much one way or the other by how well I do on this job.
15. Whether or not this job gets done right is clearly *my* responsibility.
16. I feel pride and triumph when I talk about my job.
17. I feel a great sense of prestige inside my work.
18. All in all, I am proud of my achievements at work.
19. I feel a great sense of prestige outside my work.
20. Generally speaking, I am very involved in this job.
21. I feel highly effective at work.
22. Generally speaking, I produce a remarkable amount of high quality work.
23. I feel that I manage my time well at work.
24. My feeling of engagement to the work I do is high.
25. I feel much attached to the job I do.

SECTION THREE

Now please indicate how *satisfied* you are with each aspect of your job listed below. Once again, write the appropriate number in the blank beside each statement.

1 Extremely Dissatisfied	2 Dissatisfied	3 Slightly Dissatisfied	4 Neutral	5 Slightly Satisfied	6 Satisfied	7 Extremely Satisfied
--------------------------------	-------------------	-------------------------------	--------------	----------------------------	----------------	-----------------------------

1. The amount of job security I have.
2. The amount of pay and fringe benefits I receive.
3. The amount of personal growth and development I get in doing my job.
4. The people I talk to and work with on my job.
5. The degree of respect and fair treatment I receive from my boss.
6. The feeling of worthwhile accomplishment I get from doing my job.
7. The chance to get to know other people while on the job.
8. The amount of support and guidance I receive from my supervisor.
9. The degree to which I am fairly paid for what I contribute to this organization.
10. The amount of independent thought and action I can exercise in my job.
11. How secure things look for me in the future in this organization.
12. The chance to help other people while at work.
13. The amount of challenge in my job.
14. The overall quality of the supervision I receive in my work.
15. The amount of knowledge I can apply in my work.
16. The amount of skills I use in doing my job.
17. The overall competency I show in exercising my job.

SECTION FOUR

Now please think of the other people in your organization who hold the same job you do. If no one has exactly the same job as you, think of the job which is most similar to yours.

Please think about how accurately each of the statements describes the feelings of those people about the job.

It is quite all right if your answers here are different from when you described your *own* reactions to the job. Often different people feel quite differently about the same job.

Once again, write a number in the blank for each statement, based on this scale:

How much do you agree with the statement?

1 Disagree Strongly	2 Disagree	3 Disagree Slightly	4 Neutral	5 Agree Slightly	6 Agree	7 Agree Strongly
---------------------------	---------------	---------------------------	--------------	------------------------	------------	------------------------

1. Most people on this job feel a great sense of personal satisfaction when they do the job well.
2. Most people on this job are very satisfied with the job.
3. Most people on this job feel that the work is useless or trivial.
4. Most people on this job feel a great deal of personal responsibility for the work they do.
5. Most people on this job have a pretty good idea of how well they are performing their work.
6. Most people on this job find the work very meaningful.
7. Most people on this job feel that whether or not the job gets done right is clearly their own responsibility.
8. People on this job often think of quitting.
9. Most people on this job feel bad or unhappy when they find that they have performed the work poorly.
10. Most people on this job have trouble figuring out whether they are doing a good or a bad job.
11. Most people on this job feel that their self-esteem is *not* usually affected by the kind of work they do.
12. Most people on this job feel a great sense of prestige when they talk about their work.
13. Most people on this job feel pride and triumph when they talk about their job.
14. Most people on this job are generally *not* affected by how much prestige their jobs offer to them.
15. Most people on this job feel a very high degree of work effectiveness.

1 Disagree Strongly	2 Disagree	3 Disagree Slightly	4 Neutral	5 Agree Slightly	6 Agree	7 Agree Strongly
---------------------------	---------------	---------------------------	--------------	------------------------	------------	------------------------

16. Most people on this job, generally speaking, are very involved in their job.

17. Most people on this job feel that they manage their time well at work.

18. Most people on this job have a great sense of work engagement when they do their job.

SECTION FIVE

Listed below are a number of characteristics which could be present on any job. People differ about how much they would like to have each one present in their own jobs. We are interested in learning how much you personally would like to have each one present in your job.

Using the scale below, please indicate the degree to which you would like to have each characteristic present in your job.

Note: The numbers on this scale are different from those used in previous scales.

4 Would like having this only a moderate amount (or less)	5	6	7 Would like having this very much	8	9	10 Would like having this <i>extremely</i> much
--	---	---	---	---	---	--

1. High respect and fair treatment from my supervisor.
2. Stimulating and challenging work.
3. Chances to exercise independent thought and action in my job.
4. Great job security.
5. Very friendly co-workers.
6. Opportunities to learn new things from my work.
7. High salary and good fringe benefits.
8. Opportunities to be creative and imaginative in my work.

