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MULTIVARIATE ANALYSIS OF EMPLOYEE CAREER CHANGES

Submitted by

CANAN YILDIRIM DEMİRKIRAN

112801025

ADVISOR: DOÇ.DR. MEHMET GENÇER

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ÇALIŞANLARIN KARIYER DEĞİŞİMLERİNİN

ÇOK DEĞİŞKENLİ ANALİZİ

Canan Yıldırım Demirkıran

112801025

Tez Danışmanı: Doç. Dr. Mehmet Gençer

Jüri Üyesi: Prof. Dr. Hayat Kabasakal

Jüri Üyesi: Prof. Dr. Gonca Günay

Jüri Üyesi: Doç. Dr. Deniz Kantur

Jüri Üyesi: Doç. Dr. Müjdelen Yener

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To my family with
love...

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LIST OF ABBREVIATIONS

HCM..... Human Capital Management

HR..... Human Resources

HRD.....Human Resources Development

HRITNA....Professionals who have worked in HR and IT roles as well as roles that
are not related with HR and IT such as finance.

HRIT.....Professionals who have worked in HR and IT roles

HRNA.....Professionals who have worked in HR as well as in roles that are not
related with HR and IT such as finance.

IT.....Information Technology

ITNA.....Professionals who have worked in IT as well as in roles that are not
related with HR and IT.

MIS.....Management Information Systems

SME.....Small Medium Enterprise

VP.....Vice President

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DISSERTATION ABSTRACT

Canan Yıldırım Demirkıran, “Multivariate Analysis of Employee Career Changes”

The present study explores the topic of Employee Career Development. The study aims to analyze the relationship between the career progress of professionals with their personal and professional attributes including sociodemographic, social and human capital aspects.

The sociodemographic characteristics include age, gender and marital status. The human capital of the individuals are investigated through education level, foreign language knowledge, total professional life experience, total number of job changes, rotation, and graduation from a top university. The social capital information on the other hand, is collected through the group affiliations. For this purpose the professional, non-professional affiliations and early career affiliations are taken under close focus.

The study applies quantitative research methodology. Within this scope data is collected through the resumes of 2529 professionals', who have worked in any time period of their career lifespan, on human resources or information technology or any other functional areas such as finance, sales etc. The career management research literature has specific focus on a particular area, such as a specific company, or a university graduates' alumni group. One of the areas that make this study a unique one is that the professionals under focus have experience from various industries, various companies and are coming from different backgrounds. Descriptive statistics and multinomial logistic regression models are applied to identify how the

sociodemographic, social and human capital characteristics of the individuals are affecting the professional career progress.

Human and social capital are expected both to be contributing to professionals' careers. Within the career research literature, it is expected not to ignore one another when it comes to career development. However, the social capital is usually approached through a specific network definition such as networks of the professionals within the corporation that they are working for, or networks of certain academic interactions. There has not been any study that takes social capital from professional, non-professional and early career affiliations perspective and with this variety of professionals from different backgrounds. Besides this, another gap in the literature is that researches mainly focused on a particular industry, most commonly the academy, and particular corporations without any hybrid approach on social and human capital aspects on career progress. This gap is expected to be fulfilled within this study.

The social capital analysis results, together with the hybrid approach of social and human capital analysis through this variety of professionals, independent of industry, corporation or any educational background, are the areas that, this study is contributing to the literature.

The findings of this research can be grouped under sociodemographic, social and human capital. Using multinomial logistic regression analyses, age, gender, marital status, graduation from a top ten university, graduating from a university or higher degree, number of months worked, number of job changes, rotation, and knowledge of foreign language are found to be predictors of career progress. Results also show

that social capital that is defined through non-professional affiliations and early career affiliations are also predictors of career progress. The results also indicate that the place of residence being Istanbul and professional career affiliations do not have any significant contribution to the career progress. In contrast to findings of previous studies, educational level is not a strong predictor of career progress. However, graduating from a university or higher level is found to support career progress of professionals. From a sociodemographic perspective, the findings are in alignment with Super's Lifespan Theory, Human Capital Theory and Social Capital Theory.

Out of these results, one of the contributions to the theory is that this study has come up with a hybrid model of career achievements including human and social capital together. The early career affiliations and non-professional affiliations are found to be significant in the overall career achievements from a social capital perspective. The study has also contributed to the practice of human capital management as well. The major implications to practice are for the corporations. The corporations can encourage their employees to invest on their foreign language knowledge and educational level especially university levels and above. Corporations that want to build their management team from inside, are encouraged to support their internal rotation programs and their employees education, especially PhD degrees.

Another set of implications is for the professionals. The professionals are encouraged to have nonprofessional affiliations, to learn foreign languages and to increase their education level. One suggestion for the universities is to promote the early career affiliations of the university students which would pay back through the increased social capital of the individuals, serving for their career achievements. Finally the high school teenagers are encouraged to target for the top ten universities.

Key Words: Human Resources, Career Development, Human Capital, Social Capital.

TEZİN ÖZETİ

Canan Yıldırım Demirkıran, “Çalışanların Kariyer Değişimlerinin Çok Değişkenli Analizi”

Bu tez çalışması kariyer gelişimi konusunu incelemektedir. Çalışma, profesyonellerin kariyer hareketleri ile sosyo demografik, sosyal ve beşeri sermaye özellikleri arasındaki ilişkiyi analiz etmeyi amaçlamaktadır.

Sosyodemografik özellikler arasında yaş, cinsiyet, medeni durumu bulunmaktadır. Bireylerin beşeri sermayesi eğitim düzeyi, yabancı dil bilgisi, toplam çalışma süresi, toplam iş değişikliği sayısı, rotasyon deneyimi ve üst düzey bir üniversiteden mezun olup olmaması yoluyla elde edilir. Öte yandan, üye olunan topluluklar ve ikamet yeri üzerinden sosyal sermayenin çalışanların kariyer değişiklikleri üzerinde olası etkileri saptanmaktadır. Bu amaçla, çalışanların profesyonel olan ve profesyonel olmayan kurum üyelikleri ile erken iş hayatı dönemi, üniversite topluluk üyelikleri ele alınmaktadır.

Çalışmada nicel araştırma yöntemleri uygulanmıştır. Bu kapsamda, kariyerlerinin herhangi bir döneminde insan kaynakları ile bilgi teknolojileri ve diğer uzmanlık alanlarında çalışmış olan 2529 profesyonelin özgeçmişi üzerinden veri toplanmıştır. Kariyer yönetimi literatüründe, belirli bir uzmanlık alanı, belirli bir şirket veya belirli bir üniversite mezunlar grupları üzerine daha çok odaklanıldığından; sektör, şirket ve okul gibi ortak noktası bulunmayan bir profesyonel grup üzerinden kariyer gelişiminin incelenmesi, bu çalışmayı farklı kılan unsurlardan birini oluşturmaktadır. Bireylerin sosyo demografik, sosyal ve beşeri sermaye özelliklerinin kariyerlerini

nasıl etkilediğinin tesbiti için tanımlayıcı istatistiksel analizler ve çok değişkenli lojistik regresyon modelleri kullanılmıştır.

İnsan sermayesi ve sosyal sermayenin, ikisinin de profesyonellerin kariyerlerine katkıda bulunması beklenmektedir. Literatürdeki bazı kariyer araştırmalarında da kariyer gelişiminde bu iki sermayenin birbirini görmezden gelmemesi beklenmesi gerektiği vurgulanmaktadır. Bununla birlikte, literatürde sosyal sermaye, genellikle, bireylerin içinde çalıştıkları kurumun profesyonel ağı gibi sınırlı bir ağ tanımına odaklanır. Bu çalışma, sosyal sermaye konusunu mesleki, mesleki olmayan ve erken meslek dönemi topluluk üyelikleri üzerinden ele alması açısından farklıdır ve çalışmanın sosyal sermayeyle ilgili sonuçları, bu çalışmanın teoriye katkıda bulunduğu alanlardan biri olarak paylaşılabilir.

Bu araştırmanın bulguları, sosyo demografik, sosyal ve beşeri sermaye olarak 3 ana grup altında toplanabilir. Çok değişkenli lojistik regresyon analizleri kullanılarak yaş, cinsiyet, medeni durum, ilk on üniversiteden mezun olup olmama, toplam çalışma süresi, üniversite ve üstü bir eğitim seviyesine sahip olma, iş değişikliği sayısı, rotasyon ve yabancı dil bilgisinin kariyer gelişiminin destekleyicileri olduğu tesbit edilmiştir. Sonuçlar aynı zamanda, profesyonel olmayan ve erken iş hayatı dönemi, üniversite topluluk üyelikleri yoluyla tanımlanan sosyal sermayenin, kariyer ilerlemesine anlamlı katkıları olduğunu göstermektedir. Elde edilen sonuçlar, ikamet yerinin İstanbul olmasının ve profesyonel üyeliklerin, kariyer gelişimine anlamlı bir katkıda bulunmadığını göstermektedir. Önceki çalışmaların bulgularının aksine, eğitim düzeyi, kariyer gelişiminin güçlü bir belirleyicisi değildir. Ancak üniversite mezunu ve üstü bir dereceye sahip olmanın kariyer gelişiminde bir katkısı olduğu saptanmıştır. Sosyo demografik açıdan bakıldığında, bulgular Süper'in Yaşam Boyutları Teorisi, Beşeri Sermaye Teorisi ve Sosyal Sermaye Teorisi ile uyumludur.

Bu sonuçların haricinde, bu çalışmanın teoriye olan katkılarından biri, insan ve sosyal sermayenin beraber ele alındığı bir hibrit model olarak kariyer ilerlemesinin incelenmesidir. Bir başka katkı da, profesyonel olmayan üyelikler ve erken kariyer yaşamında kurulan bağlantıların sosyal sermaye üzerinden genel kariyer ilerlemesine sağladığı anlamlı katkının öneminin ortaya çıkmasıdır.

Çalışma aynı zamanda insan kaynakları uygulanmasına da katkıda bulunmaktadır. Bu çıktılar doğrultusunda, kurumlar için bir öneri çalışanlarını yabancı dil ve eğitim düzeylerine, özellikle üniversite ve üstüne, yatırım yapmalarının teşvik edilmesidir. Bir diğer öneri, yönetim ekibini içeriden yetiştirmeyi hedefleyen kurumların, çalışanlarının iç rotasyon programlarına katılmalarını teşvik etmesi ve doktora eğitimlerini desteklemesidir. Bu çalışmanın çalışanlara yönelik çıktıları, çalışanların yabancı dil öğrenimlerine, eğitimlerine yatırım yapmaları ve sosyal üyeliklere katılmalarının teşvik edilmesidir. Ayrıca yüksek öğretim kurumlarının, üniversitelerin, öğrencilerinin üniversite klüp üyeliklerini teşvik etmeleri önerilmektedir. Bu üyeliklerin, öğrencilerin kariyer hayatlarında sosyal sermayeleri üzerinden olumlu geri dönüşleri olması beklenmektedir. Son olarak lise öğrencilerinin hedeflerini yüksek seviyedeki üniversitelerde tutmaları önerilmektedir.

Anahtar Kelimeler: İnsan Kaynakları, Kariyer Gelişimi, İnsan Sermayesi, Sosyal Sermaye.

1. CHAPTER I

INTRODUCTION

The Employee Career Development is a subject of attention point in human capital management, especially in today's digital era. According to the Encyclopedia of Human Resource Management, the term career has several different meanings. The primary meaning is stated to be the occupation for which an individual has been educated on; the job; the individual's line of work or occupation; the specialty. Career planning on the other hand is defined as the process of formulating the direction of one's career. This planning is supported from the organizations' point through career management which is defined as an organization's efforts to help managing careers through career paths that includes the relationships among jobs or levels on the corporate hierarchy and which training or other experiences and qualifications are needed for the professionals to move forward (Yindhom et al., 2012).

Here, the definition of Arthur, Hall and Lawrance can be taken as a reference for including almost all of these three major definitions of specialization, planning and management, that is "The evolving sequence of an individual's work experiences over time" (Arthur et al., 1989). As shared by Cullen, the concept of "career" has become the dominant mode of thinking about the "lifespan" of one's working life in contemporary late capitalist society (Cullen, 2013).

It is not very surprising that this dominant mode of thinking is almost gaining the majority of attention from the top levels of management as well. According to Manpower's 2016 - 2017 Talent Shortage Survey, 40% of global employers are

reporting talent shortages and hence are the number of employers, that are focusing on training and developing existing employees to fill open positions, are reported as being doubled since 2015. Especially considering the upcoming Y generations, who are expected to have higher tendency to change jobs frequently than their older coworkers (Catalyst, 2001), it will be more challenging for the organizations to maintain employee retention.

This research will focus on professional's career movements and how their professional attributes can guide us to their intentions for career progress, simply understanding the changes in career and coming up with some implications for individuals and as well as corporations on career management. One of the major areas of interest will be the affiliations of the professionals. According to Stanley, a social network is defined as a social structure that is made up of a set of social actors like individuals or organizations and a set of ties between these actors (Stanley, 1994). In this research, the set of social actors under focus is over 2500 individual professionals, who have worked in Human Resources or Information Technologies or any other specialization area in any period of their professional lives.

The major question behind this research is to explore professionals' career movements. Until now, the literature includes employee career progress and turnover analysis through qualitative and quantitative techniques with interviews and a limited number of researches through resume analysis, that especially focus on academicians. Identifying the social capital effect on the professionals' career progress, which similarly has not been studied in this cross profession, through this amount of professionals' resumes, is expected to be one of the major contributions of this work. The resume data under focus is over 2500 CV's of professionals, belonging to a local recruitment portal in Turkey which accepts Turkish and International candidates

resumes for application from Turkish and as well as international markets. The target customers are either Turkish investors operating in Turkey and international markets as well as multinational corporations operating in Turkey. The second major contribution of this research is that, this research will attempt to examine the relationship among career change and socio demographic factors like age, gender, marital status; professional factors such as education level, graduation from a top university, number of job changes, rotation, total months of job experience, knowledge of a foreign language and social factors such as place of residence and professional, non-professional and early career affiliations.

According to this objective of the study, the following chapter is dedicated to the literature search on career management with a specific focus on human capital and social capital aspects. Here, various human resources management literature is reviewed and shared. The third chapter focuses on the theoretical background and methodology. Here, the theories that will be utilized throughout this research, which are human capital theory, social capital theory and reproduction model theory, Super's Life Span Life Space are further detailed. The section ends with a proposed model, research focus and research questions.

Chapter IV is dedicated to the research design, in which the hypotheses, research design, the methodology and data collection procedures are presented. Chapter V presents the research results through data analysis, hypothesis testing and descriptive statistics. Chapter VI is dedicated to the discussion of findings, where the research results are further discussed and the revised model of this research is presented. The final section, conclusion, is dedicated to the summary of the study and implications to theory and to practice, as well as limitations of the study and suggestions for the future work.

In alignment with the literature, the findings of this research demonstrate that, human and social capital are contributing positively to career progress. Within this scope age, gender, marital status, graduation from a top ten university, number of months worked, number of job changes, rotation, graduation from a university or higher level, knowledge of foreign language are found to be predictors of career progress. Results also indicated that social capital, that is defined through non-professional affiliations and early career affiliations are also predictors of career progress. Interestingly, professional affiliations did not possess a strong relationship with career progress. Similarly, the results also did not indicate any significant contribution of place of residence, on career progress. In contrast to previous studies' findings, the educational level is not found to be a strong predictor of career progress. However, graduating from a university or higher levels has demonstrated support for career progress.

This study contributed to the literature with a hybrid model of career progress including human and social capital together. Another contribution is that early career affiliations and non-professional affiliations are found to be significant in the overall career achievements from a social capital perspective.

The study has also contributed to the practice of human capital management as well. The major implications to practice are for the universities to promote the early career affiliations of the university students which would pay back through the increased social capital of the individuals, serving for their career achievements. One suggestion for the corporations is to encourage their employees to invest on their foreign language knowledge and educational level especially university levels and above. Another suggestion for the corporations is that, corporations that want to build

their management team from inside are encouraged to support internal rotation programs.

2. CHAPTER II

LITERATURE REVIEW

The literature review of this research is presented in two main sections, which are the human capital and the social capital. The first section is dedicated to the human capital management literature and its relation with career management. Similarly the second section is dedicated to the literature review of social capital management and its relation with career management.

2.1. THE HUMAN CAPITAL AND CAREER MANAGEMENT

As stated by Audrey and Young, employee career, has been a key notion in twentieth century (Collin & Young, 2000). According to Hall, career is the individually perceived sequence of attitudes, and behaviors associated with work related experiences and activities over the span of the person's life (Hall, 1996).

In alignment with Collin; Cappellen and Janssens define the path metaphor of a career, consisting of a series of moves (Cappellen & Janssens, 2005) and that it has a direction and purpose linking successive positions (Adamson et al., 1998). The different positions that individuals hold as they progress along their career path can be viewed as different stages in the career path.

Sears, defines career development as the total constellation of economic, sociological, psychological, educational, physical, and chance factors that combine to shape one's career (Sears, 1982).

Career stages are characterized by various important activities (Levinson et al., 1978) in which individuals are expected to master different elements of work (Cohen, 1991). This can be exemplified with a human resources specialist starting as an associate, and then moving to specialists/generalists and moving forward to senior roles and then to human resources manager (i.e recruitment manager) roles moving towards HR directorate and VP positions. As stated by Arthur and Rousseau, all these different steps in a career can refer to different skills and experiences required and gained (Arthur and Rousseau, 1996) which may allow individuals to be helpful for the professionals to advance further in their career path.

Lellatchitch states that regarding the employer's value specific human capital; it is important for individuals to have the capital valued by the career in order to advance in the career (Iellatchitch et al., 2003). Therefore, individuals develop their human capital through personal, educational and professional development, that can be used to advance in a career (Iellatchitch et al., 2003). These personal, educational and professional development are exemplified and supported by Becker, Wright and McMahan further as investments in education and training that would help the professionals to advance within the career (Becker, 1964; Wright and McMahan, 2011).

As a mean for human capital, education level is another area of focus when it comes to career development analysis. Strober, defines the well-known advice of "if you

want a good job, get a good education” as the essence of human capital (Strober, 1990).

According to Bills, highly schooled become the highly placed in job hierarchies (Bills, 2016), which is also in alignment with Sorokin’s famous paper. Sorokin emphasized the significance of educational degrees on professional life as follows:

“In present Western societies, the schools represent one of the most important channels of vertical circulation. This is manifested in hundreds of forms...Many fields of social activity (especially professions) are practically closed to a man who does not have a corresponding diploma; a graduate is often paid better than a non-graduate at the same position”. (Sorokin, 1927/1959, pp. 170–171)

Within the career cycle, leaving a position, a company is a key step in the career move as this life span is actually a continuous cycle of hire to exit and period in between. Ingersoll, Lynch and Tucky, define the employee turnover from an organization perspective that includes employee migration to other jobs within the organization, involuntary attrition (e.g., age retirement and death), and voluntary attrition (e.g., occupational change and early retirement) (Ingersoll, 2002; Lynch & Tuckey, 2004).