4	5	6	7	8	9	10
Would like having this only a moderate amount (or less)			Would like having this very much			Would like having this <i>extremely</i> much

9. Quick promotions.

10. Opportunities for personal growth and development in my job.

11. A sense of worthwhile accomplishment in my work.

SECTION SIX

People differ in the kinds of jobs they would most like to hold. The questions in this section give you a chance to say just what it is about a job that is most important to you.

For each question, two different kinds of jobs are briefly described. You are to indicate which of the jobs you personally would prefer – if you had to make a choice between them.

In answering each question, assume that everything else about the jobs is the same. Pay attention only to the characteristics actually listed.

Please ask for assistance if you do not understand exactly how to do these questions.

JOB A

1. A job where the pay is very good.

1-----	2-----	3-----	4-----
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B

JOB B

A job where there is considerable opportunity to be creative and innovative.

1-----	2-----	3-----	4-----
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B

2. A job where you are often required to make important decisions.

1-----	2-----	3-----	4-----
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B

A job with many pleasant people to work with.

1-----	2-----	3-----	4-----
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B

3. A job in which greater responsibility is given to those who do the best work.

1-----	2-----	3-----	4-----
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B

A job in which greater responsibility is given to loyal employees who have the most seniority.

1-----	2-----	3-----	4-----
Strongly Prefer A	Slightly Prefer A	Neutral	Slightly Prefer B

JOB A

4. A job in an organization which is in Financial trouble – and might have to close down within the year.

1-----
Strongly
Prefer A

2-----
Slightly
Prefer A

3-----
Neutral

4-----
Slightly
Prefer B

5-----
Strongly
Prefer B

5. A very routine job.

1-----
Strongly
Prefer A

2-----
Slightly
Prefer A

3-----
Neutral

4-----
Slightly
Prefer B

5-----
Strongly
Prefer B

6. A job with a supervisor who is often very critical of you and your work in front of other people.

1-----
Strongly
Prefer A

2-----
Slightly
Prefer A

3-----
Neutral

A job which prevents you from using a number of skills that you worked hard to develop.

4-----
Slightly
Prefer B

5-----
Strongly
Prefer B

7. A job with a supervisor who respects you and treats you fairly.

1-----
Strongly
Prefer A

2-----
Slightly
Prefer A

3-----
Neutral

A job which provides constant opportunities for you to learn new and interesting things.

4-----
Slightly
Prefer B

5-----
Strongly
Prefer B

8. A job where there is a real chance you could be laid off.

1-----
Strongly
Prefer A

2-----
Slightly
Prefer A

3-----
Neutral

A job with very little chance to do challenging work.

4-----
Slightly
Prefer B

5-----
Strongly
Prefer B

9. A job in which there is a real chance for you to develop new skills and advance in the organization.

1-----
Strongly
Prefer A

2-----
Slightly
Prefer A

3-----
Neutral

A job which provides lots of vacation time and an excellent fringe benefit package.

4-----
Slightly
Prefer B

5-----
Strongly
Prefer B

10. A job with little freedom and independence to do your work in the way you think best.

1-----
Strongly
Prefer A

2-----
Slightly
Prefer A

3-----
Neutral

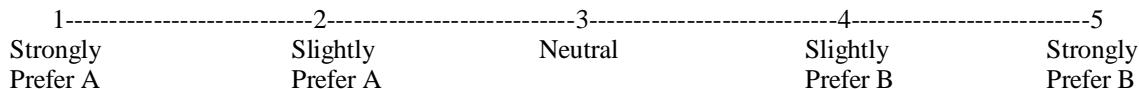
A job where the working conditions are poor.

4-----
Slightly
Prefer B

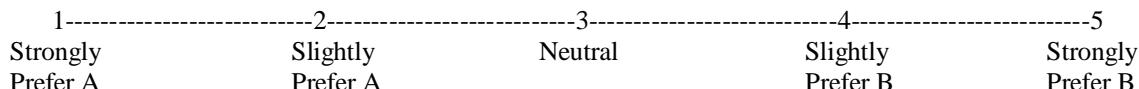
5-----
Strongly
Prefer B

JOB A

11. A job with very satisfying teamwork.



12. A job which offers little or no challenge.

**SECTION SEVEN**

Now please indicate how *you personally feel about your labor market*.

Each of the statements below is something that a person may say about his or her labor market. You are to indicate your own personal *feelings* about your labor market by marking how much you agree with each of the statements.

Write a number in the blank for each statement, based on this scale:

How much do you agree with the statement?