There have been a number of researches on turnover. The turnover literature usually looks at the internal dynamics that the employee is experiencing within their latest

company. Loene M. Howes and Jane Goodman-Delahunty focus on current and former Australian teachers and police officers, through an online survey, and applying a logistic regression analyses. Here boundaryless careers are characterized by working across or beyond organizational boundaries in terms of both physical and psychological movement (Rousseau, 1996; Sullivan & Arthur, 2006). The definition of psychological movement refers to the degree to which someone willingly and actively developing and maintaining working relationships across organizational boundaries (Briscoe et al., 2006). They confirmed that embeddedness related variables such as financial responsibility and age predicted, having made an active decision to stay in the chosen occupation, and boundaryless career attitudes predicted having left that occupation to change careers. Another fact is that years in the career predicted a history of mobility and years of career-specific education did not add predictive utility to the model (Howes & Goodman, 2015).

Another research by Griffeth, R. W., Hom, P. W., & Gaertner, includes a meta-analysis on employee turnover through different models that were applied on 1995 and extended to 2000's. The meta-analysis of demographic predictors, in their model included cognitive ability, education, training, marital status, kinship, children, weighted application, race, sex, age and tenure (Griffeth et al., 2000). A second, meta-analysis of job satisfaction, organization factors, and work environment factors included the following: overall job satisfaction, compensation pay, compensation pay satisfaction, compensation distributive justice, leadership supervisory satisfaction, leadership leader member exchange, coworker work group cohesion, coworker satisfaction, stress - role clarity, stress role overload, stress role conflict, overall stress, promotional chances, participation, instrumental communication. A third meta-analysis, on job content and external environment factors including job content - job scope, routinization, work satisfaction, job involvement, external environment - alternative job opportunities, comparison of alternatives with present job. Another

meta-analysis was performed by Griffeth, R. W., Hom, P. W., & Gaertner on other behavioral predictors such as lateness, absenteeism and performance. The result of this study indicated that managerial interventions may most effectively defer quits. On top of that, the role of contingent rewards is found to help explaining the performance turnover relationships. Another interesting finding was that women's quit rates helped to identify that women are more likely to remain as they age than are men (Griffeth et al., 2000).

Another aspect of the career studies is commitment. Porter, Steers, Mowday, and Boulian define organizational commitment as the strength of an individual's identification and involvement in a particular organization. This definition of commitment is stated to be characterized by at least three factors. The first factor is defined as a strong belief in and acceptance of the organization's goals and values. The second factor is defined as willingness to exert considerable effort on behalf of the organization and finally the third factor is defined as a definite desire to maintain organizational membership (Porter et al., 1974).

Another well-known study on commitment is conducted by Meyer, Allen, and Smith, where they have applied a questionnaire to two different groups of nurses, students and registered nurses. The major output of the study was that not only different commitments to same entity like the organization but also commitment to different entities might be significant in understanding the behaviors like turnover and dissatisfaction (Meyer et al., 1993).

Besides education, experience is also an important contributor to the human capital. Becker states that education and experience together underlie the concept of human capital (Becker, 1975).

Up to this section, the literature review on human capital has been highlighted. The major contributor of human capital has been identified as the educational investment one has collected through the prevocational time and the professional experience. The following section is dedicated to discuss the theory of social capital.

2.2. THE SOCIAL CAPITAL AND CAREER MANAGEMENT

According to Friesen, if human capital reflects ability, social capital reflects opportunity. Hence, the social capital is another significant factor under focus in this study. Friesen states that the definitions of social capital are centered on the core idea that social networks possess value. This value is stated to be included through connections among individuals within networks and between networks (Friesen, 2011).

In alignment with Friesen, a support for the hybrid model is suggested by Scott E. Seibert, Kraimer and Liden, who emphasize that both the social capital and careers literatures can be enhanced through integration and there is a social capital effect on the career progress. Through online interview on 448 professionals (a particular alumni group of Midwestern university), they have primarily enhanced research on social networks by integrating contending theories of social capital, testing an analytical distinction between network structure and network resources and testing

for their relationship. They further state that they have extended the social capital and careers literatures by testing for the effects of social capital on a full set of career outcomes. They have focused on contacts in other functions, contacts at higher levels, access to information, access to resources, career sponsorship, salary, promotions, career satisfaction, network size, gender, age, spouse employment, living in a metropolitan area. As a result, this study supported the fact that social resources were in turn positively related to current salary, number of promotions over the career, and career satisfaction through their positive relationships with three measures of network benefits that are access to information, access to resources, and career sponsorship (Scott et al., 2001).

Another study on social capital effect on career progress, by Kang et al., on career development and social capital focuses on international marriage immigrants especially women, who move to another country. The study conducted in South Korea shows that due to lack of social capital in the new country, immigrant women are found to experience significant barriers to gaining employment (Kang et al., 2015).

Lin states that women's networks commonly are more family-based than men's which is also in alignment with the fact that women tend to work in usually smaller, more localized, and more domestic organizations (Lin, 2000). Having children is stated to be another fact that reduces the woman's social network (Lin, 2000). In general, marriage immigrant women have found to have smaller, more homogeneous networks largely composed of women who have similar, lower, hierarchical positions (Lee, 2010).

Another study by Marcia R. Friesen, on social capital, is a longitudinal study focusing on 39 immigrant engineers during and after their participation in a university-based qualifications recognition program in Canada during a period from 2004 through 2009. The study was conducted through group interviews, survey questionnaires and internship reports (Friesen, 2011). Here, the cultural capital is operationalized through IEEQ registration which is defined as, a foreign qualifications recognition program, where internationally educated engineers can fulfill the requirements for academic qualification, including formal recognition of foreign credentials, cultural orientation and language development. It is developed in 2003 at the University of Manitoba, Canada, to address qualifications recognition for immigrant engineers (Friesen, 2011). The result of this study indicated that the cultural knowledge, social capital and linguistic capital also facilitates what engineers do in daily behaviors that reflect the habits, heuristics and norms of the Canadian professional engineering. Friesen further emphasizes that the range and importance of these multiple forms of capital were recognized for successful professional integration as an immigrant, and that without them, it would be very limited to get true opportunities for re-entry into the engineering profession in Canada (Friesen, 2011).

A recent paper on career development, written by Christophersen, examines the successive stages of the career path for psychologists who commit to spending their professional lives working in academic health centers (, 2017). Here, the key factors for success at each stage are described, as the steps required for progressing to subsequent stages of professional development. This paper does not include any mathematical analysis. It is rather stated as a roadmap suggestions that the author has shared based on his 45-year career. Interestingly within this study, Christophersen also emphasizes the power of networking through having a mentor at the beginning of the career, as well as direct networking though attending one or two APA or similar annual conventions as well as becoming active with state psychological

associations, serving on specialty boards, giving workshops and attending presentations on specific areas of interest or expertise. All these networking activities are stated to be good ways to grow the professional network which would positively serve for climbing the career steps (Christophersen, 2017).

Tai et al. analyzed the 3359 students within United States who responded to the question about their age 30 career expectation as eighth graders in 1988 and who also obtained baccalaureate degrees from 4-year colleges or universities by 2000. The analysis's independent variable is stated to be derived from the survey question of : "What kind of work do you expect to be doing when you are 30 years old?" where students were then given a list of employment options and required to select only one. This selection list is categorized into two groups: science-related and non-science career expectations, creating the Career Expectation independent variable. Furthermore, the academic backgrounds of the students (i.e science and mathematics achievement scores); also students' demographics including gender and ethnicity; as well as students' academic characteristics such as enrollment in advanced versus regular mathematics and science classes; and parents' background including highest educational level and professional versus nonprofessional employment. The multinomial logistic regression was applied on the model. As a result it is found out that young adolescents who expected to have a career in science were more likely to graduate from college with a science degree, emphasizing the importance of early encouragement (Tai et al, 2006).

Goudard and Lubrano state that the theory of human capital, is too short for explaining the existing diversity of scientific output in academy. Hence, their study introduces social capital as a necessary complement to explain the creation of scientific human capital. Gouard and Lubrano further argue that Coleman (1988)

provided justifications for showing how the two notions of human capital and social capital can work together but did not include any formal mathematical model. Hence, Goudard and Lubrano aimed to combine into a single econometric model the individual publishing behavior explained by the life-cycle model together with individual effects and the social capital 'model' represented by institutional variables. As a result of their study they social capital from an international collaboration perspective is found to be profitable for individuals while internal collaboration is not (Goudard & Lubrano, 2013).

Goudard and Lubrano, have introduced social capital as a necessary complement to explain the creation of scientific human capital. They further argue that human capital was the object of considerable modeling efforts, however the notion of social capital coming mainly from the sociological literature includes very little modeling. Gaudard and Lubrano applied their model to academicians in EU. The social capital in this study is represented with the social relations inside a department that facilitates individual scientific production by means of collaboration and of social networks. The relations between the researchers and the departments were named as affiliations and contributed to the social capital. The proportion of papers that are written alone and with co-authors belonging all to the same department is taken as a point of reference for the degree of cooperation. The result of this study indicated that the international collaboration is profitable for individuals while internal collaboration is not (Goudard and Lubrano, 2013).

Coleman (1988) provides justifications for showing how the two notions (human capital and social capital) can work together, by taking the example of education to build his demonstration but he provides no formal mathematical model. Within this study Coleman has illustrated the influence of social capital at the family level,

through collaborative attitudes of parents helping children for their homework (Coleman, 1988).

Another study on social capital and gender effect is done by Metz and Tharenou, where they have assessed if human capital is more related to women's advancement to low levels such as supervisory and junior management and if social capital is more related to their advancement to high levels, such as middle and senior level management in Australian banks. This study was accomplished through qualitative data of 848 questionnaires that are received from different levels of management. The results did not support differential prediction hypotheses. The human capital explained most of women's advancement at all levels in Australian banks and social capitals effects were stated to be negligible (Metz and Tharenou, 2016).

In agreement with Tharenou, Lin focused on gender differences especially in the perspective of accessing to social capital resources to determine if the differences occurred because of capital deficits, return deficits, or both. As a result of his study men were identified as knowing a greater variety of people from all occupations, and including especially individuals in higher status occupations. This study showed that women had a capital deficit relative to men because they had less access to individuals who could offer opportunity, influence or information to help with their careers (Lin, 2001).

Another recent study analyzing leadership through multinomial logistic regression, is a PhD thesis on Social Work leadership: Predictors of leadership positions in a sample of human service professionals, by Christa Countee-Gilliam (Countee-Gilliam, 2016). The aim of that research study was to investigate the factors that are

associated with having a leadership position in a human service agency in social work. The associations under focus within this research were between leadership positions in a human service agency and sociodemographic characteristics such as age, gender, ethnicity, marital and parenting status. The professional characteristics included Title IV-E participation, state of employment, years of experience, licensure, leadership training, management experience, the type of employment agency, the type of agency funding, and the population served (i.e urban/not urban); and leadership qualities such as style, skills and motivational needs. The target group under focus was 267 human service professionals and data is collected through a questionnaire and with snowball sampling. It uses multiple logistic and multinomial logistical regressions to examine the joint predictors for the specific types of leadership positions (overall leadership, agency/executive director, clinical director, program manager or director, supervisor, or other leadership).

In literature, the social capital and the relationship with career development is usually focused through the immigrant professionals (i.e R. Friesen R. M. from SSCI journals). There is a lack of analysis among the social capital and career progress within the non-immigrant professionals through affiliations.

The literature review on human resources and multinomial logistic regression also is quite a new area of research. The only paper from SSCI on multinomial logistic regression which is most relevant to human career lifecycle is found in “Coverage of the retirement system and factors associated to the access to a retirement pension in Mexico” which is not career management focused but rather targets the retired people. It estimates the pension coverage for the Mexican population over 65 years. The paper assesses the impact of pension systems in transitions to retirement of adults

in middle and advanced ages in Mexico (Murillo-Lopez and Venegas-Martinez, 2011).

Broadening up the research on other publications, the case study on a bank in India, the Industrial Credit & Investment Corporation of India, where Swarnalatha investigated the relationship between human resources development practices with managerial effectiveness, through job involvement, salary incentives and promotion, good-coordination with colleagues, capacity building training, admissible deadline and work load, liberty to take decision in job, recreation activities, presence mind of HR managers and commitment of HR managers through a set of questionnaire. The result of the paper indicates that interpersonal attitude and maintenance of effective environment in the bank have strongly influence on job involvement attitude of the employee (Swarnalatha, 2013).

Considering these gaps, this study targets to develop a more thorough understanding of social capital and human capital relationship with career development. The following section is dedicated to discuss the theoretical framework and methodology of this research.

3. CHAPTER III

THEORETICAL FRAMEWORK AND METHODOLOGY

This research applies a holistic approach, based on Human Capital, Social Capital and Reproduction and Super's Life Span Life Space Theories. Within this chapter, each of these theories will be detailed and then, the proposed model of the holistic structure of this study will be presented.

3.1. HUMAN RESOURCES MANAGEMENT AND ORGANIZATIONAL MANAGEMENT THEORIES

As stated by Dobbs et al., human capital theory is a well-accepted foundation of human resources development (HRD) research and practices (Dobbs et al., 2008). Before diving deep within the theory, firstly the definition of human resources and its evolvement throughout the history will be emphasized and later the focus will shift towards the human capital theory.

The idea and practices of human resources have been utilized throughout the history, in different subject areas including politics, management, and it has recently been further diversified in strategic management practices. According to Kertoff and Knights, since the 1980s the discourse of human resource management has begun to establish itself in management thinking and practice as well as within the academic and consultant literature (Kertoff and Knights, 1992). The academic studies on human resource management have started lately by the end of 19th century. The initial

course and textbooks appeared around after 1900's. Hoskin states that in the North American context, the genesis of Human Resources Management can be traced to the Harvard Business School MBA where Human Resources Management was established as an alternative to traditional courses in personnel management (Hoskin, 1990). This evolvement of human resources has put itself to a competitive edge as well.

According to Wright et al., the resource-based view of the firm has its roots in the organizational economics literature, where theories of profit and competition associated with the writings of Ricardo (1817), Schumpeter (1934) and Penrose (1989) focus on the internal resources of the firm. These are stated to be the major determinant of competitive success. Central to this understanding of the resource-based view of the firm stands the definitions of resources and sustained competitive advantage. Since, human resources meet the criteria that they are valuable, rare, inimitable and non-substitutable, it is stated to be one of the main reasons why developing human resources is seen as a source of sustained competitive advantage (Wright et al., 1994). Human resources hence has been seen as a resource from the resource based view.

We can see these effects in the naming conventions as well as the job definitions of the human resource departments. Human resource management departments are restructured and renamed as “Strategic Human Resources” and/or “Strategic Human Resources Shared Services” which was initially named as personnel department and afterwards human resources management department. This transformation is also aligned with the evolvement of human resources management in within the literature.

Further evolvement in the literature takes us from a resource based view where the employees are seen as resources towards human relations theory. According to La Rue, Human relations theory started evolving during the great depression when the theoretical insights into human relations positioned organizations to view employees as human beings with cares and needs, rather than as property or machines (LaRue et al., 2006). This further elaborated on the sustained competitive advantage, which sees human as actually not a property of organization as a resource, but rather focuses on their individual potentials based on their social needs including relations. Here, in our research we will focus on the human resources from this human relations theory point of view. As stated by LaRue, (LaRue et al., 2006) human relations focuses on behaviors and social interactions among workers with emphasis on belonging, recognition, and value of their roles within the organization. This is also in alignment with Brass, where the social network perspective is defined to extend HR research from focusing on individual actors to considering the relations among actors (Brass, 1995).

Pierre Bourdieu defines capital as, ‘the goods material and symbolic, without distinction, that present themselves as rare and worthy of being sought after, in a particular social formation’ (Bourdieu, P., 1986).

According to Becker, the human capital refers to the studies of investments, of individuals, organizations, or nations that accumulate stocks of productive skills and cognitive or technical knowledge (Becker, 1964). Dobbs, Sun and Roberts refer to Becker’s contribution in this era as the path-breaking one on human capital, formalizing the theoretical derivation of the theory (Dobbs et al., 2008).

Sobel argues that although first designed to explain individual decisions in making education and training choices, the theory of human capital was quickly expanded to cover much broader economic decisions by individuals, including occupational choice, migration, health care, and even planned family size, fertility, and mortality (Sobel, 1982).

Dobbs, Sun and Roberts emphasize that although rooted in Adam Smith's work, analyses on such economic behavior were traditionally not in the core of microeconomic theory, but rather the human capital investments were defined to comprise expenditures on schooling and income forgone during the schooling period (Dobbs et al., 2008).

Sweetland, states that the review of human capital theory begins in 1776, when the theoretical and empirical foundations of the field were articulated and established. Sweetland defines "Human capital theory" as a theory suggesting that individuals and society derive economic benefits from investments in people. Sweetland further explains that human capital research has not been limited to education, but it is usually included empirical measures of education and produces results that affect educators and education policy. He emphasizes the fact that review of the foundation studies were conceived by Nobel prize laureates and historically prominent economists that is supporting the position that educators should draw their own informed conclusions and define the agenda of future human capital research (Sweetland, 1996).

In alignment with Sweetland, Audrey and Richard enlarges the definition of the theory on investment in people as follows: the human capital theory focuses on the

individual investing in his/her intellectual capital, education, training and productivity and invests in his/her health through good food and leisure and assessing their return in the labor market (Collin and Young, 2000).

In agreement with Sweetland, Audrey and Richard; Friesen, characterizes the human capital as most commonly through skills and knowledge acquired through formal education and experience, which are defined as relatively tangible entities with strong and immediate ties to the labour market (Friesen, 2011). Friesen, further extends this definition by stating that human capital also encompasses less-quantifiable factors like one's relative literacy and physical health. Human capital implies a correlation between investments made (e.g. education) and return on such investments.

Donald Super, as one of the major influencers in the area of career development, emphasized the idea that self-realization is important subject when planning for a career. With this sense of self, Super highlighted the fact that individuals realize that they change over time. In his early studies Super focused on individual development (Super, 1953). As stated by McMohan et al, Supers later work in 1992, introduced a greater focus on environmental influences on career. Theoretical frameworks have been proposed to encompass elements of the social system such as family and friends and the environmental - societal system (i.e. geographic location, globalization and socioeconomic circumstances) (McMohan et al., 2014)

Audrey and Richard, G. Becker, addresses that the concept originated in human capital theory from an economics tradition point of view, referring to the fact that the investments in human beings in those areas of education, training, job and life experiences, and personal health creating an expectation on an individual's direct

earnings (Becker, 1964). P. E. Stephan and S. G. Levin, focusing on scientific and academic workforce, further states within this human capital that at earlier stages of career building, productivity incentives are strong while skills are growing. At the early to middle stages, both incentives and skills are strong as productivity peaks and at middle to later stages, both wane, as does productivity (Levin and Stephan, 1991, 1997).

In one of the most cited papers on this subject “The Human Resource Architecture: Toward a Theory of Human Capital Allocation and Development”, David P. Lepak and Scott A. Snell have made the argument that human capital theory, transaction cost economics, and the resource-based view of the firm all converge on two dimensions-the value and uniqueness of employee skills-as primary determinants of a HR architecture and they state that the competitive advantage of firms comes from that potential which is identified, developed, and deployed strategically. (Lepak and Snell, 1999).

The subject of human capital can also be incorporated in the networks, as people have the tendency to build up professional relationships, social capital through some social activities which can be seen similar as individual investments stated in human capital theory. According to Halata, for human resources development practitioners and researchers, it is significant to identify techniques that measure the relations between people within a given environment to improve the interactivity between them that leads to increased performance and effectiveness (Halata, 2006). Here, social capital comes into the picture.

Focusing on the above stated sociology and human resources theories, it can be clearly seen that there is a potential relation among identity and career progress through social capital. The following section is dedicated to Social Capital, its theory and how it is linked to human resources career development.

3.2. THE SOCIAL CAPITAL THEORY

In alignment with Bourdieu's definition of Capital, Friesen states that capital exists in forms other than monetary or otherwise tangible, liquid assets and some scholars suggest that social and cultural capital is equal to or more important than educational credentials for achieving career success and mobility (Friesen, 2011). This is further emphasized, by Metz and Tharenou as especially for women and minorities, the significance of social capital and cultural capital is more important (Metz and Tharenou, 2016).

The social capital is defined by Lin, as the scope of resources that an individual is able to access through social networks formed with other individuals (Lin, 1999). A social network is defined by Stanley as a social structure that is made up of a set of social actors that can be individuals or organizations and a set of the ties between these actors (Stanley, 1994).

According to Brass, the social network perspective extends HR research from focusing on individual actors to considering the relations among actors (Brass, 1995). Specifically, several types of networks are relevant in the context of customization:

strong ties and weak ties, which are distinguished by the extent to which the ties are long-term, intensive, intimate, reciprocal, and overlapping (Granovetter, 1973); and proximal and distal ties, which vary based on whether the connections are internal or outside the immediate workgroup (Aime et al., 2011). The configuration of HR practices, such as teamwork, information sharing, and rewards, can facilitate the creation of preferred social capital (Evans & Davis, 2005).

Human resources practices have also recently been linked with this one particular substantive theory: the theory of social capital, first outlined in a systematic way by Pulnam (Pulnam, 2000). According to this point of view, social networks are a particular form of social capital that individuals can employ to enhance their advantages and opportunities. This has been stated to be generating some powerful applications of social network analysis (Lin, 2001; Lin and Erikson, 2008). The significant growth of social networking websites such as LinkedIn, Facebook and Twitter, though which people can build up networks of contacts as a source of social capital. As stated by Lin and Cook, individuals engage in interactions and networking in order to produce profits (Lin and Cook, 2001).

Lin further states that there are major reasons for why the embedded resources in social networks, will enhance the outcomes of actions that are information, influence, social credentials and reinforcement.

The first reason can be stated as the social network facilitating the flow of information, which can significantly reduce the transaction cost of some interactions such as to recruit better sources and for candidates to find better organizations to work for.

The second factor is stated as social ties exerting influence on the agents. Here we can refer to the social ties in the social networks that have strategic locations, such as the structural holes, and positions such as authority or supervisory capacities.

The third is mentioned to be the individuals' accessibility to resources and the final reason is mentioned to be social relations expecting to reinforce identity and recognition. One's individual worthiness and membership to a social group sharing similar interests is stated to share emotional support and public acknowledgement (Lin and Cook, 2001).

The following section is dedicated to discuss the theory of reproduction model.

3.3. THE REPRODUCTION THEORY

The status attainment theory as emphasized by Collin and Young was a very popular theory among sociologists in 70's US. According to this theory, the socialization process establishes a link between social origin and status attainment so that for example the father's education and occupation influencing the children's educational attainment and their first and following jobs they attain (Collin and Young, 2000).

The reproduction or allocation model theory, developed as a reaction to status attainment theory, includes systematic discrimination based on internal and external rules through which the reproduction of social classes is perpetual that included sex and race (Collin and Young, 2000). Collin further argues that the institutional

mechanisms of entering an occupation starts with the social origin. This origin goes along with the individuals as they move toward the education system and is still with them during their professional lives.

In alignment with Collin, Kerckhoff states that these structures form either forms levers or restraints to occupational and educational development (Kerckhoff, 1995). There have been numerous researches on the gender effect on career development and opportunities, which will be detailed in this section.

Gender is usually taken under close investigation together with race. Kanfer et al. (2001) argues that there are some interesting patterns related to race and gender when it comes to career development. Kanfer states that although race was not related to employment outcomes, racial and ethnic minority job seekers are reported to have a longer job search period than whites. Similarly, Kanfer reports that gender was related to job search behaviors but not with employment outcomes. He further argues that men tended to engage in more job-searching behaviors than women and when the type of search measure was examined, women reported greater job search effort.

The findings of Kanfer highlights how the job search and hiring processes are not separated from the effects of gender and racial socialization, as well as societal prejudice and discrimination (Kanfer et al., 2001). As having higher level of education is associated with greater job search behavior and likelihood of reemployment it may be beneficial for individuals who experience discrimination, to obtain additional job training or degrees (Kanfer et al., 2001; Wanberg et al., 2002).

In her research on career obstacles in front of the women managers, Alberalar has applied a questionnaire among women teachers and determined the handicaps for the female managers. The leading handicaps that hinder women from doing a career are found out to be the idea that the principal responsibility of the woman is merely her family and home (Alberalar, 2015).

Another research, on gender and career is conducted by Ünlü, in her thesis on career obstacles of women and relationship between career satisfaction and life satisfaction. The results of this research has similarities with Alberalar's work. After conducting interviews on Gazi University women academicians and administrative staff, Ünlü has found out that women do not possess a relationship between career satisfaction and life satisfaction which is mainly due to the fact that they are experiencing a gender-based prejudice and there is a negative impact of their domestic responsibilities on their career (Ünlü, 2014).

Mitra and Singh state that while human capital theory predicting that high educational and literacy attainment are important tools, it is also validating among women in achieving gender empowerment as well. They further emphasize that educated women have better labor market opportunities, higher earnings, greater decision-making power within the household, and serve as excellent role models for their children (Mitra and Singh, 2007).

Cannings has studied the gender effect on career on a Canadian firm through a questionnaire on a sample professionals indicated that the female managers are distinctly less likely than their male colleagues to be promoted. She further states that the disadvantages are not primarily the result of a particular acquired attributes, such

the level of education, but, rather, it is the result of the gender. It has often been remarked that women hit an "invisible ceiling" as they attempt to climb the corporate ladder (Cannings, 1988).

Cannings, further elaborated on the gender discrimination where she has explored the determinants of the gender gap in a systematic way by extending in human-capital theory towards a social model by incorporating earnings. The human capital theory in this study has been criticized for an overly narrow view of the factors that determine the earnings of individuals. The study was applied to a Canadian Corporation, through a questionnaire and logistic regression. It showed that despite the progress that women have made in entering the ranks of Canadian management, they are still penalized by the fact that they are women. Cannings, further states that the careers of women are hampered by an unequal division of labor in the household, which is mainly due to the negative impact of women's family commitments (Cannings, 1991).

Cannings and Montmarquette, analyzed the differences between men and women in "managerial momentum" - sustained career progress within a Canadian firm. The result of this study indicated that underlying the greater success of men in gaining promotion is their greater use of informal network (Cannings, 1991). Cannings and Montmarquette further argue that as women, lack the informal networks and rely more on formal meritocratic procedures to maintain managerial momentum, women apparently come up against an "invisible ceiling" that only a restructuring of social relationships within the company can remove (Cannings and Montmarquette, 1991).

Konrad and Cannings, argue that managerial advancement is different among men and women. Based on the data collection through questionnaire from two big

corporations Konrad and Cannings have found out that advancement was positively associated with hours on job and negatively related with participation in the household job for men more than women. As a result, women experienced pressure to demonstrate their commitment and competence more than their male counterparts (Konrad and Cannings, 1997).

Emmerik, studied social capital from a gender perspective within faculty members. The focus of his study was on gender differences in the creation of hard and soft social capital. The study was accomplished over a sample of 352 female and 486 male faculty members. The results of this study indicated that men were more effective in creating hard social capital. Unexpectedly, although women thought to be emotional, the results showed that they were not emotional specialists. In addition, the multilevel analyses indicated that men were more effective in creating hard social capital by using emotional intensity of ties. In alignment to this, men were found to be more effective using team-related resources to create both hard and soft social capital, where hard social capital is defined as accumulated task-oriented resources that can be used to achieve valued career outcomes and soft social capital as emotional support resources that can be used to achieve socio-emotional support like counseling, friendship. Emmerik's hypothesis that strong ties affect the creation of soft social capital received support. Similarly strong ties will be positively associated with the creation of hard social capital also received support (Emmerik, 2006).

Granovetter's definition of strength of ties refers to network relationships that are close, stable, and binding. Granovetter named the strong ties, lacking in emotional investment, when compared to weak ties (Granovetter, 1973).

Burt highlights in *Structural Holes and Good Ideas*, Granovetter's (1973) statement on the critical role that "weak ties" would play in information access and flow if bridge relations were weak rather than strong, (Burt, 2004). Burt (1982, 1992) further argues that people who have networks that bridge the structural holes between groups have an advantage in detecting and developing rewarding opportunities. Here one advantage is exemplified as information arbitrage. The people who had weak ties are expected to have a greater visibility, which would help them to see earlier and broader, which in return would help them to transfer information across the groups (Burt, 2004).

Kanfer et al., have studied a number of demographic and human capital variables that were related to different aspects of the job search process, which included age, gender, race and educational level. Their study showed that there is an evidence of age being an influential factor in getting the job and that as individuals get older, they might have a more difficult time in obtaining employment (Kanfer et al., 2001).

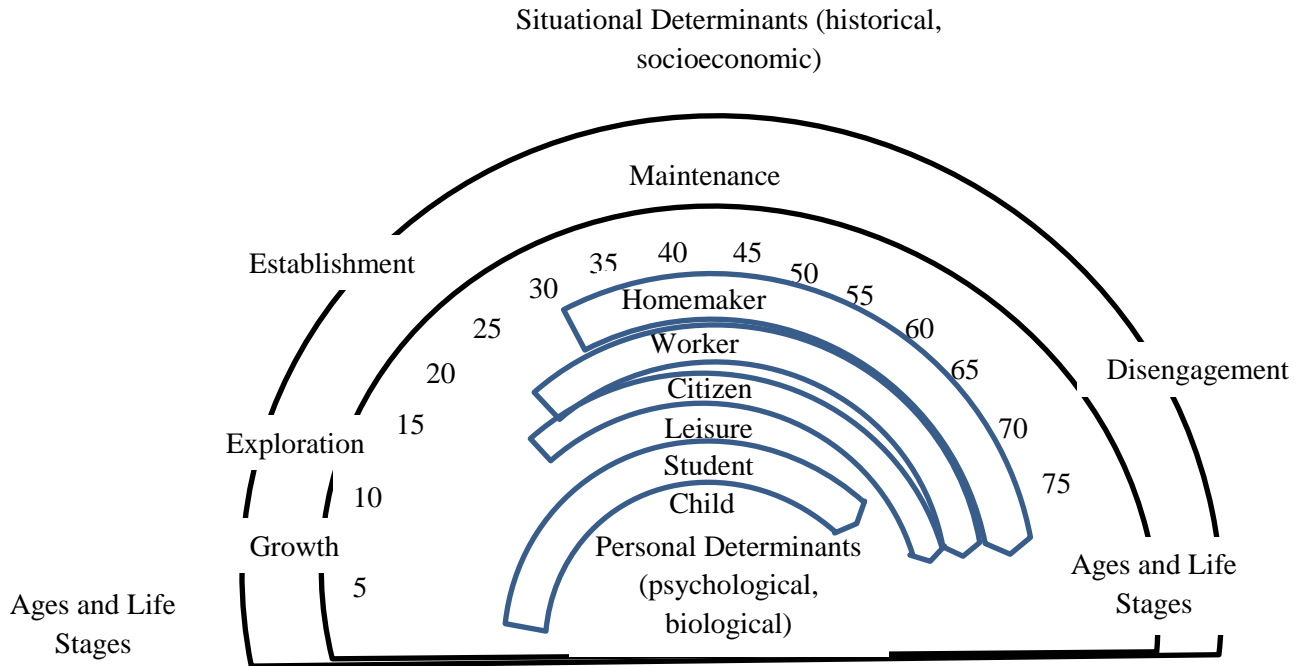
Age being one of the common demographic factors under focus in the career management literature, Nakai et al. identified that are three clusters of mature job seekers. They have defined mature job seeker as individuals who are at their mid-career, which is typically at the age of 40 and above. These three clusters are defined as the satisficers, whose main goal is to find a job to meet financial obligations; the maximizers, who have various needs and desires that are mainly centered on the job parameters such as benefits, full-time versus part-time; and finally the free agents, who are older with fewer family obligations and are focused on fulfilling the individual needs in their job. (Nakai et al., 2001).

Age has also been one of the major area of attention within Super's Lifespan and Lifespace Approach. According to Super, self-concept is changing over time, and it develops as a result of experience, indicating that career development is actually life long. Super argues that competencies and occupational preferences, together with the individual's life situations, all change over time and with experience. Super developed the concept of vocational maturity. This maturity is not expected to correspond to chronological age but people are stated to cycle through each of these stages when they go through career transitions (Super, 1990).

Hartung further emphasizes on Super's life span, life space theory (Super, 1990, Super et al., 1996) that it deals with the linear and nonlinear progression of careers over the life course in terms of developing, implementing and stabilizing self-concepts in work and other roles (Hartung, 2013).

Below is the representation of Super's model of six life roles in schematic life space, which is the life career rainbow.

Figure 3.1. The Life – Career Rainbow: Six Life Roles in Schematic Life Space



Source: The Life Career Rainbow: Six Life Roles in Schematic Life Space in D.E Super (Super, 1990).

As stated in the figure above, Super’s five stages of life and career development together with their corresponding age intervals are the following:

- Growth: from birth to the age of 14.
 - Within this stage the capacity development, interests, needs and attitudes associated with self concepts are build.
- Exploration: from 15 to 24

- This time period is dedicated where the choices of self are narrowed but are yet not finalized.
- Establishment: from 25 to 44
 - This age interval is defined as the stabilization period, going through through work experiences and trials.
- Maintenance: from 45 to 64
 - From 45 to 64, the professionals are expected to have settled down and to continue their adjustment process to improve their position.
- Decline: from 65+
 - As the final stage, there is an expected reduction in the work output, and is the period where the individual gets ready for retirement.

Super argues that career development is a continuous, and is a life-long process. Super, focuses on the definition of self and self-concept developmental processes which are multi-dimensional. The lifespan and life space approach further emphasizes that the vocational self-concept develops through the physical and mental growth and is incorporated into careers as a means of self-expression.

Not only the self-realization, the needs and adjustments with respect to the different age periods of life, but also other factors such as the economic conditions have been stated to influence the decisions of the professionals together with age. One example regarding the socio economic situation, that is stated to have an influence on the life span, Kanfer et al argues that in difficult economic times when jobs are scarce,

individuals may opt to work in jobs that are beneath their training, educational level, or skill level (Kanfer et al., 2001).

After reviewing the literature and going through the theoretical background, the following section is dedicated to the proposed model of this study.

3.4. PROPOSED MODEL

The review of literature on career management from the human capital, social capital and demographical perspectives led to the fact that human capital and social capital have not been very thoroughly investigated together, if not separately taken into consideration to understand career outcomes.

The human capital and social capital are usually investigated through particular criteria where the individuals have a commonality, such as belonging to the same occupation, same company, university alumni, academic unions or industry.

Another fact is that social capital is commonly taken from an internal network structures within the companies, or academic work collaborations networks for academic focused studies. Investigating the value of social capital through professional, non-professional and early career affiliations perspectives is not a very illuminated area as well.

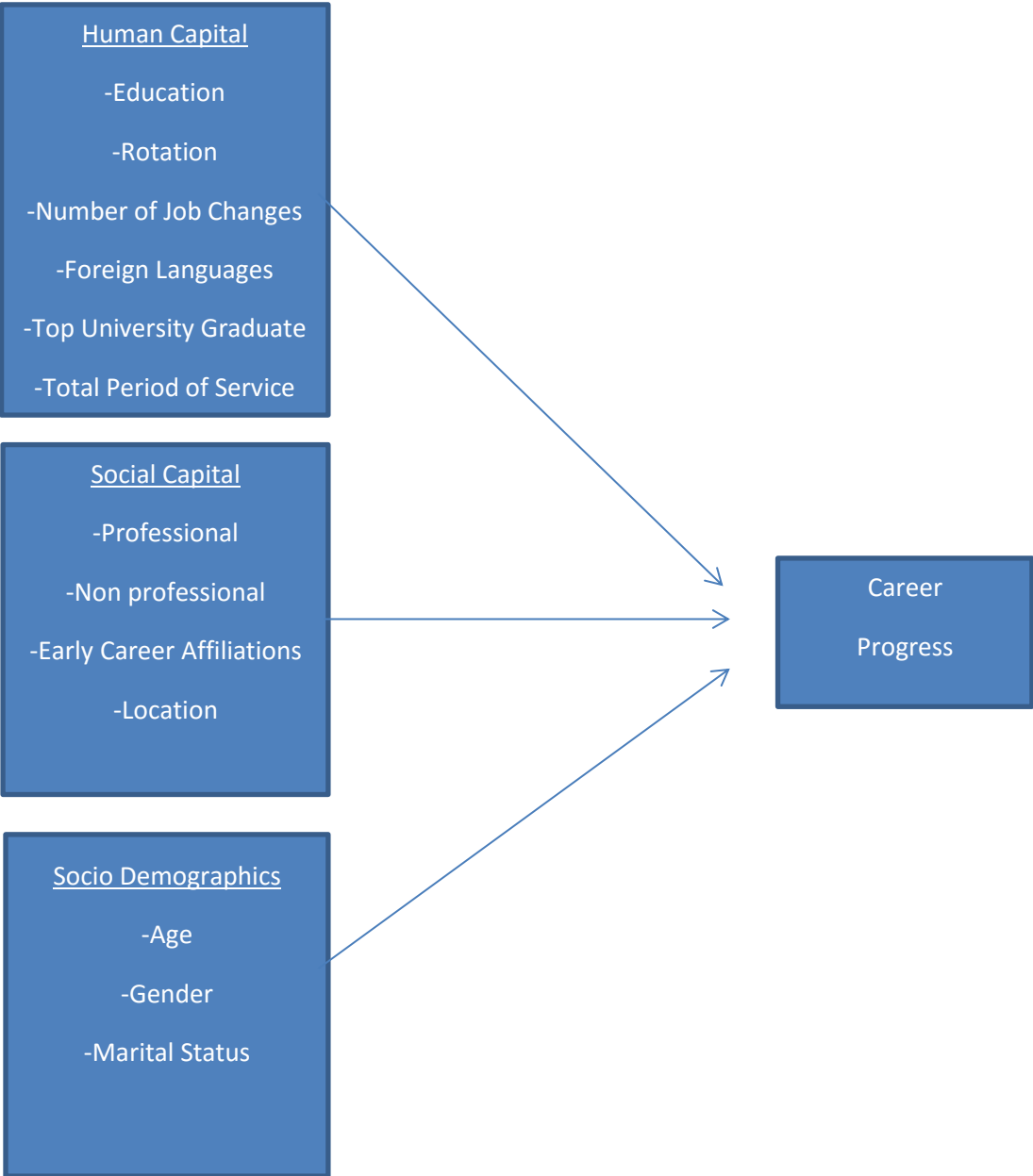
In alignment with these theoretical background and literature search results, on “the career of organizations”, Arnold and Cohen state that, it is not a coincidence, that when searching for organizational career related literature, a great deal of it is occupation - specific such as how career planning is done in medicine and other occupations. Arnold and Cohen further argue that trying to establish whether there are findings that generalize across these contexts is a worthwhile activity (Arnold and Cohen, 2013).