1 Disagree Strongly	2 Disagree	3 Disagree Slightly	4 Neutral	5 Agree Slightly	6 Agree	7 Agree Strongly
---------------------------	---------------	---------------------------	--------------	------------------------	------------	------------------------

1. It is important for me to know about whether or not the job is close or far from home.
2. I feel a great sense of security when I know that there is a labor union that protects my rights at work.
3. Generally speaking, I like to be an employer in this labor market.
4. I feel great and happy when I realize that my job offer matches my individual qualifications.
5. Generally speaking, I prefer a job which is close to home.
6. I feel I belong to the private sector.
7. My own feelings are generally affected by whether foreign workers are getting the same rights as national workers in my labor market.

8. I feel a great sense of security when I belong to a formal job (a job which obeys to the government laws).
9. Being well prepared by my University's programs of studies to fit into the labor market is very important to me.
10. Having an effective labor union is very essential to me.
11. I frequently think of becoming self employed.
12. Generally speaking, I prefer a formal job (a job which obeys to the government laws).
13. I feel very satisfied when I discover that my personal competencies are very well matching my job salary.
14. Generally speaking, I prefer a job that belongs to the private sector.
15. Whether or not foreign workers are being treated equally as national workers is generally one of my concerns.
16. I feel happy when I discover that the programs of study I followed at the university are very well matching with the labor market requirements.

SECTION EIGHT

People differ in the personal and work outcomes that would retain them at their job. The questions in this section give you a chance to determine the personal and work outcomes which are most important to you to stay in a job.

For each question, you are to indicate whether you agree or not by circling the YES or NO answer.

- | | |
|--|-----------------|
| 1. I would likely stay in my job because I feel a great sense of high internal motivation. | 1. YES 2. NO |
| 2. I would likely stay in my job because I have a great chance of personal growth and development. | 1. YES 2. NO |
| 3. I would likely stay in my job because I am very satisfied. | 1. YES 2. NO |
| 4. I would likely stay in my job because I feel a very high degree of work effectiveness. | 1. YES 2. NO |
| 5. I would likely stay in my job because I am very involved. | 1. YES 2. NO |

SECTION NINE

Culture: (*Circle YES or NO for each of the following affirmations*)

SECTION TEN

Biographical Background

1. Sex: Male Female

2. Age (check one):

18-23 24-29 30-35 36-40 Over 40

3. Marital Status:

- Single Married Other.....

4. Number of Children (if any):

- No Children One Two Three

- Four More than Four (please specify).....

5. Level of Education (check one):

- | | | | |
|-------------------|--------------------------|-----------------|--------------------------|
| Bachelor's Degree | <input type="checkbox"/> | Master's Degree | <input type="checkbox"/> |
| PhD | <input type="checkbox"/> | Other | <input type="checkbox"/> |

6. Type of Education (check one):

- | | | | |
|---------------------|--------------------------|----------------------------------|--------------------------|
| Business Studies | <input type="checkbox"/> | Medical Studies | <input type="checkbox"/> |
| Engineering Studies | <input type="checkbox"/> | Sciences Studies | <input type="checkbox"/> |
| Technology Studies | <input type="checkbox"/> | Arts and Social Sciences Studies | <input type="checkbox"/> |
| Others | <input type="checkbox"/> | | |

7. Language of Education (for your highest Degree) (check one):

- | | |
|--------------|--------------------------|
| Arabic | <input type="checkbox"/> |
| French | <input type="checkbox"/> |
| English | <input type="checkbox"/> |
| Others | <input type="checkbox"/> |

8. Type of the Institution from which you Graduated (for your highest Degree) (check one):

- | | | | |
|---------|--------------------------|--------|--------------------------|
| Private | <input type="checkbox"/> | Public | <input type="checkbox"/> |
|---------|--------------------------|--------|--------------------------|

9. When did you achieve your highest Degree?

- | | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Less than 6 months | <input type="checkbox"/> | 6 months – 12 months | <input type="checkbox"/> |
| 13 months – 18 months | <input type="checkbox"/> | 19 months – 24 months | <input type="checkbox"/> |
| 25 months – 30 months | <input type="checkbox"/> | 31 months – 36 months | <input type="checkbox"/> |

10. Social Class to which you belong (check one):

- | | |
|--------------|--------------------------|
| Lower Class | <input type="checkbox"/> |
| Middle Class | <input type="checkbox"/> |
| Upper Class | <input type="checkbox"/> |

11. What is your current job position?

- | | | | |
|-------------------------------------|--------------------------|----------------------------|--------------------------|
| Worker (Messenger, Cleaner, Waiter) | <input type="checkbox"/> | Clerk/Office Administrator | <input type="checkbox"/> |
| Supervisor/Manager | <input type="checkbox"/> | Teacher/Academic | <input type="checkbox"/> |
| Other..... | <input type="checkbox"/> | | |

12. Is this your first job after graduation?

Yes No

13. What is your area of employment?

Business Sector	<input type="checkbox"/>	Medical Sector	<input type="checkbox"/>
Engineering Sector	<input type="checkbox"/>	Sciences Sector	<input type="checkbox"/>
Technology Sector	<input type="checkbox"/>	Arts and Social Sciences Sector	<input type="checkbox"/>
Teaching/Academia Sector	<input type="checkbox"/>	Others	<input type="checkbox"/>

14. What is your sector of employment?

Public Sector	<input type="checkbox"/>	Private Sector	<input type="checkbox"/>
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15. How long have you been employed in your current job?