As a result, the hybrid approach of human capital and social capital aspects on analyzing the career achievements, within a comprehensive independent career history set is found to be a gap worth investigating. Furthermore, operationalization of the social capital through the affiliations is expected to be a contribution as well.

Bearing the entire literature search and theoretical background and the corresponding gaps under consideration, this study has come up with an initial preliminary model, incorporating the human capital theory, the reproduction theory, Super’s life space and life span and the social capital theory to highlight the career outcomes of professionals.

The representation of the preliminary model is available below.

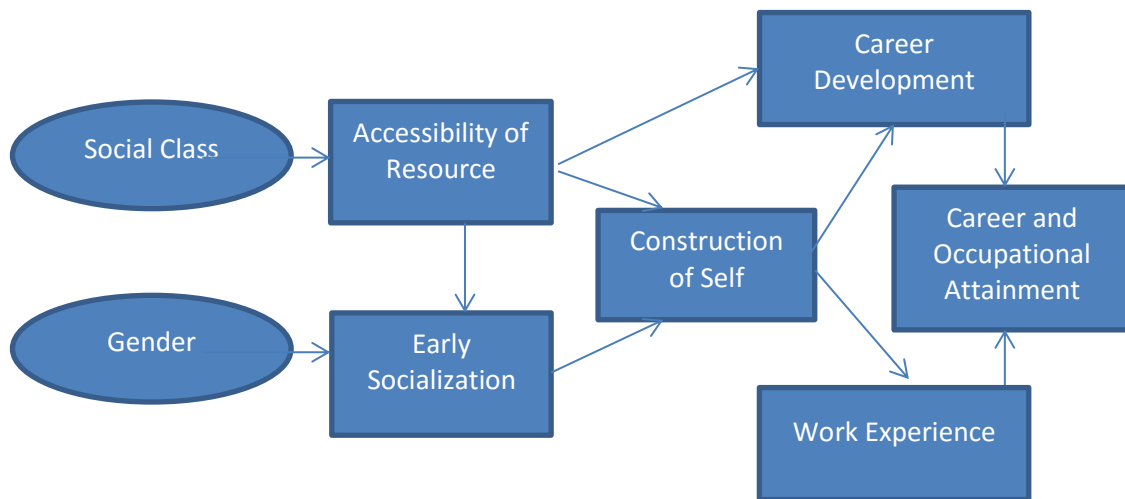
Figure 3.2. Proposed Model



This proposed model is compared with Heppner and Jung’s model of Gender and Social Class and is revised according to the statistical outputs. The finalized version of this model, is represented in the section called “Revised Theoretical Framework” within discussions on findings section.

Heppner and Jung, defined the gender and social class model of career development as a model that emphasizes the interactions between individuals and society in shaping the career paths. Heppner and Jung’s model of gender and social class is represented below.

Figure 3.3. The Gender and Social Class Model



Source: (Heppner and Jung, 2014).

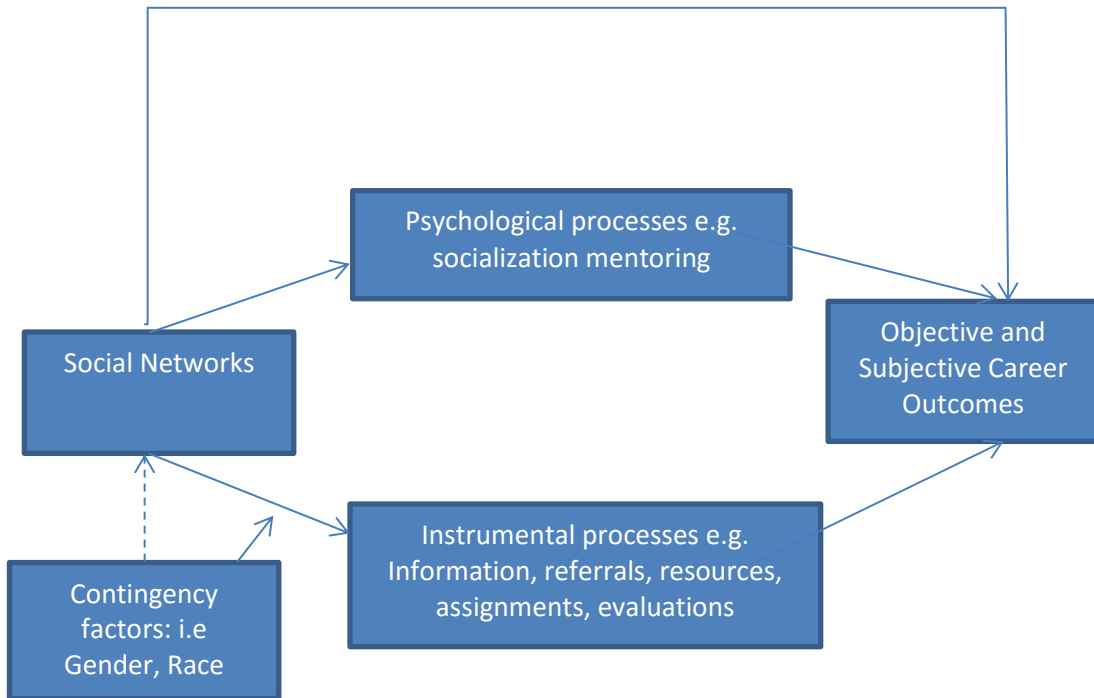
Heppner and Jung argue rather than being simple descriptive demographic variables, gender and social class, both providing unique perspectives, opportunities and barriers throughout the individuals life span, are stated to underline the reproduction of power and privilege in society where certain groups dominate and have differential access to resources that can support their development especially when compared with others, who do not have these sources (Heppner and Jung, 2014).

Heppner and Jung, emphasize that gender and social class model focuses on variables related to how the self is constructed under the cultural/contextual conditions of the society and besides the access to resources, the early class and gender socialization play a role in the construction of self, which then influences one's life span career development and work experience. The career and occupational attainment is stated to be influenced by work experience and career development. The possible disadvantages of the professionals are suggested to be overcome once he or she works hard (Heppner and Jung, 2014).

While Heppner and Jung have incorporated gender and social class in their model, emphasizing that gender through socialization constructed the self identity which in return affected the career development, Ibarra and Desphande have included gender and race as contingency factors effecting the social networks as well as instrumental processes (Ibarra and Desphande, 2007).

Ibarra and Desphande, have come up with a model of social capital through network relations that had indirect influence on the career outcomes through psychological and instrumental processes (Ibarra and Desphande, 2007). Below is the social capital career development model suggested by Ibarra and Desphande.

Figure 3.4. The Landscape of Research on Networks and Careers.



Source: Ibarra and Desphande, 2007.

3.5. RESEARCH FOCUS and RESEARCH QUESTIONS

This research focuses on professional's career movements and how their professional attributes can guide us to their intension for career progress. This includes understanding the changes in career, understanding what helps the professionals to achieve career attainment and coming up with some implications to individuals and corporations on career attainment.

This research focus can be grouped under three categories, that as represented in the preliminary model, which are human capital aspects, social capital aspects and socio demographical aspects.

The human capital related research questions are available below.

- Is there a relation between education level and career progress?
- Is there a relation between graduating from a top university and career progress?
- Is there a relation between foreign language knowledge and career progress?
- Is there a relation between total period of service and career progress?
- Is there a relation between rotation and career progress?
- Is there a relation between number of job changes and career progress?

The social capital related research questions are available below.

- Is there a relation between place of residence being Istanbul and career progress?
- Is there a relation between professional affiliations and career progress?
- Is there a relation between non-professional affiliations and career progress?
- Is there a relation between early career affiliations and career progress?

The sociodemographic related research questions are available below.

- Is there a relation between gender and career progress?
- Is there a relation between age and career progress?
- Is there a relation between marital status and progress?

4. CHAPTER IV

RESEARCH DESIGN

Based on the research questions and the preliminary model shared in the previous section, this section is dedicated to the research design, starting from the definition of hypotheses, and continuing with the selection of the methodology, data collection procedure and presentation of the variables.

4.1. HYPOTHESES

Hypotheses were developed and tested within this study, for the purpose of answering the research questions and testing the preliminary model. The variables under focus were tested against the dependent variable of career progress of work as well as across each other in order to observe the existing relations among each other.

Similar as the research focus, the hypotheses are represented under three major categories of human capital, social capital and the reproduction model, Super's life space, life span.

The reproduction and Super's life space and life span theory hypotheses under focus in this study are available below:

- H1: Age is negatively related with career progress.
- H2: Gender being Men has a positive relation with career progress.
- H3: Being unmarried has a positive relation with career progress.

These first three hypotheses are linked with reproduction theory and Super's lifespan life space approach.

The human capital theory hypotheses under focus in this study are available below:

- H4: Graduation from a top ten university, is positively related with career progress.
- H5: Educational Level is positively related with career progress.
- H6: Rotation is positively related with career progress
- H7: Changing Jobs is positively related with career progress
- H8: Total number of months worked is negatively related with career progress.
- H9: Foreign language knowledge is positively related with career progress.

The social capital related hypotheses under focus in this study are available below:

- H10: Place of residence being Istanbul is positively related with career progress.
- H11: Having professional affiliations are positively related with career progress.
- H12: Having non-professional affiliations are positively related with career progress.
- H13: Having early career an affiliation is positively related with career progress.

These four hypotheses are linked with social capital theory.

All these hypotheses will be tested with multinomial logistic regression and the results will be represented in section called hypotheses testing results.

4.2. RESEARCH DESIGN

4.2.1. The Objectives and Scope of the Research

Bottomore highlights Marx's following statement "The individual is placed in such a condition of gaining his life, as not only to make the acquiring of wealth his object, but self-sustenance, its own reproduction as a member of the community; the reproduction of himself as a proprietor of the parcel of ground and, in that quality, as a member of the commune" (Bottomore, 1991).

This is quite in alignment with today's increasing significance of the social capital such as online professional networking, professional affiliations, non-professional affiliations, alumni networks, in a professional's career. The self-sustenance and one's own reproduction over the community become major points in one's career movements.

The research question here is to explore employee career progress, especially the promotion opportunity within the management, through the individuals' professional characteristics. It will focus on employee demographic and professional aspects including age, gender, marital status, education level, knowledge of foreign languages, graduation from a top university, place of residence being Istanbul or not, total months of experience, especially experience in human capital management and information technology and other functional areas, number of professional and non-professional affiliations and early career affiliations and their effect on the career

progress. The period of focus of the career progress of the professionals is between January 2011 and February 2016.

4.2.2. The Model

The model is build based on the professionals' resumes that do not have any commonality like university, corporation or occupation. The major focus of interest is the career progress and how it is related with the individuals' personal and professional attributes. The definitions of dependent and independent variables under investigation within this study are available in this section.

The representation of the model is available in the previous section in Figure 3.2.

4.2.2.1. The Dependent Variable

The main target of this study is to identify the trends in career progress which indicates the career change of the professional. This change can be promotion through the levels of management career ladder by one, two or three degrees and similarly three levels of downgrades. The dependent variable under focus in this study, is the career progress.

Table 4.1.

Independent Variable

Independent Variable	Levels of Measurement	Codes
Career Progress	Categorical	-3 = Three levels of downgrade -2 = Two levels of downgrade -1 = One level of downgrade 0 = No Change +1 = One level of promotion +2 = Two levels of promotion +3 = Three levels of promotion

The majority of the data has individuals with zero career changes. The single promotion and downgrades are their followers and two degree promotion and downgrade are the next. The three level career changes are experienced rare when compared with the other set of career changes. The analysis have been performed with a randomized set of zero career changes employees with an equal sample of non-zero career changes and the result implicated a level of 0,01 significance. Hence, the data set is not limited with a random subset but rather is taken as it is.

4.2.2.2. The Independent Variables

Within this study, the independent variables, which we are focusing on are gender, age, marital status, rotation, number of job changes, total experience education level, graduation from a top university, being an Istanbul resident or not, the number of foreign languages known, the number of professional, non-professional and early career affiliations.

Below, the dependent and independent variables are represented in a table format, with the levels of measurement and codes used during the analysis.

Table 4.2.
Sociodemographic Variables

Socio Demographic Variables	Levels of Measurement	Codes
Age	Nominal	Numbers
Gender	Categoric	1= Male 2= Female
Marital Status	Categoric	1 = Married 2 = Unmarried

Table 4.3.

Human Capital Variables

Human Capital Variables	Levels of Measurement	Codes
Months of Experience	Nominal	Numbers
Number of Job Changes	Nominal	Numbers
Area of Expertise	Nominal	1 = HR 2 = IT 3 = HRIT 4 = HRITNA 5 = HRNA 6 = ITNA 7 = NA
Education Level	Ordinal	1 = Elementary school 2 = High school 3 = Vocational school of higher education 4 = Bachelor's degree 5 = Master's degree 6 = Doctorate degree
Top Ten University Graduate	Categorical	1 = Graduation from a Top Ten University 0 = Non-Top Ten University Graduation
Knowing a Foreign Language	Categorical	0 = No foreign language knowledge 1 = At least one

Table 4.4.

Social Capital Variables

Social Capital Variable	Levels of Measurement	Codes
Living in a Metropolitan City: Istanbul	Categorical	1 = Living in Istanbul 0 = Living out of Istanbul
Member of a Professional Affiliation	Categorical	1 = Having a professional affiliation 0 = Having no professional affiliation
Member of a non-Professional Affiliation	Categorical	1 = Having a non-professional affiliation 0 = Having no non-professional affiliation
Member of an Early Career Affiliation	Categorical	1 = Having an Early Career affiliation 0 = Having no Early Career affiliation

4.2.3. The Methodology

The aim of this study is to identify predictors of career progress among individuals from different professional background. The professionals do not have any common

institutional background such as university and / or company. The applied methodology of the research is multinomial logistic regression.

The predictors of the model included sociodemographic characteristics including gender, age, marital status; professional characteristics included months of experience, number of job changes, area of specialization, education level, top ten university graduate, foreign language knowledge; social characteristics included professional, non-professional and early career affiliations and location of residence.

Logistic regression is defined by Field as the multiple regression with an outcome variable that is a categorical variable and predictor variables that are continuous or categorical. Therefore, given a certain information, we can predict which of the two categories a person is likely to belong to (Field, 2009).

The Multinomial logistic regression is defined to be appropriate for the analysis of the data in which the dependent variable is ordinal, the multiple independent variables are either categorical or continuous (Garson, 2009).

The simple log model and multinomial logistic regression model definitions are available below (Joanne et al., 2002).

$$\text{logit}(Y) = \text{natural log(odds)} = \ln\left(\frac{\pi}{1 - \pi}\right) = \alpha + \beta X.$$

$$\pi = \text{Probability}(Y = \text{outcome of interest} \mid X = x, \\ \text{a specific value of } X) = \frac{e^{\alpha + \beta x}}{1 + e^{\alpha + \beta x}},$$

$$\text{logit}(Y) = \ln\left(\frac{\pi}{1 - \pi}\right) = \alpha + \beta_1 X_1 + \beta_2 X_2.$$

Therefore,

$$\pi = \text{Probability}(Y = \text{outcome of interest} \mid X_1 = x_1, X_2 = x_2) \\ = \frac{e^{\alpha + \beta_1 X_1 + \beta_2 X_2}}{1 + e^{\alpha + \beta_1 X_1 + \beta_2 X_2}},$$

β are the beta-coefficients, X_i are the independent variables
 $Y = \text{logit}(P) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n,$

$P = e^Y / (1 + e^Y)$ and $P / (1 - P)$ is the odds that an event will occur given the character of interest relative to not having the character of interest.

The multinomial logistic regression is stated to make no assumptions about normality, linearity or equal variances within each group for independent variables in the log function (Tabachnick and Fidell, 1996).

As defined by Meyer et al., below is the list of assumptions for multinomial logistic regression (Meyers et al., 2017).

One of the assumptions is that the dependent variable is expected to be measured at the nominal level. For example in case of profession in health industry, this can be five groups: doctor, nurse. Within this study this assumption is fulfilled as the dependent variable: career progress is classified as change of management level such as any transitions among level 3 manager, level 2 manager and level 1 manager and a non-manager of level of 0, which includes transitions among -3,-2,-2,0,1,2 and 3.

A second assumption is that, the model is expected to have one or more independent variables that are continuous, ordinal or nominal. In alignment with this assumption, the independent variables are fulfilling this requirement as the model has continuous, ordinal and nominal independent variables. The type of each variable is represented in Tables 4.1, 4.2, 4.3 and 4.4.

The model is expected to have independence of observations and the dependent variable should have mutually exclusive and exhaustive categories. The data used for this model is a random sample of resumes hence this assumption is also fulfilled.

Another assumption is that, there should be no multicollinearity among the independent variables, meaning none of the two or more independent variables can be highly correlated with each other. In a possible collinearity, it would have been difficult to identify the contribution of variables to the explanation of the dependent variable. According to the correlation matrix, the correlations among the independent variables are quite low (i.e 0,01-0.3). The highest correlation is among the early career affiliations and the non-professional affiliation which is 0.67. The correlation outputs analysis is available under additional analysis section. According to Field and

Slinker the 0.7 and above is a concern for multicollinearity. (Slinker 1985, Field, 2009). Hence, this assumption is also not violated.