Less than 6 months	<input type="checkbox"/>	6 months – 12 months	<input type="checkbox"/>
13 months – 18 months	<input type="checkbox"/>	19 months – 24 months	<input type="checkbox"/>

16. What is your monthly income?

Less than 750 000 LBP	<input type="checkbox"/>
750 000 LBP – 1 500 000 LBP	<input type="checkbox"/>
1 500 001 LBP – 3 000 000 LBP	<input type="checkbox"/>
More than 3 000 000 LBP	<input type="checkbox"/>

Appendix B

Modified Job Diagnostic Survey – for Retention (MJDS-R) in Comparison with JDS

Scale 1: Core Job Dimensions	Item
Decision Making and Autonomy	<p>1.6 – Section 2, Item 4 in revised JDS questionnaire</p> <p>1.9 – Section 2, Item 13 in original JDS questionnaire</p> <p>1.11 – “The job gives me a chance to participate in the decisions relate to the work I do”</p> <p>1.16 – “The job provides me a considerable opportunity to contribute in daily decision-makings”</p>
Job Significance and Feedback	<p>1.3 – Section 2, Item 4 in original JDS questionnaire</p> <p>1.5 – Section 2, Item 8 in original JDS questionnaire</p> <p>1.8 – Section 2, Item 13 in revised JDS questionnaire</p> <p>1.10 – Section 2, Item 15 in revised JDS questionnaire</p>
Promotion	<p>1.19 – “The job gives me the chance to be promoted”</p> <p>1.21 – “The job is one where there is a possibility to get a higher position or rank”</p>
Working Conditions	<p>1.25 – “The job is one where a good working environment (well-equipped offices with good lighting, air conditioning and comfortable seating) is provided”</p> <p>1.26 – “The job provides me many facilities (eating area, car parking, sports, library and WIFI access)”</p>
Work Load	<p>1.12 – “The job is structured so that it is easy for me to meet deadlines”</p> <p>1.17 – “This job is one where a reasonable and balanced Work load is offered”</p>
Technology Use	<p>1.15 – “The job is arranged so that I need to use the Computers”</p> <p>1.23 – “The job gives me the chance to use high tech in daily Work”</p>
Physical Efforts	<p>1.14 – “The job is one where physical effort is needed”</p> <p>1.20 – “The job is arranged so that I need to do a work that requires strength”</p>
Social Environment	<p>1.22 – “The job gives me the chance to interact with and get feedback from people from outside the organization”</p> <p>1.24 – “The job is one where a strong social support network is available to help through the stress of tough days”</p>
Task Identity	<p>1.2 – Section 2, Item 7 in revised JDS questionnaire</p>
Skill Variety	<p>1.7 – Section 2, Item 11 in original JDS questionnaire</p>
Work Benefits	<p>1.1 – Section 2, Item 1 in original JDS questionnaire</p> <p>1.4 – Section 2, Item 9 in revised JDS questionnaire</p> <p>1.13 – “This job is one where health insurance is offered”</p> <p>1.18 – “This job is one where on demand vacations and sick leave are allowed”</p>
Scale 2: Experienced Psychological States	Item
Self Confidence	<p>4.4 – Section 5, Item 4 in original JDS questionnaire</p> <p>4.5 – Section 5, Item 5 in original JDS questionnaire</p> <p>4.6 – Section 5, Item 6 in original JDS questionnaire</p> <p>4.7 – Section 5, Item 7 in original JDS questionnaire</p>
Experienced Meaningfulness of the Work	<p>2.7 – Section 3, Item 7 in original JDS questionnaire</p> <p>2.16 – “I feel pride and triumph when I talk about my job”</p> <p>2.18 – “All in all, I am proud of my achievements at work”</p>
Prestige Inside Outside	<p>4.13 – “Most people on this job feel pride and triumph when</p>