In addition to the assumptions listed above, another assumption is that there needs to be a linear relationship between any continuous independent variables and the logit transformation of the dependent variable. Here, we have two continuous independent variables which are age and total number of months worked. Creating a logit transformation of the dependent variable of career progress and testing the linearity results with an R square value of 0.791 and 0.967, which passes the test of linearity.

Table 4.5.

Linearity Control among independent variable Age and logit of dependent variable Career Progress

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	,060	1	,060	,070	,791 ^b
Residual	2158,610	2527	,854		
Total	2158,670	2528			

a. Dependent Variable: LogitCareerProgress

b. Predictors: (Constant), Age

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	,041	,071		,580	,562
Age	-,001	,002	-,005	-,265	,791

a. Dependent Variable: LogitCareerProgress

Table 4.6.

Linearity Control among independent variable Total Months of Service and logit of dependent variable Career Progress

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	,001	1	,001	,002	,967 ^b
Residual	2158,668	2527	,854		
Total	2158,670	2528			

a. Dependent Variable: LogitCareerProgress

b. Predictors: (Constant), TotalMonth

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	,022	,032		,686	,493
TotalMonth	1,428E-005	,000	,001	,041	,967

a. Dependent Variable: LogitCareerProgress

The multinomial logistic regression provides a more satisfactory solution compared to other analysis techniques because it does not require strict assumptions and enables a direct interpretation of the relationship between independent variables and the dependent variable (Press and Wilson, 1978). As the model fulfills all the assumptions, the multinomial logistic regression is utilized within this study.

4.2.4. Data Collection Procedures

In terms of data collection, the research focuses on the data extracted from one of the largest local recruitment portal. The fields to be extracted were limited by the corporation, based on security requirements. The professionals' names, companies that they have worked for and the personal contact details are some examples that were within the scope of this restriction. The recruitment portal provider has shared the data through SQL data extraction tools. There has been a very long time period dedicated only for the data cleaning and data formatting phase. For the aim of getting a reliable data set, there have been verification sessions with HR experts as well. This work is explained in more details in the following sections.

Data cleaning and conversion process:

- How data cleaning is accomplished
 - The data cleaning was an exhaustive time consuming part of the work. The data cleaning was performed at multiple levels on 2529 resume data.
 - The first step was the conversion of the data to meaningful independent variables, such as converting the birthdate to age and service dates on particular jobs of the professionals to months of service in that particular job.
 - The next step was dedicated to identifying the period of service in each functional area such as the total months of service of the professional, and its allocation based on HR, IT and NA job functions.

Based on the focus area of job function, including the transitions among different job functions of the individuals, the data has been categorized to different job categories such as employees who only have experience in the human resources functional area is grouped as one. The second group was defined as the professionals who similarly had a single area of experience which was on IT. The third group was dedicated for the professionals who have worked on both of the functional areas of HR and IT. These positions might include projects

that involve both IT and HR specialization as well as job transitions from one to another such as being an HR key specialist in an HR technology project and then moving to an IT role. The fourth group included professionals who had experience not only in IT and HR but also have worked in any other functional areas like finance. The fifth and sixth groups of professionals were representatives of HR and IT, consecutively and at the same time are non ITHR specialists such as people who have worked for HR and finance for group five and IT and finance for group six.

- How the gender data is defined
 - The data included gender information for all the professionals and is taken as it is.
 - Men and women data are transformed to a nominal data as one and zero.

- How the age data is defined
 - The professionals' date of birth was available in the data set. The age data was retrieved from the date of birth.
 - This information is taken as it is, as a nominal variable.

- How the marital status data is defined
 - The data included marital status as married, divorced and single.
 - This information is transferred to a nominal variable representing married and single.

- How the top ten universities are identified and mapped with data
 - According to the research done by ODTÜ Informatic Institute, the University Ranking by Academic Performance (URAP) laboratory, eight different institutes conducted the research on “Global Universities Ranking” and released the top universities of Turkey within the first 500. This research states that in any of the eight different assessment criteria, the following universities from Turkey were in the first 500 ranking. These are Istanbul University, Ankara University, ODTÜ – Middle East Technical University, Hacettepe University, Gazi University, Ege University, Bilkent University, ITÜ – Istanbul Technical University, Bogaziçi University and Sabanci University.

As one of the major inputs of the model, the graduation from a top university was derived based on this Global Universities Ranking. In case the professionals, have been graduated from any of these ten universities, they have been flagged within their curriculum vitae data.

Hence, this variable is transformed into a nominal variable.

- How the professional and non-professional affiliation and early career affiliations are defined
 - The affiliation information were filtered under three categories that are professional such as Peryön for HR, Chamber of Computer Engineers for IT; Yeşilyurt Sports Club for non-professional, and early career affiliations such as ITU Photography Club.
 - This information is transferred as a nominal variable and represented as zero and one.

- How Istanbul residency has been identified
 - The name of the city, the professional lives in was one of the data available in the set. This information was converted to a binary variable indicating if the residence place is Istanbul or not. The reason underlying this analysis was to identify if there are any effect of living in a metropolitan on career progress.
 - This information is transferred as a nominal variable and represented as zero and one.

- How the foreign languages are driven
 - The names of the foreign languages known were available in the data set.
 - This information is transferred as a nominal variable as knowing a foreign language or not and is represented as zero and one.

- How positions are mapped with management levels
 - Management levels are classified under three levels and the set of data classifications have been verified with three separate HR professionals of experience over ten years.

The classification included entry level managers who have majority of team lead, project group lead responsibilities in general. These managers do not have direct influence on salary, promotion and performance appraisals of the individuals.

The second level managers are most of the time the direct managers of the employees with direct influence on salary, promotion and performance appraisals but do not have any direct first level company corporate level responsibilities such as corporate goals.

The third level managers are classified as managers who have direct influence on salary, promotion and performance appraisals and on top are the primary responsible of the corporate level goals such as headcount budgets. These third level managers are directors, C levels, company board members and company owners.

- This information is transferred as an ordinal variable and represented as 1,2 and 3.

- How career progress is defined
 - The study focused on the last five years of career movements of the professionals' progress.

 - The positions mapping with the management levels already prepared within the previous step have been utilized and grouped under the last five years of individuals. The progress is then calculated by checking the initial and final level of the positions, that the individuals held. This is represented in the equation below:

Where T_0 is the initial time, $T_n =$ Time n.

$D_0 =$ Degree of the position at time T_0 which is Jan 2011 for this study

D_n = Degree of the position at time T_n which is Feb 2016 for this study

$$\text{Career progress} = D_n - D_0$$

- This information is transferred as an ordinal variable and represented as -3, -2, -1, 0, 1, 2, 3. Here, zero is representing a no change which means that the professional has either not changed the job or has changed the job but there is no change in the management level.
- How the number of job changes are retrieved
 - The total number of job changes was retrieved from the data set by calculating the cumulative number of transactions among different jobs of the individuals. A similar approach was used to focus only on the last five years of transactions.
 - This information is transferred as a nominal variable.

The multivariate analysis here, in design and analysis, is expected to help performing analysis across multiple dimensions while taking into account the effects of all variables on the responses of interest. Within this context, the dependent and independent variables are further explained in the section below.

4.2.4.1. Sample Selection

In terms of sampling, the data is selected through a random sample from the CV database by one of the well-known recruitment career portal. This analysis includes over 2500 professional's career data with a period focusing on Jan 2011 and Feb 2016.

4.2.4.2. Variables

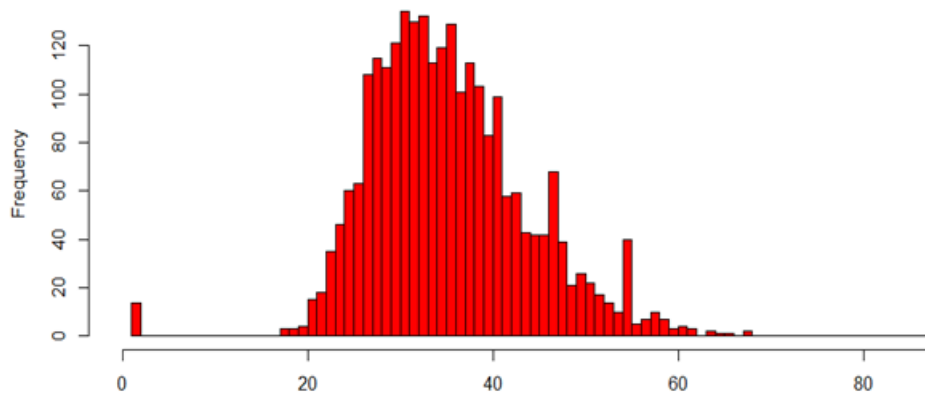
This section is dedicated to explain in detail which variables are incorporated within the model, with some insight through graphics. A more detailed descriptive analysis of the variables will further be explained in the data analysis section.

4.2.4.2.1. Age

The 21st century's workplace, promises to look different than that of any generation before as the new generations have different priorities. According to Jamrog, for example individuals of Gen X (1965-1980) and Gen Y (1980-2000) tend to value work life balance differently than those belonging to the generations preceding them (Jamrog, 2004). Catalysts further adds that Gen X and Gen Y tend to change jobs more frequently than their older coworkers (Catalyst, 2001). Therefore age will be taken as a variable in our analysis.

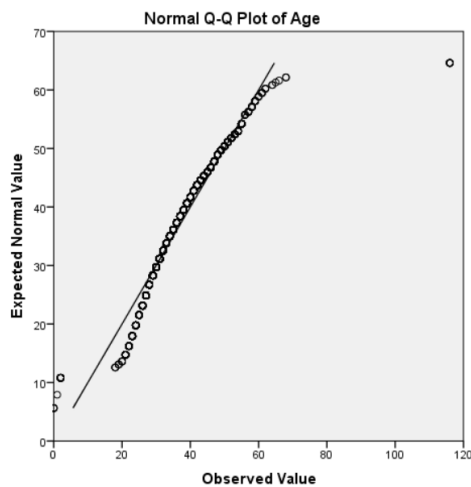
The age is taken as a continuous variable within this study and is expected to give insight from socio demographic perspective on career progress.

Figure 4.1. Histogram of Age



As it can easily be seen both from the histogram of age, the majority of the population, corresponding approximately 40%, is around in their 30's, with a mean of age of 35,89. According to the Q-Q plot, Age is found to be almost normally distributed.

Figure 4.2. Q-Q Plot of Age

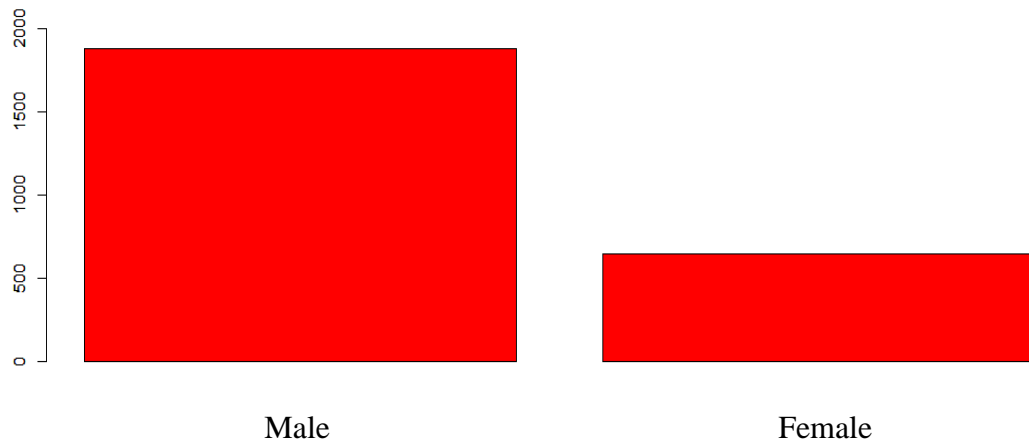


4.2.4.2.2. Gender

The gender effect has been studied in various areas of literature. While focusing on the career progress, it was one of the primary areas of interest to identify if any differences exist among men and women. This variable is taken as a binary independent variable in the model and is expected to give insight from a socio demographic perspective on career progress.

The histogram of gender is represented below.

Figure 4.3. Histogram of Gender

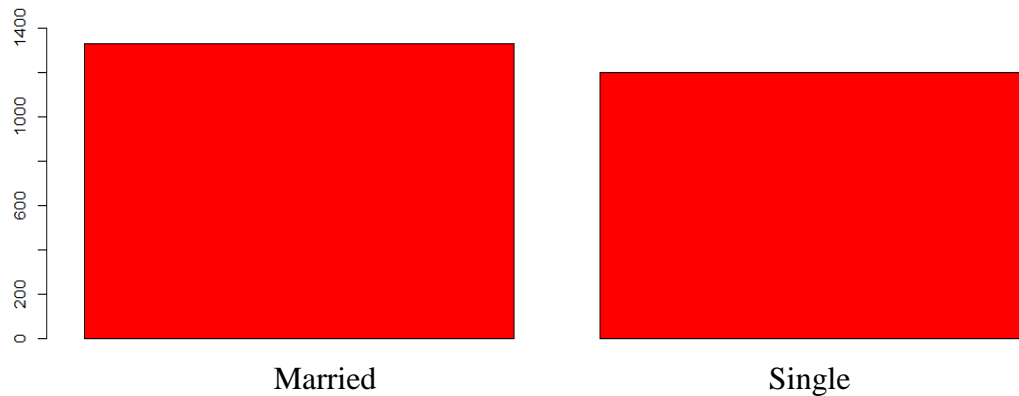


The majority of the population, which corresponds to an approximately 75% is represented by the males.

4.2.4.2.3. Marital Status

Besides gender, the marital status of the individuals is an area of interest to identify possible differences among the career opportunities. This variable is taken as a binary independent variable in the model and is expected to give insight from socio demographic perspective on career progress.

Figure 4.4. Histogram of Marital Status



The histogram of marital status tells us that the married and single population of the professionals under study are quite similar in number with 52,6% married and 47,4% of single population.

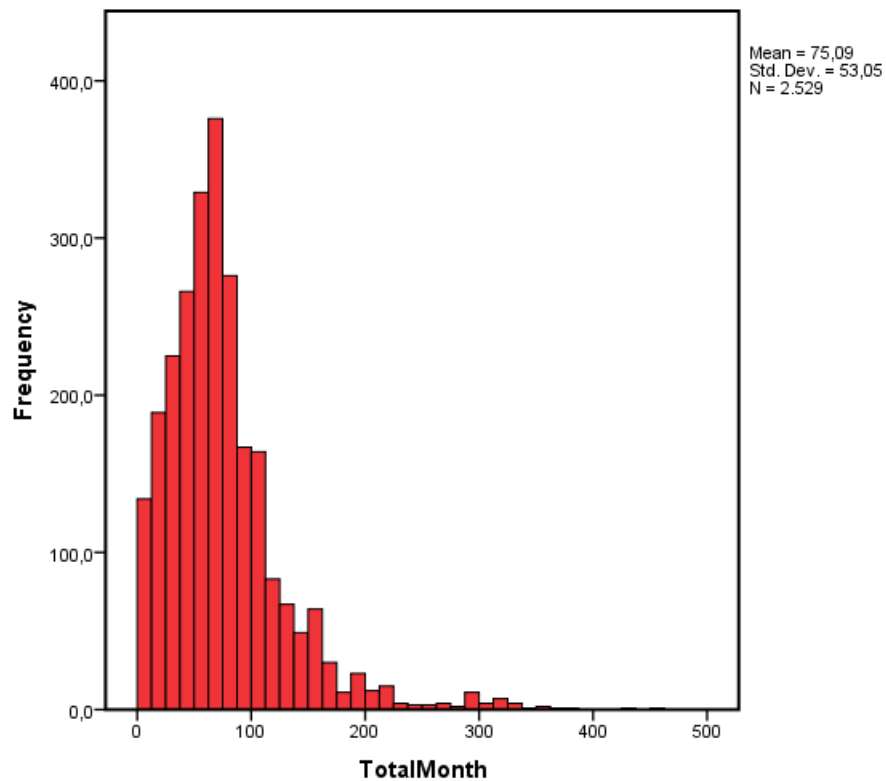
4.2.4.2.4. Experience

Years of experience is an interesting factor to analyze that might have a role in the human capital, that the individual builds throughout the years. It is expected that, the

more experience the employee has might have a direct effect on the knowledge, competence and capability he/she develops throughout the years.

This independent variable is taken as a continuous variable measured in months within this study, as some job changes of the professionals occurred within months. It is expected to give an insight from human capital perspective on career progress.

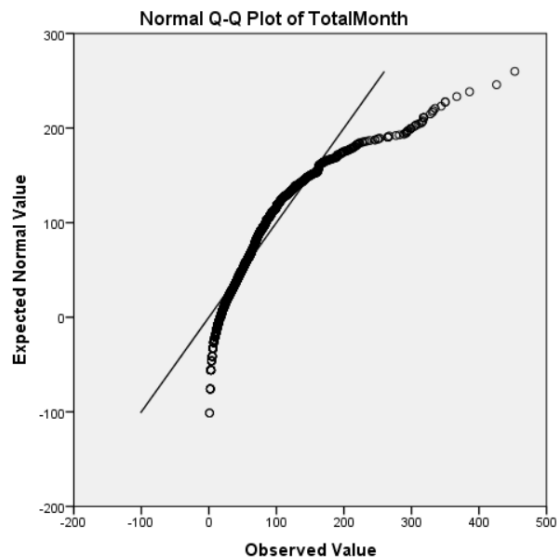
Figure 4.5. Histogram of Total Months of Experience



The histogram of total months of work tells us that the majority of the population is within their first ten years of experience which is in alignment with the age

population, as we would not expect the majority of professionals of age in 30's to have a total experience of more than 10 years.

Figure 4.6. Q-Q Plot of Total Number of Months Worked



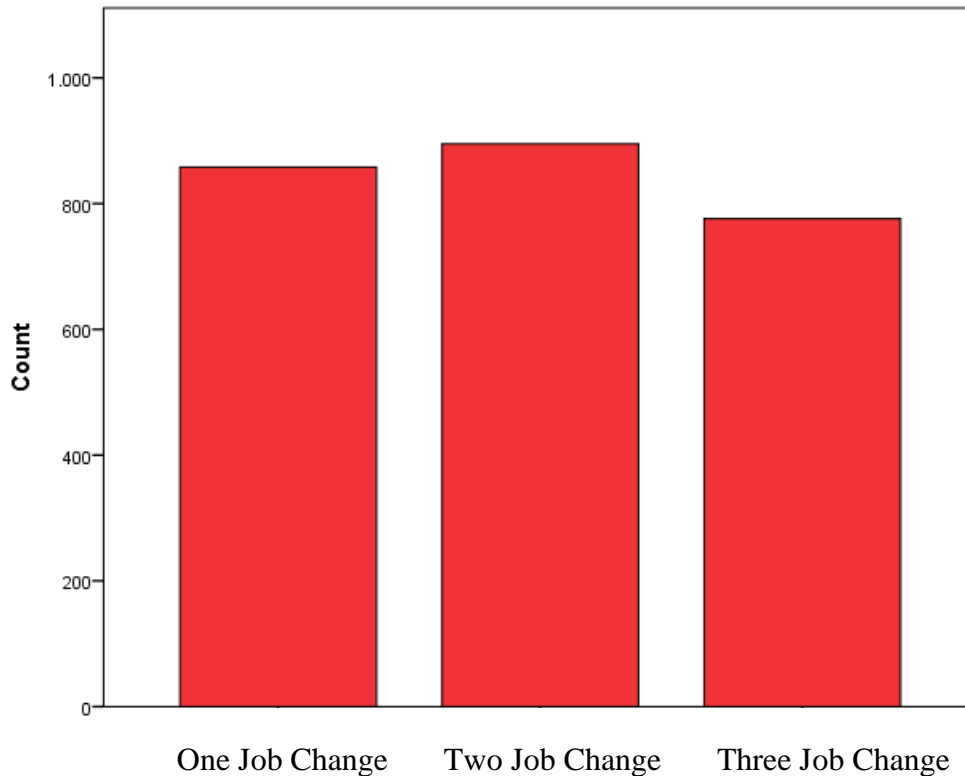
Furthermore, the Q-Q plot of total months of worked, indicates almost a linear plot especially for the experience years of 5-10 years which corresponds to the majority of the data.

4.2.4.2.5. Number of Job Changes

The total number of job changes is also taken into consideration within the study to identify if it has any association with the career progress. When focusing only within the last five years the number of job changes are represented as maximum three. Below are the frequencies of these job change transactions. This variable is taken as a

categorical independent variable in the model to give insight from human capital perspective on career progress.

Figure 4.7. Histogram of Number of Job Changes Within Last Five Years

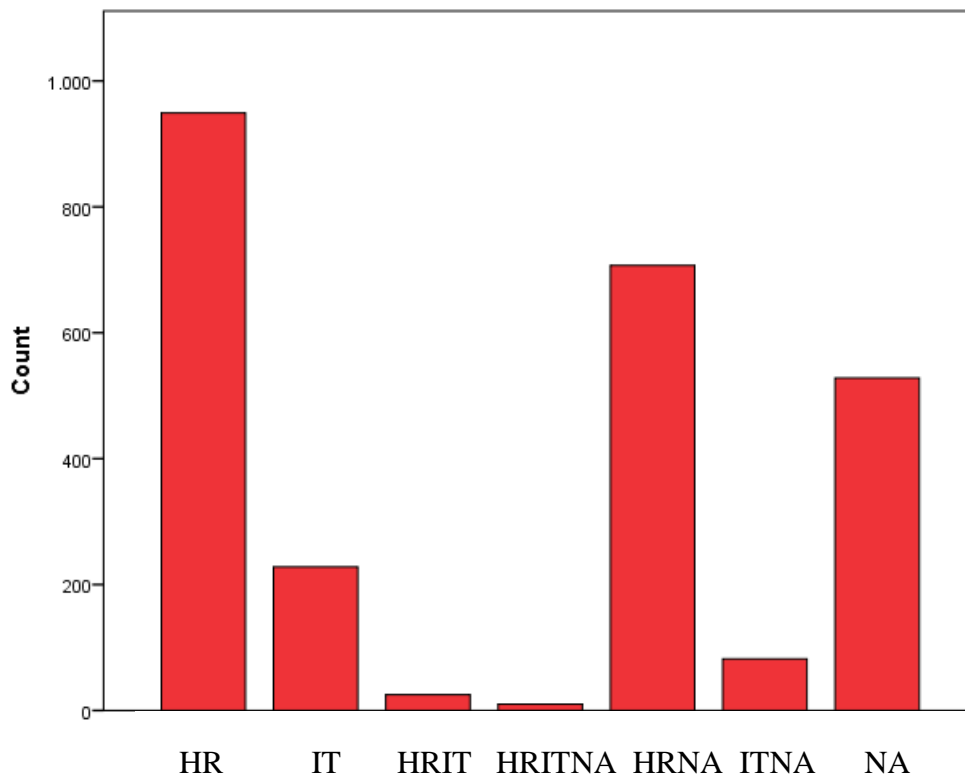


4.2.4.2.6. Area of Expertise

The area of expertise is classified as human resources practices, information technology practices and the non HR and IT practices, which is quite common where professionals do rotation among different jobs. IT positions might frequently be involved in high tech jobs. Sellers states that jobs in “high tech” require specialized

skills and knowledge borne from scientific acumen further developed by technical degree curriculum as well as company provided training and development (Seller, 2007). This variable is taken as a categorical independent variable in the model. It is expected to give insight from human capital perspective on career progress.

Figure 4.8. Histogram of Area of Experience



As it can be easily identified from the histogram above, the majority of the data has professionals of HR experience. The percentage of professionals who have worked in any combination of HR roles with other areas of expertise corresponds to 66.9% of the data.

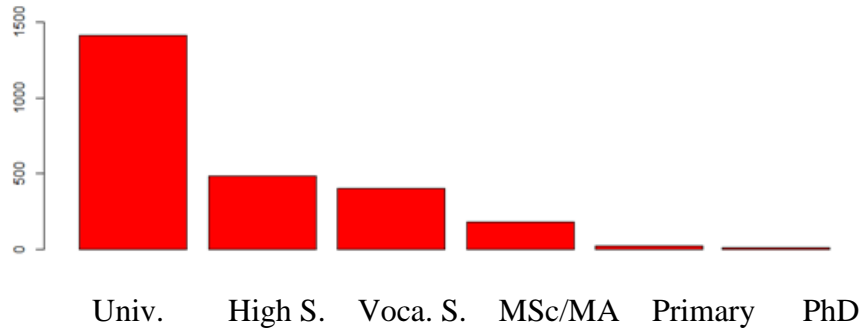
4.2.4.2.7. Education Level

Our model will also incorporate the education level, together with the university (graduation from a top ten university) and specialization focused work experience. The education level is referred to as one of the primary mean of the human capital. This variable is taken as a categorical independent variable in the model.

Here as possible investment areas on the professional's human capital, this research will be focusing on the educational degree, such as the level of graduation including elementary school (1), high school (2), vocational school of higher education (3), bachelor's degree (4), master's degree (5) and doctorate (6) degree. Similarly the University of Graduation is expected to be a critical factor affecting the employee's career progress. This might have two different aspects, in which the first belongs to the capacity of the professional as a graduate form the top university and second as the potential social network the individual can build within this environment.

Education level, which is incorporated into the model to assess human capital effect on career progress, is represented though a categorical variable of one to six groups which are the following:

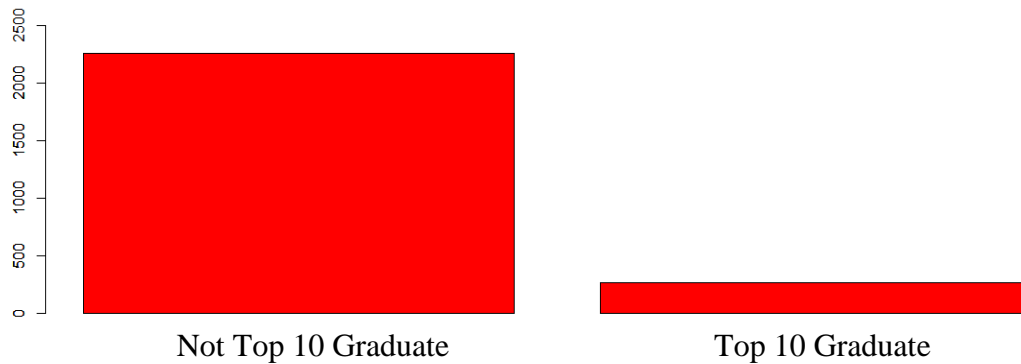
Figure 4.9. Histogram of Educational Level of Professionals



4.2.4.2.8. Top Ten University Graduate

Quite related with the education level, graduating from a well-known, top ten university might also have a relationship with the career progress opportunities. Hence, this variable is also taken under close investigation. This variable is taken as a categorical independent variable in the model to assess human capital effect on career progress.

Figure 4.10. Histogram of Top Ten University Graduate

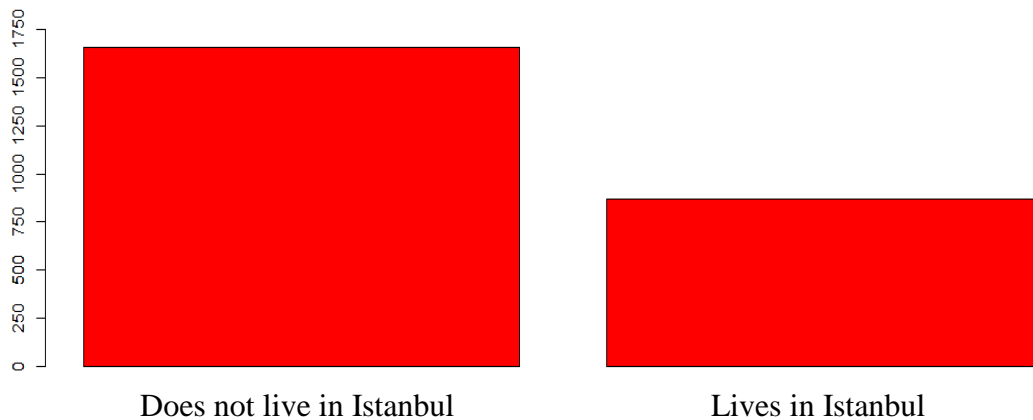


As it can be seen from the histogram, the majority (89.5%) of the data is composed of professionals who have not graduated from any of the top 10 universities. Only 10.5% of the population is a top university alumni.

4.2.4.2.9. Living in the Metropolitan: Istanbul Resident or not?

The place of residence is another interesting area to discover when it comes to find career progress opportunities so this research includes the place of resident of Istanbul within the analysis from a social capital perspective. This variable is taken as a categorical independent variable in the model.

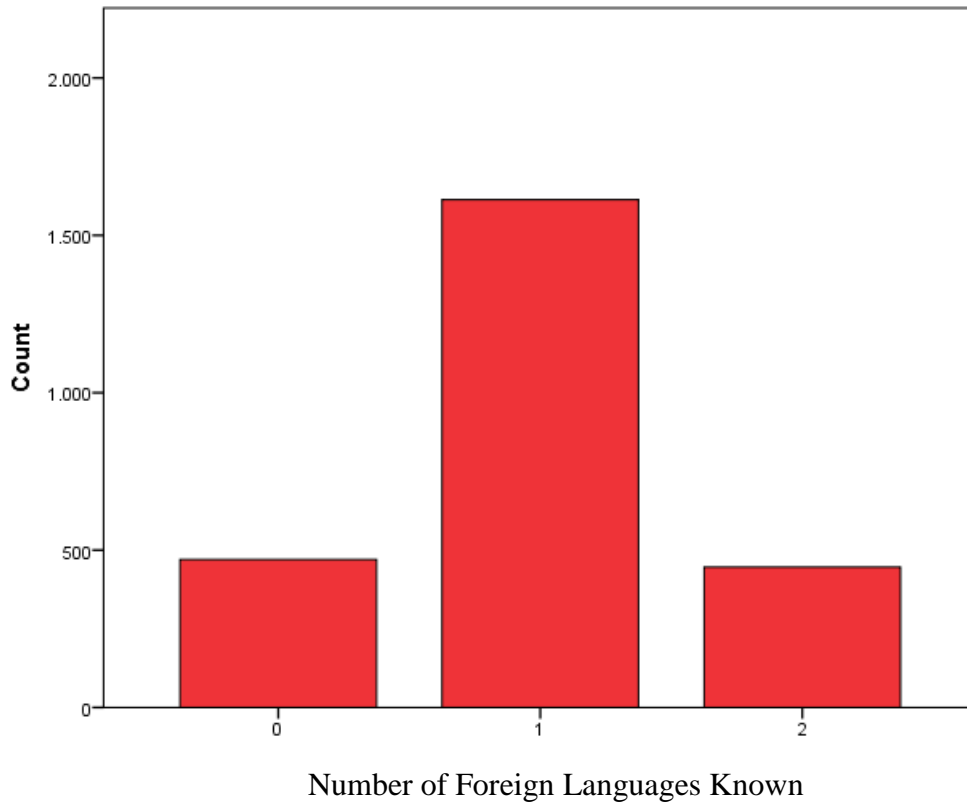
Figure 4.11. Histogram of Place of Residence



This frequency indicated that, the majority of the population with 65.6% is living out of Istanbul and the remaining 34.4% is an Istanbul resident.

4.2.4.2.10. Number of Foreign Languages

Figure 4.12. Histogram of Number of Foreign Languages

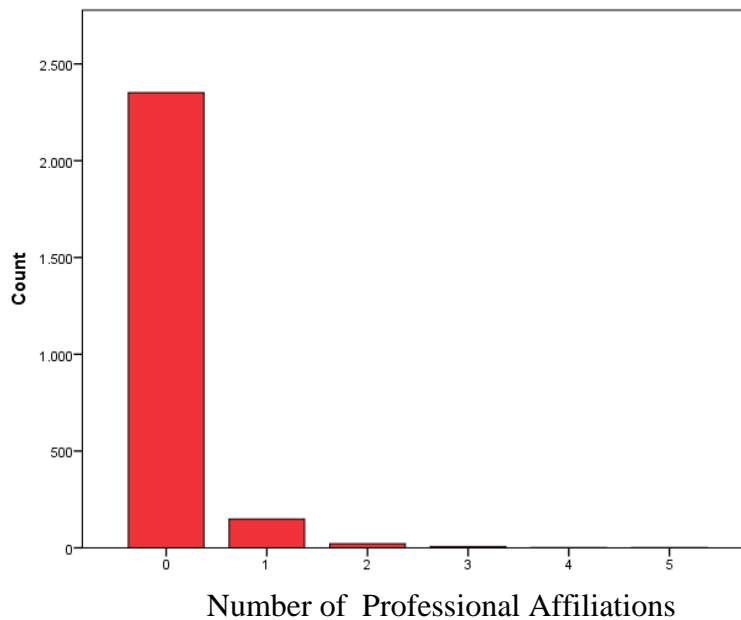


The graph shows us that 81.4 % of the population knows a foreign language and these further breaks down to 63.8% of one foreign language and 17.6% of two foreign languages. This variable is taken as a categorical independent variable in the model to assess human capital on career progress.

4.2.4.2.11. Professional, non-Professional Affiliations and Early Career Affiliations

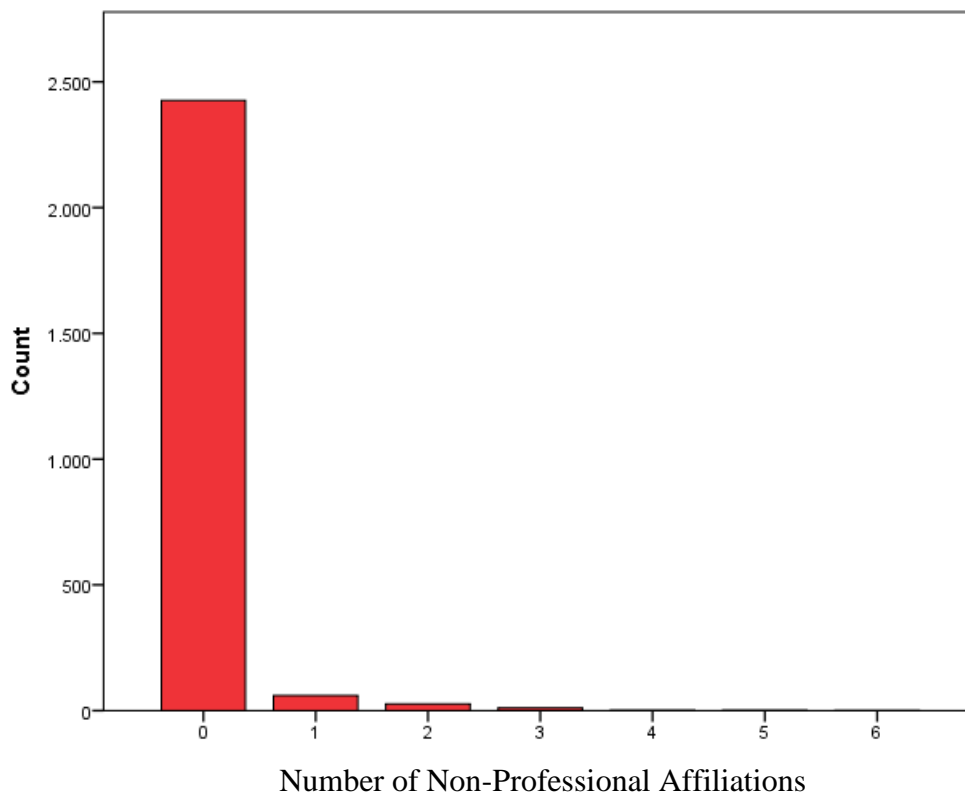
The universities are expected to give a membership identity to their graduates as well once their students graduate from them. It is commonly experienced that once a hiring manager assesses applicants, he/she can prefer alumni from his/her university over another candidate. It is not only the expectation of a desired qualification but also a feeling of a group membership that can build this connectivity. The group membership is not only limited with the alumni club memberships but also some other professional and nonprofessional affiliations like social interests memberships including sports club memberships. These variables are taken as categorical independent variables in the model to assess social capital on career progress.