	<i>they talk about their job”</i>
Knowledge of Results	4.12 – “ <i>Most people on this job feel a great sense of prestige when they talk about their work”</i>
	2.17 – “ <i>I feel a great sense of prestige inside my work”</i>
	2.19 – “ <i>I feel a great sense of prestige outside my work”</i>
	2.11 – <i>Section 3, Item 11 in original JDS questionnaire</i>
	4.3 – <i>Section 5, Item 3 in original JDS questionnaire</i>
	4.10 – <i>Section 5, Item 10 in original JDS questionnaire</i>
	4.11 – “ <i>Most people on this job feel that their self-esteem is not usually affected by the kind of work they do”</i>
	4.14 – “ <i>Most people on this job are generally not affected by how much prestige their jobs offer to them”</i>
Experienced Responsibility for the Work	2.12 – <i>Section 3, Item 12 in original JDS questionnaire</i>
	2.15 – <i>Section 3, Item 15 in original JDS questionnaire</i>

Scale 3: Labor Market Conditions	Item
Educational and Labor Market Gap	7.9 – “ <i>Being well prepared by my University’s programs of studies to fit into the labor market is very important to me”</i>
	7.16 – “ <i>I feel happy when I discover that the programs of study I followed at the university are very well matching with the labor market requirements”</i>
Formal and Informal Sector	7.8 – “ <i>I feel a great sense of security when I belong to a formal job (a job which obeys to the government laws)”</i>
	7.12 – “ <i>Generally speaking, I prefer a formal job (a job which obeys to the government laws)”</i>
Foreign and National Workers	7.7 – “ <i>My own feelings are generally affected by whether foreign workers are getting the same rights as national workers in my labor market”</i>
	7.15 – “ <i>Whether or not foreign workers are being treated equally as national workers is generally one of my concerns”</i>
Geographical Location	7.1 – “ <i>It is important for me to know about whether or not the job is close or far from home”</i>
	7.5 – “ <i>Generally speaking, I prefer a job which is close to home”</i>
Labor Status	7.3 – “ <i>Generally speaking, I like to be an employer in this labor market”</i>
	7.11 – “ <i>I frequently think of becoming self-employed”</i>
Unionization	7.2 – “ <i>I feel a great sense of security when I know that there is a labor union that protects my rights at work”</i>
	7.10 – “ <i>Having an effective labor union is very essential to me”</i>
Private and Public Sector	7.6 – “ <i>I feel I belong to the private sector”</i>
	7.14 – “ <i>Generally speaking, I prefer a job that belongs to the private sector”</i>
Job Matching	7.4 – “ <i>I feel great and happy when I realize that my job offer matches my individual qualifications”</i>
	7.13 – “ <i>I feel very satisfied when I discover that my personal competencies are very well matching my job salary”</i>

Scale 4: Individual Differences	Item
Skill and Knowledge	3.15 – “ <i>The amount of knowledge I can apply in my work”</i>
	3.16 – “ <i>The amount of skills I use in doing my job”</i>

Context Satisfaction	<i>3.17 – “The overall competency I show in exercising my job”</i> 3.1 – Section 4, Item 1 in original JDS questionnaire 3.11 – Section 4, Item 11 in original JDS questionnaire 3.2 – Section 4, Item 2 in original JDS questionnaire 3.9 – Section 4, Item 9 in original JDS questionnaire 3.4 – Section 4, Item 4 in original JDS questionnaire 3.7 – Section 4, Item 7 in original JDS questionnaire 3.12 – Section 4, Item 12 in original JDS questionnaire 3.5 – Section 4, Item 5 in original JDS questionnaire 3.8 – Section 4, Item 8 in original JDS questionnaire 3.14 – Section 4, Item 14 in original JDS questionnaire
Growth Need Strength (Would like Format)	5.2 – Section 6, Item 2 in original JDS questionnaire 5.3 – Section 6, Item 3 in original JDS questionnaire 5.6 – Section 6, Item 6 in original JDS questionnaire 5.8 – Section 6, Item 8 in original JDS questionnaire 5.10 – Section 6, Item 10 in original JDS questionnaire 5.11 – Section 6, Item 11 in original JDS questionnaire
Growth Need Strength (Job Choice Format)	6.1 – Section 7, Item 1 in original JDS questionnaire 6.2 – Section 7, Item 2 in original JDS questionnaire 6.3 – Section 7, Item 3 in original JDS questionnaire 6.4 – Section 7, Item 4 in original JDS questionnaire 6.5 – Section 7, Item 5 in original JDS questionnaire 6.7 – Section 7, Item 7 in original JDS questionnaire 6.8 – Section 7, Item 8 in original JDS questionnaire 6.9 – Section 7, Item 9 in original JDS questionnaire 6.10 – Section 7, Item 10 in original JDS questionnaire 6.11 – Section 7, Item 11 in original JDS questionnaire