Figure 4.13. Histogram of Professional Affiliations



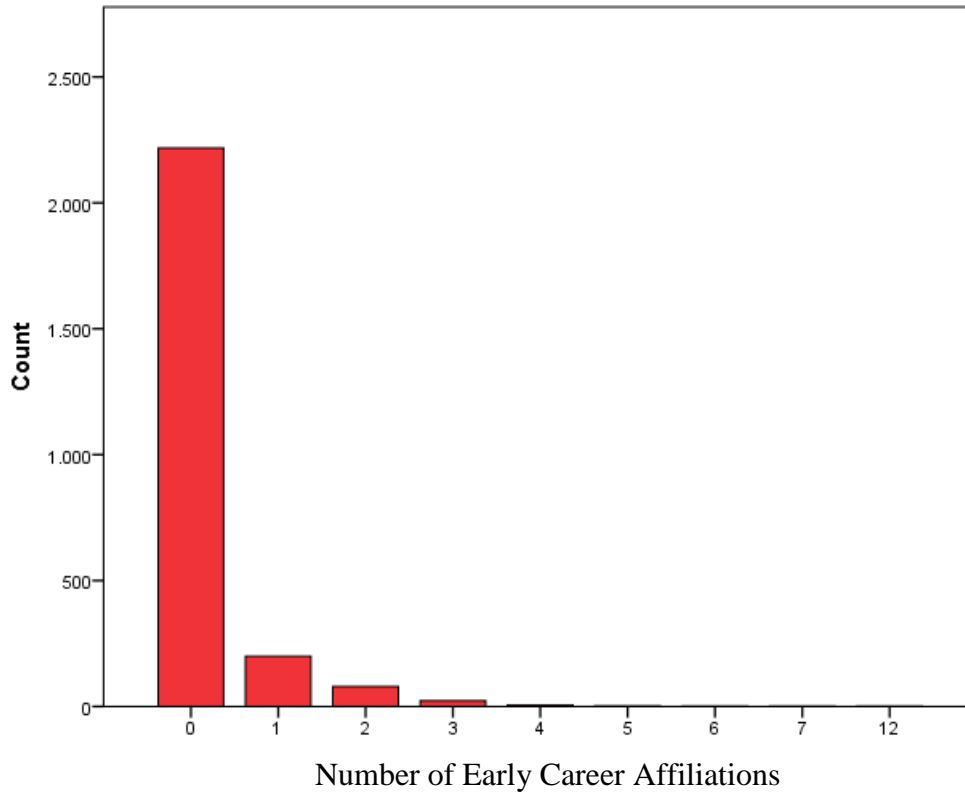
The majority of the population, which corresponds to the 93 % does not have any professional affiliation like Peryön or Turkey IT Association etc. 5.9% has at least one professional affiliation and the remaining 1.1% have two or more affiliations.

Figure 4.14. Histogram of Non-Professional Affiliation



The majority of the population, which corresponds to the 95.9% does not have any nonprofessional affiliation like sports club, music, painting, social responsibility associations etc.

Figure 4.15. Histogram of Early Career Affiliation



When compared with the nonprofessional memberships, a similar but majority of the population, corresponding to the 87.7 % does not have any early career affiliation like universities sports club or universities music club etc. The remaining 7.9% has at least one early career affiliation and remaining approximately 5% have two or more affiliations.

4.2.4.2.12. Career Progress

As the categorical dependent variable, career progress represents the possible changes among the management levels that the professional might experience during the

career path. Here, the management levels as classified among -3 to +3 levels which are taken as a point of reference in assessing if the individual has promoted or has downgraded. The possible transitions that might have occurred within the last five years are listed below:

- Plus one level career movement: This reflects a one level promotion. i.e The professional was not a manager and was promoted to a team lead.
- Plus two level career movement: This refers to a two level promotion. i.e The professional was not a manager and was promoted to a line management level where he/she has direct reports and has the salary and performance appraisal responsibility of the team.
- Plus three levels of career movement: This represents a three level promotion. i.e The professional was not a manager and was promoted to a third line manager, which is most of the time, professional deciding to starting up his/her own company.
- Zero career movement: This indicates there is no change in career level. i.e. The professional has carried the same level of management. This either refers to a situation where the individual was not a manager and stayed as is within this last five years or was at a level one, two or three level manager position and similarly has sustained his level either by staying in the same job or transferring to another position with the same degree.

- Minus one level career movement: This refers to a one level downgrade. i.e The professional was a team lead and was downgraded to a non-managerial position.
- Minus two levels of career movements: This indicates a two level downgrade. i.e The professional was a first line manager and was downgraded to a non-managerial position.
- Minus three levels of career movements: This represents a three level downgrade. i.e The professional had his own company and decided to close it down and start as a non-managerial position in a company.

Figure 4.16. Histogram of Career Progress

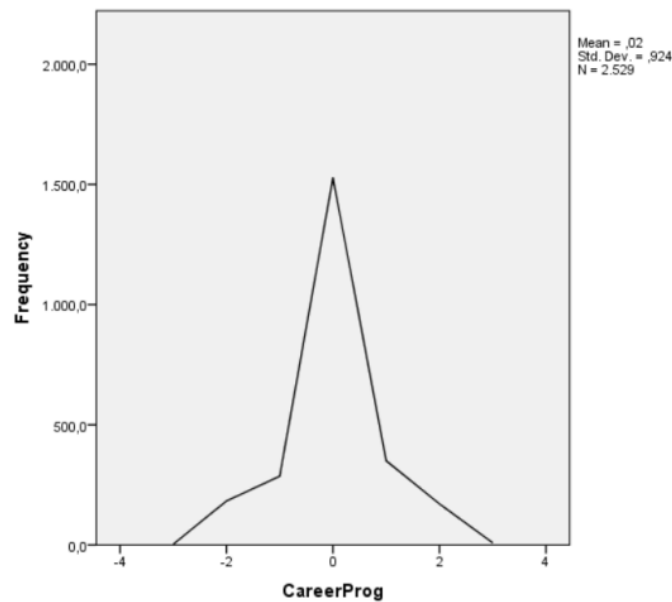
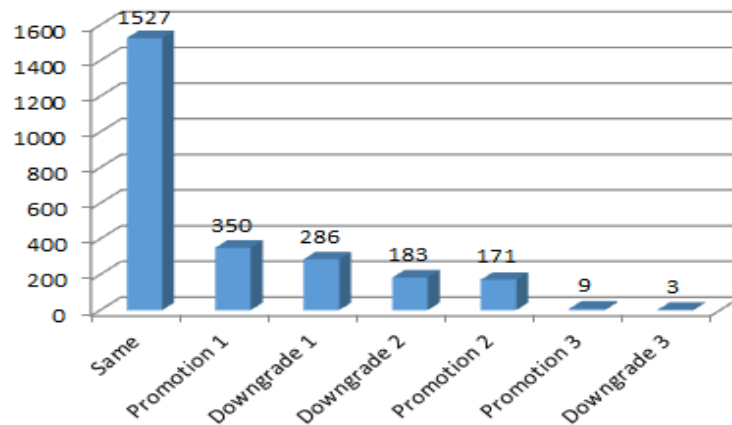


Figure 4.17. Frequency of Career Progress



Checking the career progress of the population, it can easily be seen that the majority of the population with a percentage of 60.4% has a zero level change which indicates either the professional has changed the job but got the same level of managerial degree or has stayed within the same position.

The frequency of one level positive and negative change are approximately same with 13.8% and 11.3% respectively. Similarly the two level changes in positive and negative direction have a frequency of 6.8 % and 7.2% respectively. Finally the positive and negative three level of career changes occur in 0.4% and 0.1% of the population. As the three level changes are a minority, they have not been included in the interpretation of the model outputs.

5. CHAPTER V

RESEARCH RESULTS

5.1. DATA ANALYSIS

5.1.1. DATA SET

The data set includes 2529 professionals who have human resources and information technology and non-human resources, non-IT expertise in majority. All these professionals' demographic information like age, gender, marital status as well as professional information such as total months of experience, area of experience, education level, graduating form a top university, living in Istanbul, professional, and non-professional affiliations and early career affiliations together with their career progress have been investigated. An example of the data set of this study is available below:

Table 5.1.

Sample Data Extract

refnumber3	MaxNumJ	CareerProg	NumJobChIn	HR	IT	TotalMon	Marital	Gender	Age	ProfClub	MerTopUniv	IstanbulReside	Education	NonProfMem	UnivClubMem	ForeignLanguage
35878	7	0	3	0	120	120	Bekar	Erkek	39	0	Yes	Yes	Univ	0	0	2
46329	6	0	1	0	105	105	Evli	Erkek	39	1	No	Yes	Univ	0	0	1
48547	9	2	2	0	0	44	Bekar	Erkek	47	0	Yes	Yes	YL	2	2	2
97394	3	0	2	0	166	166	Evli	Erkek	45	0	Yes	No	Univ	1	1	1
106377	4	0	1	147	0	147	Evli	Erkek	46	0	No	Yes	Univ	0	0	1

5.1.2. DATA DESCRIPTIVE STATISTICS

The variables that are taken into consideration are defined in the previous section including their explanations and frequencies. This section is dedicated to the descriptive statistics of the variables.

Table 5.2.

The Descriptive Statistics

Descriptive Statistics					
	Number of Data	Min	Max	Mean	Std Dev.
Number of Job Changes in Last 5 Years	2529	1	3	1,97	,803
Total Months of Experience	2529	1	453	75,09	53,050
Age	2529	0	116	35,89	9,632
Number of Professional Affiliations	2529	0	5	0,09	,354

Table 5.2.

The Desc. Statistics
cont'

Descriptive Statistics					
	Number of				Std.
	Data	Min	Max	Mean	Dev.
Number of Non-Professional Affiliations	2529	0	6	,07	,384
Number Early Career Affiliation	2529	0	12	,19	,626
Number of Foreign Languages known	2529	0	2	,99	,602

The other variables such as gender, marital status, area of expertise, education level, top ten university graduate, living in Istanbul and career progress are all categorical variables. Therefore, are not reflected in this table.

5.2. HYPOTHESES TESTING AND RESULTS

The employee career movements' history data for all the variables above were taken from Turkey's one of the biggest career portal. The data is first cleaned and reformatted in excel and then uploaded to trial SPSS 21 software.

An initial analysis of the data was conducted based on the descriptive statistics, frequency analysis and correlation matrix. Correlation analysis was applied for the purpose of understanding if there is a significant relationship between all numeric variables. The independent T test and Chi Square were conducted to test the relationship between the variables. These results are shared in the following section called additional analysis and results. This section is dedicated for the hypothesis testing, results through the multinominal logistic regression and the results mapping with the theoretical background.

5.2.1. Reproduction and Lifespan Theory Hypotheses

This section is dedicated to the hypotheses that are related with the reproduction model theory and Super's lifespan approach.

According to the reproduction theory there is a systematic discrimination based on internal and external rules through which the reproduction of social classes is perpetual including included sex and race (Collin and Young, 2000). In alignment with this based through a research on female and male professionals in Germany,

Alewell found a result supporting this fact. Based on Alewell's research, masculine gender role specifications, male sex and male or mixed job contexts are associated with higher career success which is measured with the income of individuals (Alewell, 2013).

Sabatier et al., through their study on gender on academicians, state that gender differences play a role in speeding up or slowing down the time for promotion. They further argue that there is neither a clear discrimination nor a glass ceiling effect, but rather a sum of involvements. These involvements are mentioned to be higher for women than for men. As a result of this study women academics are mentioned to need demonstrating higher performances than their male counterparts. This is stated to appear more difficult for women, as they can not be very mobile, or can not be heavily involved in the life of the organization, mainly due to the fact that women have greater family responsibilities (Sabatier et al., 2006).

Based on the reproduction theory and super's lifespan, lifespan approach age is expected to have a negative impact on career progress. One reason for this is that as professionals age, the ladders they can keep climbing up decreases hence the career progress pace is not expected to be as new joining juniors.

H_1 : Age is negatively related with Career Progress.

- H_1^0 : Age is not negatively related with career progress.
- H_1^1 : Age is negatively related with career progress.

This test has been conducted at career progress categories as [-3,+3] and age. The reference category for checking the career progress is the no change category of zero. The results showed that the model is a good fit with a significance of $p < 0,0009$.

Checking all the significance levels of the seven career attainment outcomes, the model showed for all the career attainment levels that age is a significant factor with a significance level of $p < 0.0009$ for achieving both one and two levels of career attainment with negative beta values.

These results indicate that as the professionals' age, their tendency to achieve a one and two level promotion decreases. Therefore, this hypothesis is accepted.

The independent sample t-test was also applied among age and career attainment and the results were in alignment with the multinomial logistic regression that age is a significant factor with a p value smaller than 0,0009.

As in alignment with various different researches on gender men is expected to be privileged on career attainment. Hence the following hypothesis is build and tested.

H_2 : Gender being Men has a positive relation with career progress.

- H_2^0 : Gender being Men does not have positive relation with career progress.
- H_2^1 : Gender being Men has a positive relation with career progress.

This test has been conducted at career attainment categories as [-3,+3] and gender being men or women. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit with a significance of $p < 0,01$.

Checking all the significance levels of the seven career attainment outcomes, the model showed that gender is a significant factor for career attainment. The model indicated that men when compared to women, with a significance level of $p < 0.009$, have a lower tendency to promote to one level up in the management ladder, when compared to zero career change. The beta value is -0,34. This interesting output is for a single level of analysis, the descriptive statistics in the additional findings indicate that men are a privileged group in career progress.

The independent sample t-test was also applied among men women on career attainment and the results are found to be a significant factor with a p value of 0,042.

Therefore, this hypothesis is accepted.

Most of the time, in literature the gender analysis are accompanied with the marital status and its effects. Within this study, the hypothesis is build upon the advantage of unmarried professionals to be advantaged for career progress.

H₃: Being unmarried has a positive relation with career progress.

- H_3^0 : Being unmarried does not have a positive relation with career progress.
- H_3^1 : Being unmarried has a positive relation with career progress.

This test has been conducted at career attainment categories as [-3,+3] and marital status of married and unmarried. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit with a significance of $p < 0,0009$.

Checking all the significance levels of the seven career attainment outcomes, the model showed that marital status is a significant factor for career attainment. The model indicated that married professionals when compared to unmarried, with a significance level of $p < 0,009$, have a lower tendency to promote to one level up in the management ladder, when compared to zero career change. The beta value is -0,5.

Similarly, married professionals when compared to unmarried, with a significance level of $p = 0,1$, have a lower tendency to promote two level up in the management ladder, when compared to zero career change. The beta value is -0,2.

These results indicate that the professionals' marital status play a role in their tendency to achieve a one and two level promotions. Therefore, this hypothesis is accepted.

5.2.2. Human Capital Theory Hypotheses

The hypotheses under focus that are linked with human capital theory, in this research are further detailed in this section.

Educational level and graduation from top universities are primary means for human capital within career management. As stated by Sabatier et al., women who have graduated from top universities are likely to be promoted sooner than those who have graduated from other universities. This is stated to be a pure interpersonal network effect, which speeds up the career in academia (Sabatier et al., 2006). Gaugham and Robin further states that graduation from top universities increases the probability of recruitment after the PhD (Gaugham and Robin, 2004).

H₄: Graduation from a top ten university, is positively related with career progress.

- H₄⁰ : Graduation from a top ten university, is negatively related with career progress.
- H₄¹: Graduation from a top ten university, is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and top ten university graduate as 0,1. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit with a significance of p=0,002.

Checking all the significance levels of the seven career attainment outcomes, the model showed that the significance is the highest at career attainment plus 2 levels, with a significance level of $p < 0.0009$. The Beta=0.824 is identified to be predictor of the career attainment in the expected positive direction.

These results indicate that the professionals who are top ten university graduates are more likely to get a two level promotion, when compared to other possible career changes. Therefore, this hypothesis is accepted.

Varnali states that education level and industry specific work experience as items of human capital are significant contributors. The skill and knowledge requirements are also in alignment with Varnali's study on the role of social networks and human capital in entrepreneurial success (Varnali, 2014).

Education level is shared in the model as it is one of the possible affecting the career development opportunities. As stated by Sorokin's famous paper, it is not a new subject that mentions schools in Western societies, representing one of the most important channels of vertical circulation (Sorokin, 1927).

In alignment with Sorokin, Harris et al., states that when individuals have high levels of human capital, they are more likely to perform well when they advance from the first stage of the career to the second stage of the career (Harris et al., 2015). In order for individuals to advance in a career path, it is important for them to have the human capital that allows them to perform at a high level in the various stages along the

career path (Iellatchitch et al., 2003). Within this study the educational level is tested against career progress.

H₅: Educational Level is positively related with career progress.

- H₅⁰: Educational Level is negatively related with career progress.
- H₅¹: Educational Level is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and educational degree as 1,2,3,4,5,6 and grouping of university graduates and non university graduates. The reference category for checking the career attainment is the no change category of zero.

Focusing on all the educational level grouping did not indicate any significance however, when checking the model at university and non-university graduate levels, the model outputs showed a trend for the non-university graduates.

Checking all the significance levels of the seven career attainment outcomes, the model showed that non university graduates with a p value of 0,05 show a less tendency to promote two levels in the management line, when compared to others. The Beta = - 0,33 is identified to be a predictor of the career attainment in the expected negative direction. Therefore, this hypothesis is accepted for the university graduation and above.

H6: Rotation is positively related with career progress

- H_6^0 : Rotation is negatively related with career progress.
- H_6^1 : Rotation is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and specialization areas of HR, IT, NA combinations. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit.

Checking all the significance levels of the seven career attainment outcomes, the model showed that the significance is the highest at career attainment plus one, plus two levels, with a significance level of $p < 0.0009$, $p < 0.011$ and $p < 0.002$ among the plus one and plus two career attainments.

Detailed analysis of each outcome, indicates that professionals who have HR only expertise have a significance level of $p = 0,037$ and a positive beta value of 0,477 when analyzing the tendency to promote one level, so for one level promotions, only HR experienced professionals when compared to other specialization groups, have a higher tendency to promote, when compared to zero career progress.

For two level promotions, the picture is different though. Professionals who have HR only expertise, have a significance level of 0,011 and beta value of -0,7 which means

only HR experienced professionals when compared to other specialization groups, have a lower tendency to promote 2 levels, when compared to zero career progress.

Similar investigation on the IT professionals indicate that, with a p value of $p < 0,0009$, and a positive beta value of 1,4 and 2,5, that IT and ITHR have a tendency to promote one level professionals. Focusing on the two level career attainments, IT professionals with a significance level of $p = 0,002$ have a tendency to promote with a beta value of 0,947. However, different than one level promotion, IT HR combination of specialization was not a good prediction for the two level promotions in the management line.

The model showed that as the HR specialized professionals get experience in other specialization areas, the model is improving the prediction level of higher positive career attainment. For one level promotion, this is supported for HR professionals on both IT and NA specialization combinations whereas for two level promotions the non IT specialization on top of HR experience was a better prediction of higher level career attainment.

As a result, the professionals who are specialized in HRIT combination and HRNA combination are more likely to get a one and two level promotion, when compared to other possible career changes. Therefore, this hypothesis is accepted.

The independent sample t-test was also applied among different functional area of expertise on career attainment and the results were in alignment with the multinomial logistic regression with a significant value of $p < 0,0009$.

Job changes are possible means to build up professional expertise, which can be tested as a human capital effect on career progress. Hence, the following hypothesis is defined and tested.

H7: Changing Jobs is positively related with career progress

- H_7^0 : Changing Jobs is negatively related with career progress.
- H_7^1 : Changing Jobs is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and number of job changes as 0,1,2,3. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit with a significance of $p < 0,0009$.