Scale 5: Personal/Work Outcomes	Item
Growth Satisfaction	3.3 – Section 4, Item 3 in original JDS questionnaire 3.6 – Section 4, Item 6 in original JDS questionnaire 3.10 – Section 4, Item 10 in original JDS questionnaire 3.13 – Section 4, Item 13 in original JDS questionnaire
General Satisfaction	2.3 – Section 3, Item 3 in original JDS questionnaire 2.9 – Section 3, Item 9 in original JDS questionnaire 4.2 – Section 5, Item 2 in original JDS questionnaire 4.8 – Section 5, Item 8 in original JDS questionnaire 4.16 – “Most people on this job, generally speaking, are very involved in their job” 4.18 – “Most people on this job have a great sense of work engagement when they do their job”
Internal Motivation	2.2 – Section 3, Item 2 in original JDS questionnaire 2.6 – Section 3, Item 6 in original JDS questionnaire 2.20 – “Generally speaking, I am very involved in this job” 2.24 – “My feeling of engagement to the work I do is high” 2.25 – “I feel much attached to the job I do” 2.21 – “I feel highly effective at work” 2.22 – “Generally speaking, I produce a remarkable amount of high quality work” 2.23 – “I feel that I manage my time well at work”
High Work Effectiveness	2.13 – Section 3, Item 13 in original JDS questionnaire 4.1 – Section 5, Item 1 in original JDS questionnaire 4.9 – Section 5, Item 9 in original JDS questionnaire 4.15 – Section 5, Item 15 in original JDS questionnaire
High Commitment	

Appendix C

Scoring Key for the Modified Job Diagnostic Survey – for Retention

The scoring manual for the Modified Job Diagnostic Survey – for Retention (MJDS-R) is presented below. For each variable measured by the MJDS-R, the questionnaire items that are averaged to yield a summary score for the variable are listed.

* * * *

I. CORE JOB DIMENSIONS

A. *Skill Variety*. Average the following items:

Section One: #1
#4

B. *Task Identity*. Average the following items:

Section One: #2
#7

C. *Job Significance and Feedback*. Average the following items:

Section One: #3
#5
#8
#10

D. *Decision Making and Autonomy*. Average the following items:

Section One: #6
#9
#11
#16

E. *Work Load*. Average the following items:

Section One: #12
#17

F. *Work Benefits*. Average the following items:

Section One: #13
#18

G. *Physical Effort*. Average the following items:

Section One: #14 (reversed scoring)
#20 (reversed scoring)

H. *Technology Use*. Average the following items:

Section One: #15
#23

I. *Promotion*. Average the following items:

Section One: #19
#21

J. *Social Environment*. Average the following items:

Section One: #22
#24

K. *Working Conditions*. Average the following items:

Section One: #25

#26

II. EXPERIENCED PSYCHOLOGICAL STATES. The first two constructs (Experienced Meaningfulness of the Work and Experienced Responsibility for the Work) are measured only directly (Section Two); the third and the last construct (Knowledge of Results and Prestige inside Outside) are measured both directly (Section Two) and indirectly, vis projective-type items (Section Four); the fourth construct (Self Confidence) is measured only indirectly (Section Four).

A. *Experienced Meaningfulness of the Work*. Average the following items:

Section Two #7, #16, #18

B. *Experienced Responsibility for the Work*. Average the following items:

Section Two #12, #15

C. *Knowledge of Results*. Average the following items:

Section Two #11 (reversed scoring)

Section Four: #3 (reversed scoring), #10 (reversed scoring)

#11 (reversed scoring), #14 (reversed scoring)

D. *Self Confidence*: Average the following items:

Section Four: #4 (reversed scoring)

5, #6, #7

E. *Prestige inside outside*:

Section Two #17, #19

Section Four: #12, #13

III. AFECTIVE OUTCOMES. The first and the last constructs (general satisfaction and high commitment) are measured both directly (Section Two) and indirectly (Section Four); the second and fourth constructs (internal work motivation and high work effectiveness) are measured only directly (Section Two); the third construct (growth satisfaction) is measured only directly (Section Three).

A. *General Satisfaction*. Average the following items:

Section Two #3

#9 (reversed scoring)

Section Four: #2, #16, #18

#8 (reversed scoring)

B. *Internal work motivation*. Average the following items:

Section Two #2, #6, #20, #24, #25

C. *Growth satisfaction*. Average the following items:

Section Three #3, #6, #10, #13

D. *High work effectiveness*. Average the following items:

Section Two #21, #22, #23

E. *High commitment*. Average the following items:

Section Two #13

Section Four #1, #9, #15

VI. SKILL AND KNOWLEDGE. Average items #15, #16 and #17 of Section Three.

V. CONTEXT SATISFACTIONS. Each of these short scales uses items from Section Three only.

- A. *Satisfaction with job security*. Average items #1 and #11 of Section Three.
- B. *Satisfaction with compensation (pay)*. Average items #2 and #9 of Section Three.
- C. *Satisfaction with co-workers*. Average items #4, #7 and #12 of Section Three.
- D. *Satisfaction with supervision*. Average items #5, #8 and #14 of Section Three.

VI. INDIVIDUAL GROWTH NEED STRENGTH. The questionnaire yields two separate measures of growth need strength, one from Section Five (the “would like” format) and one from Section Six (the “job choice” format).

- A. “*Would like*” format (Section Five). Average the six items from Section Five listed below. Before averaging, subtract 3 from each item score; this will result in a summary scale ranging from one to seven.
The items are:
#2, #3, #6, #8, #10, #11
- B. “*Job Choice*” format (Section Six). Each item in Section Six yields a number from 1-5 (i.e., “Strongly prefer A” is scored 1; “Neutral” is scored 3; and “Strongly prefer B” is scored 5). Compute the need strength measure by averaging the twelve items as follows:
#1, #5, #7, #10, #11 (direct scoring)
#2, #3, #4, #8, #9 (reversed scoring – i.e., subtract the respondent’s score from 6)
Note: To transform the job choice summary score from a 5-point scale to a 7-point scale, use this formula:
$$Y = 1.5X - .5.$$
- C. *Combined Growth Need Strength Score*. To obtain an overall estimate of growth need strength based on both “would like” and “job choice” data, first transform the “job choice” summary score to a 7-point scale (using the formula given above), and then average the “would like” and the transformed “job choice” summary scores.

VII. MODIFIED MOTIVATING POTENTIAL SCORE.

Modified Motivating Potential Score (MMPS) = Job significance & Feedback x (Skill Variety + Decision Making & Autonomy)/2 x (Promotion + Working Conditions+ Social Environment + Task identity)/4 x (Work Load + Work Benefits + Physical Effort + Technology Use)/8

VI. LABOR MARKET CONDITIONS.

- A. *Geographical Location*. Average the following items:

Section Seven: #1
#5

- B. *Unionization*. Average the following items:

Section Seven: #2
#10

- C. *Labor Status*. Average the following items:

Section Seven: #3
#11

D. *Job Matching*. Average the following items:

Section Seven: #4
#13

E. *Private and Public Sector*. Average the following items:

Section Seven: #6
#14

F. *Foreign and National Workers*. Average the following items:

Section Seven: #7
#15

G. *Formal and Informal Jobs*. Average the following items:

Section Seven: #8
#12

H. *Educational and Labor Market Gap*. Average the following items:

Section Seven: #9
#16

VII. RETENTION. Average items #1, #2, #3, #4 and #5 of Section Eight.

VII. CULTURE. Average items #1, #2, #3, #4 and #5 of Section Nine.

Appendix D

Invitation letter sent to fresh graduates in the form of Informed Consent

University of Nicosia
PhD program in Business Administration

Informed Consent Form for fresh graduates in Lebanon and who we are inviting to participate in research titled “Development of an Integrated Framework to Examine the Effects of Labor Market, Job and Personal Characteristics on the Retention of Fresh Graduates”

This informed consent form has two parts:

- **Information Sheet: to share information about the study with you**
- **Certificate of Consent: for signatures if you choose to participate**

You will be given a copy of the full Informed Consent Form

Part I: Information Sheet

I am Carole Serhan, a student at the University of Nicosia and I am conducting a study examining the factors affecting the retention of fresh graduates in order to create a framework for retaining fresh graduates in the Lebanese labor market. I am going to give you information and invite you to be part of this research which I am doing for my PhD at the University of Nicosia. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research.

Retaining fresh graduates is being one of the most difficult challenges facing organizations nowadays. I want to explore the core job dimensions, the Lebanese labor market conditions and the personal characteristics that influence fresh graduates' retention in order to provide practical recommendations for the retention of fresh graduates in general and practical recommendations for the Lebanese government employment retention strategies. This should be of a great value to the Lebanese Government allowing it to maximize the sustenance of its fresh graduates in the challenging local Labor market. I believe that you can help me by telling me about your experience as a fresh graduate. I also would like to know more about your expectations for long job sustenance because this knowledge might help me to learn how to better retain fresh graduates in the Lebanese labor market. You are being invited to take part in this research because I feel that your experience as a fresh graduate can contribute much to my understanding and knowledge of the factors affecting the retention of fresh graduates in Lebanon. Your participation in this research is entirely **voluntary**. It is your choice whether to participate or not. Kindly note, in case you decide not to participate this will not affect you in any way and in case you decide to participate and then change your mind later on then you can stop participating. If you decide to participate, you will be asked to answer the questions of the questionnaire that should take between fifteen to twenty minutes and which will be provided to you through phone call and filled out by me. If you feel that you don't want to answer any of the questions included in the questionnaire, you can easily skip them and move on to the next question. The information

recorded is totally **confidential** and your name is not going to appear on the sheets, only a number will identify you and no one else except me will have access to your answers. Besides, any information about you is not going to be shared with anyone outside the research study and any information that is going to be collected from the research study is going to be kept private and confidential. No names or personal information will appear anywhere in the dissemination of results and use of findings.

In this research, there are no known risks to you. In addition the topic and research questions and objectives are not considered to be “sensitive”. However, the benefits for the Lebanese labor market may be great because new data about the factors affecting the retention of the Lebanese fresh graduates will help to solve a crucial Lebanese employment retention problem.

Kindly note, in case you wish, you can receive a summary of the results and in case you have any questions later on you can contact me any time at my following contact address (Carole Serhan / Bterram El Koura – North Lebanon – Hanna Serhan Bldg. / Tel no. 009613903226 / e-mail: caroleserhan@hotmail.com).

This research has been approved by the Research Ethics Committee (REC) of the University of Nicosia. If you wish to find more about the REC, kindly contact the University of Nicosia (University of Nicosia / 46, Makedonitissas Avenue, P.O. Box 24005, 1700 Nicosia , Cyprus / Tel no. 0035722841500 / e-mail: university@unic.ac.cy).

Part II: Certificate of Consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this research.

Print Name of Participant _____

Signature of Participant _____

Date _____
Day/month/year

Appendix E

Invitation letter sent to employers in the form of Informed Consent

University of Nicosia
PhD program in Business Administration

Informed Consent Form for employers in Lebanon and who we are inviting to participate in research titled “Development of an Integrated Framework to Examine the Effects of Labor Market, Job and Personal Characteristics on the Retention of Fresh Graduates”

This informed consent form has two parts:

- Information Sheet: to share information about the study with you
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Part I: Information Sheet

I am Carole Serhan, a student at the University of Nicosia and I am conducting a study examining the factors affecting the retention of fresh graduates in order to create a framework for retaining fresh graduates in the Lebanese labor market. I am going to give you information and invite you to be part of this research which I am doing for my PhD at the University of Nicosia. You do not have to decide today whether or not you will participate in the research. Before you decide, you can talk to anyone you feel comfortable with about the research.

Retaining fresh graduates is being one of the most difficult challenges facing organizations nowadays. I want to explore the core job dimensions, the Lebanese labor market conditions and the personal characteristics that influence fresh graduates' retention in order to provide practical recommendations for the retention of fresh graduates in general and practical recommendations for the Lebanese government employment retention strategies. This should be of a great value to the Lebanese Government allowing it to maximize the sustenance of its fresh graduates in the challenging local Labor market. I believe that you can help me by telling me about your experience with fresh graduates at work. I also would like to know more about fresh graduates' expectations for long job sustenance because this knowledge might help me to learn how to better retain them in the Lebanese labor market. You are being invited to take part in this research because I feel that your experience as an employer dealing with fresh graduates can contribute much to my understanding and knowledge of the factors affecting the retention of fresh graduates in Lebanon. Your participation in this research is entirely **voluntary**. It is your choice whether to participate or not. Kindly note, in case you decide not to participate this will not affect you in any way and in case you decide to participate and then change your mind later on then you can stop participating. If you decide to participate, I will ask you to answer the questions of the interview that should take between fifty to sixty minutes. If you feel that you don't want to answer any of the questions asked, you can easily skip them and move on to the next question. The information recorded is totally **confidential** and your name is not going to appear on the sheets, only a number will identify you and no one else except me will have access to your answers. Besides, any information about you is not going to be shared with anyone outside the research study and any information that is going to be collected from the research

study is going to be kept private and confidential. No names or personal information will appear anywhere in the dissemination of results and use of findings. During the interview process, I may use an electronic recorder so as to ensure that I have understood clearly the discussion when analyzing my notes later. After data analysis all documents and recordings will be destroyed. However, in case you prefer that no electronic recorder be used, I will not use one.

In this research, there are no known risks to you. In addition the topic and research questions and objectives are not considered to be "sensitive". However, the benefits for the Lebanese labor market may be great because new data about the factors affecting the retention of the Lebanese fresh graduates will help to solve a crucial Lebanese employment retention problem.

Kindly note, in case you wish, you can receive a summary of the results and in case you have any questions later on you can contact me any time at my following contact address (Carole Serhan / Bterram El Koura – North Lebanon – Hanna Serhan Bldg. / Tel no. 009613903226 / e-mail: caroleserhan@hotmail.com).

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Part II: Certificate of Consent

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this research.

Print Name of Participant _____

Signature of Participant _____

Date _____
Day/month/year