Checking all the significance levels of the seven career attainment outcomes, the model showed that professionals with two job changes have a higher tendency to promote one level in the managerial line, with a significance level of $p < 0,002$, when compared with the others. The Beta=0. 421 is identified to be a predictor of the career attainment in the expected positive direction.

Although not as powerful as one level promotion, a similar result is also achieved when checking the two levels of promotions. The model showed that professionals with two job changes have a higher tendency to promote two levels in the managerial line, with a significance level of $p = 0,12$, when compared with the others. The

Beta=0.262 is identified to be the predictor of the career attainment in the expected positive direction.

As a result, this hypothesis is accepted.

Similar as the job changes number, the total number of months worked, serves as an indicator for the professional expertise and therefore is effect to promote career progress as a human capital. However, in alignment with age the contribution is expected to be less so this expected negative relationship is tested through the following hypothesis.

H8: Total number of months worked is negatively related with career progress.

- H_8^0 : Total number of months worked is positively related with career progress.
- H_8^1 : Total number of months worked is negatively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and total number of months worked. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit with a significance of $p < 0,0009$.

Checking all the significance levels of the seven career attainment outcomes, the model showed for all the career attainment levels that the total number of months

worked is a significant factor with a significance level of $p < 0.0009$ for achieving one levels of career promotion with negative beta value.

These results indicate that as the professionals' total number of experience increases, their tendency to achieve especially a one level promotion decreases. Therefore, this hypothesis is accepted.

The independent sample t-test was also applied among total months of experience and career attainment and the results were in alignment with the multinomial logistic regression that age is a significant factor with a p value smaller than 0,0009.

H9: Foreign language knowledge is positively related with career progress.

- H_9^0 : Foreign language knowledge is not positively related with career progress.
- H_9^1 : Foreign language knowledge is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and foreign language knowledge of 0,1. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit with a significance of $p=0,05$.

Checking all the significance levels of the seven career attainment outcomes, the model showed that the professionals who know a foreign language have a higher

tendency to promote one and two levels with respective p values of 0.01 and 0.05. The corresponding beta values are 0.42 and 0.44. which indicate that knowing a foreign language is a predictor of the career attainment in the expected positive direction. Therefore, this hypothesis is accepted.

The independent sample t-test was also applied among knowledge of foreign language and career attainment and the results were in alignment with the multinomial logistic regression that knowledge of foreign language is a significant factor with a p value of 0,005.

The following section is dedicated to the hypotheses that are related with the social capital theory.

5.2.3. Social Capital Theory Hypotheses

As per Pulnam's definition of social capital, social networks are a particular form of social capital that individuals can employ to enhance their advantages and opportunities. As stated by Lin and Cook, individuals engage in interactions and networking in order to produce profits (Lin and Cook, 2001).

As per Emmerik's multilevel analyses, men were found to be more effective in creating hard social capital by using emotional intensity of ties (Emmerik, 2006). As a result, the social capital built through various sources, hard and soft are expected to promote career progress. The place of residence determines the potential social

capital an individual can build through networks. Hofferth, and Iceland argue that relationships in more dense networks are likely to provide access to resources in urban communities (Hofferth and Iceland, 1998). Hence, as a metropolitan city, Istanbul is expected to have a positive effect on career progress.

H10: Place of residence being Istanbul is positively related with career progress.

- H_{10}^0 : Place of residence being Istanbul is negatively related with career progress.
- H_{10}^1 : Place of residence being Istanbul is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and place of residence being Istanbul represented as 0,1. The reference category for checking the career attainment is the no change category of zero. The results showed that the model is not a good fit with a significance of $p=0.6$.

Checking all the significance levels of the seven career attainment outcomes, the model showed neither residence being Istanbul or not, did not have any significant value against predicting the career change. Therefore, this hypothesis is rejected.

The independent sample t-test was also applied among professionals' place of residence being Istanbul and career attainment and the results were in alignment with the multinomial logistic regression that place of residence is not a significant factor with a p value of 0.8.

H11: Having professional affiliations is positively related with career progress.

- H_{11}^0 : Having professional affiliations is negatively related with career progress.
- H_{11}^1 : Having professional affiliations is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and professional affiliations of 0,1 indicating that the professionals do have a professional affiliation (1) or not (0). The reference category for checking the career attainment is the no change category of zero. The results showed that the model is not a good fit with a significance of $p=0.486$.

Checking all the significance levels of the seven career attainment outcomes, the model showed that the professionals who have a professional affiliation, don't possess a significance for predicting career attainment. Therefore, this hypothesis is rejected.

The independent sample t-test was also applied among professional affiliations and career attainment and the results were in alignment with the multinomial logistic regression that professional affiliations is not significant factor with a p value of 0.2.

H12: Having non-professional affiliations is positively related with career progress.

- H_{12}^0 : Having non-professional affiliations is negatively related with career progress.
- H_{12}^1 : Having non-professional affiliations is positively related with career progress

This test has been conducted at career attainment categories as [-3,+3] and non-professional affiliations of 0, 1 indicating that the professionals do have a non-professional affiliation (1) or not (0). The reference category for checking the career attainment is the no change category of zero. The results showed that the model is not a good fit with a significance of $p=0.496$.

Checking all the significance levels of the seven career attainment outcomes, the model showed that the professionals who have a non-professional affiliation, have a higher tendency to promote two levels, when compared with others with a p value of 0.19 and a positive beta value of 0.453 indicating a positive tendency. For the remaining 1 level career attainment, professional affiliations don't possess significance for predicting career attainment.

Therefore, this hypothesis is partially accepted.

The independent sample t-test was also applied among professional affiliations and career attainment and the results were in alignment with the multinomial logistic regression that nonprofessional affiliations is not significant factor with a p value of 0.5.

H₁₃: Having early career affiliations is positively related with career progress.

- H₁₃⁰: Having early career affiliations is negatively related with career progress.
- H₁₃¹: Having early career affiliations is positively related with career progress.

This test has been conducted at career attainment categories as [-3,+3] and early career affiliations of 0,1 indicating that the professionals do have early career affiliations (1) or not (0). The reference category for checking the career attainment is the no change category of zero. The results showed that the model is a good fit with a significance of p=0.07.

Checking all the significance levels of the seven career attainment outcomes, the model showed that the professionals who have an early career affiliation, have a higher tendency to promote two levels, when compared with others with a p value of 0.009 and a positive beta value of 0.557 indicating a positive tendency. For the remaining 1 level career attainment, early career affiliation doesn't possess significance for predicting career attainment. Therefore, this hypothesis is partially accepted.

The results of these hypotheses tests are summarized below.

Table 5.3.

Hypothesis Testing Results

Hypothesis	Result
H ₁ : Age is negatively related with Career Progress.	Accepted
H ₂ : Gender being Men has a positive relation with career progress.	Accepted
H ₃ : Being unmarried has a positive relation with career progress.	Accepted
H ₄ : Graduation from a top 10 university, is positively related with career progress.	Accepted
H ₅ : Educational Level is positively related with career progress.	Hypothesis is accepted for the university graduation.

Table 5.3. Hypothesis Testing Results cont'

Hypothesis	Result
H ₆ : Rotation is positively related with career progress	Accepted
H ₇ : Changing Jobs is positively related with Career Progress	Accepted
H ₈ : Total number of months worked is negatively related with career progress.	Accepted
H ₉ : Foreign language knowledge is positively related with career progress.	Accepted
H ₁₀ : Place of residence being Istanbul is positively related with career progress.	Rejected

Table 5.3. Hypothesis Testing Results cont'

Hypothesis	Result
H ₁₁ : Having professional affiliations is positively related with career progress.	Rejected
H ₁₂ : Having non-professional affiliations is positively related with career progress.	Limited support with p value 0.1
H ₁₃ : Having early career affiliations is positively related with career progress.	Partially Accepted

5.3. ADDITIONAL ANALYSIS AND RESULTS

This section is dedicated to the additional analysis, including descriptive statistics, and correlation analysis.

An initial correlation analyses were applied in order to determine if there were association among the variables. These outputs have been utilized in order to pass the assumptions of using the multinomial logistic regression. Please refer to section 3.2.3 for methodology.

T-tests were applied in order to determine possible gender differences among the career changes. In addition, all the variables are checked against career progress through box plots and interesting outputs were highlighted.

5.3.1. Correlation Analysis

For the aim of identifying any possible correlations among the variables, the Pearson correlations are calculated. The correlation table is available in appendices section.

As it is available in the correlation table, the Pearson correlation table does not indicate any significant correlations among career attainment and the independent variables, as well as among the independent variables.

Results from the correlation analysis are summarized below:

- The Number of job changes within the last five years is negatively correlated with the age, at a significance level of 0.01, which indicates that as age increases the tendency to change a job decreases. This is supporting Super's Lifespan and Lifespace theory because according to this approach, as individuals age the importance of professional life within their whole life decreases and the aim shifts to sustaining the position rather than seek for challenges.
- Living in Istanbul is negatively correlated with the age and total number of months worked, at a significance level of 0.01, which indicates that as age and total number of months worked increase the tendency find professionals working in Istanbul is decreasing. This is again in agreement with Super's Lifespan and Lifespace theory, because as the professionals age, their expectation from professional life and the city that they live in is changing which is leading the professionals to move out of metropolitan as they age.
- The total number of months is found to be negatively correlated with gender which means that men are working longer than women as the number of months worked increases. This is in agreement with reproduction theory.
- The foreign language knowledge is positively correlated with gender indicating that women are investing on their human capital through foreign

language more than men. This is in alignment with reproduction model theory and in the literature the disadvantages groups are advised to invest on their human capital to decrease the gap between them and the privileged group as well.

- Both professional and non-professional affiliations are negatively correlated with marital status, indicating that as professionals get married their social capital investment is decreasing. This is in alignment with Super’s lifespan life space approach.

5.3.2. T Test for Gender Analysis

In order to identify possible differences among men and women, a t test is applied to the data. The representation of the t test result is available in table below.

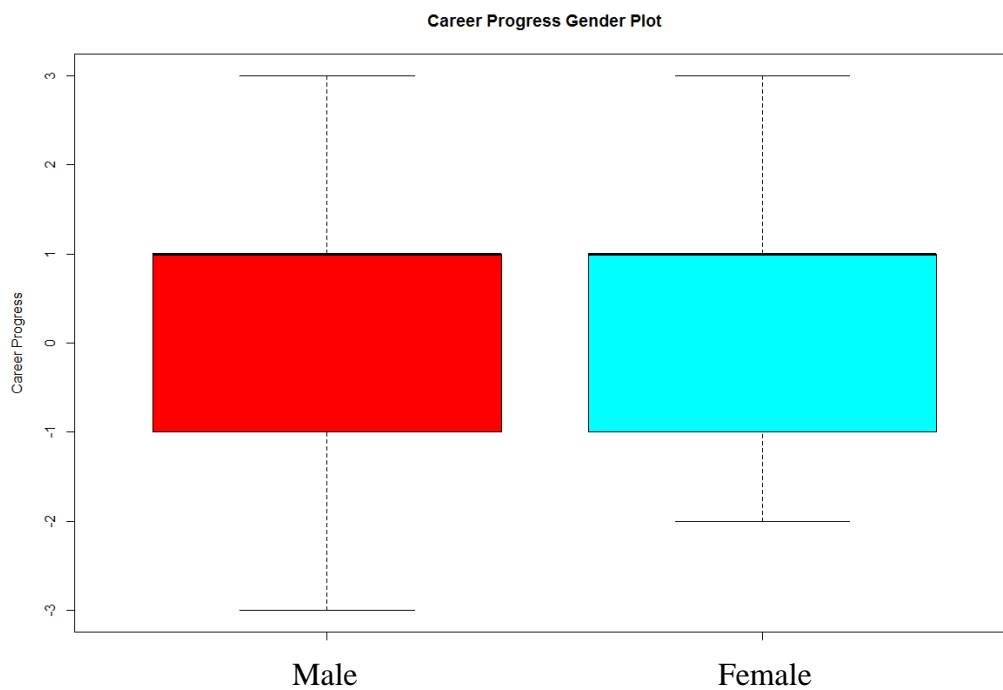
Table 5.4.

T test on Gender

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Career Attainment	Equal variances assumed	28,551	,000	2,786	2527	,005	,052	,019	,015	,088
	Equal variances not assumed			2,674	1040,832	,008	,052	,019	,014	,090

This analysis states that there is a difference on career attainment among men and women.

Figure 5.1. Box Plot of Career Progress vs Gender

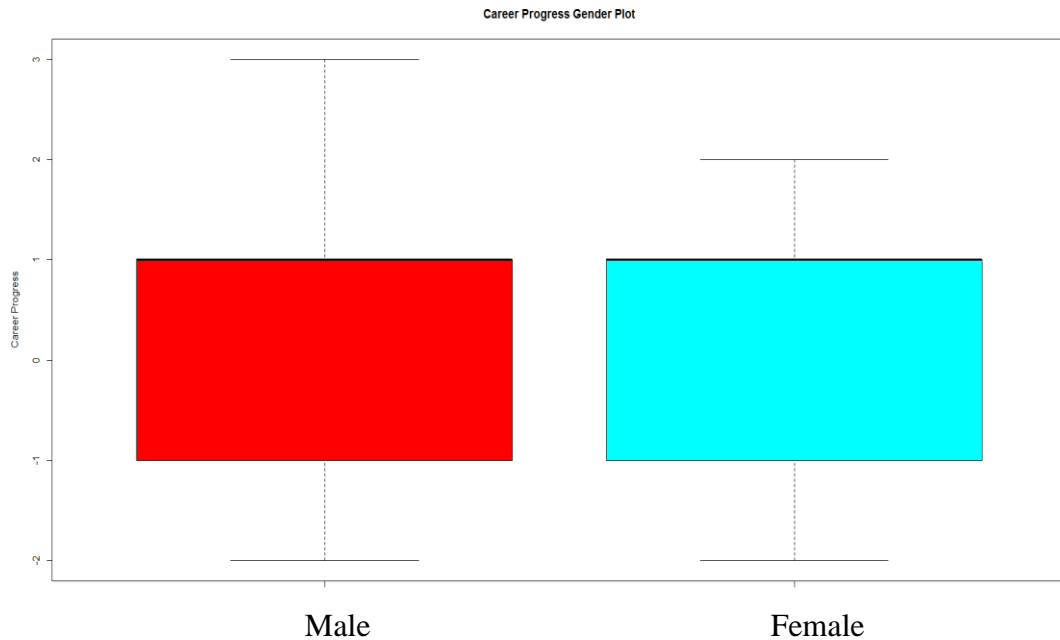


The gender career progress box plot analysis shows that the majority of male and female population are going from -1, 0 and 1 degrees of career change.

One interesting point is that there is no female in the population who has experienced -3 level of downgrade. This is in alignment with Super's lifespan theory. According to this theory the individuals take decisions with respect to their age and the roles

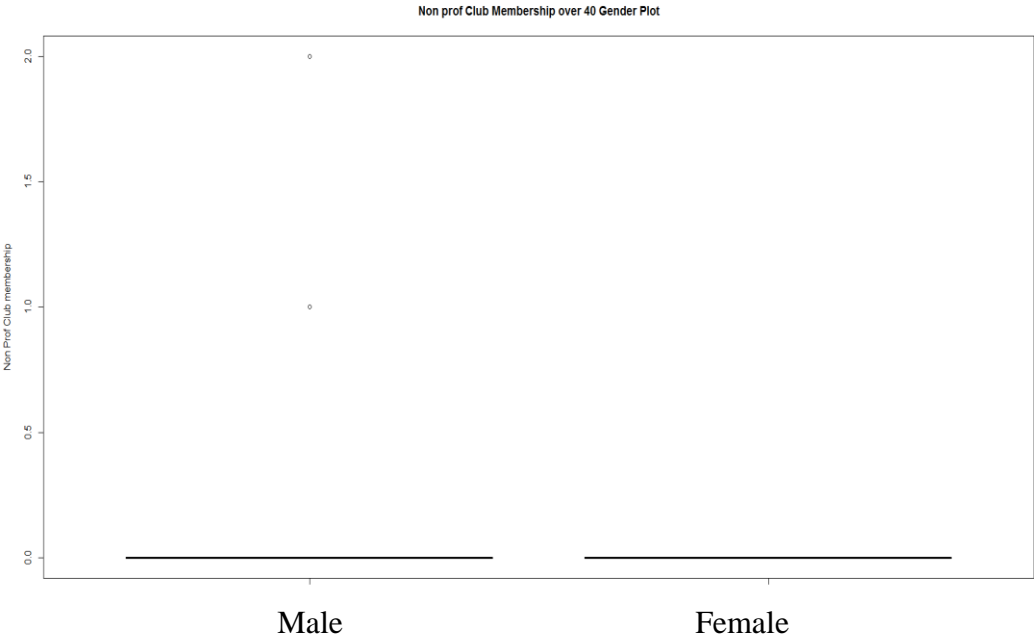
they have in that time period of lifespan. This box plot shows that women are less opportunity seekers than men.

Figure 5.2. Box Plot of Career Progress vs Gender (Over 40 Age)



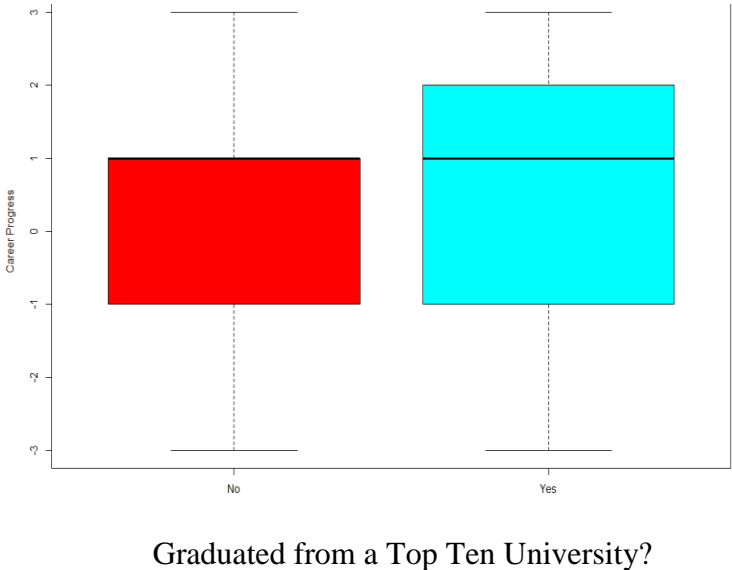
Another interesting output was that females over age 40 do not promote +3 degrees. Is this due to a glass ceiling effect or do they have different life expectations after the age of 40 are possible questions to further investigate this result. In this analysis, men are represented as a privileged group which is in alignment with reproduction model theory.

Figure 5.3. Box Plot of Non Professional Affiliations vs Gender (Over 40 Age)



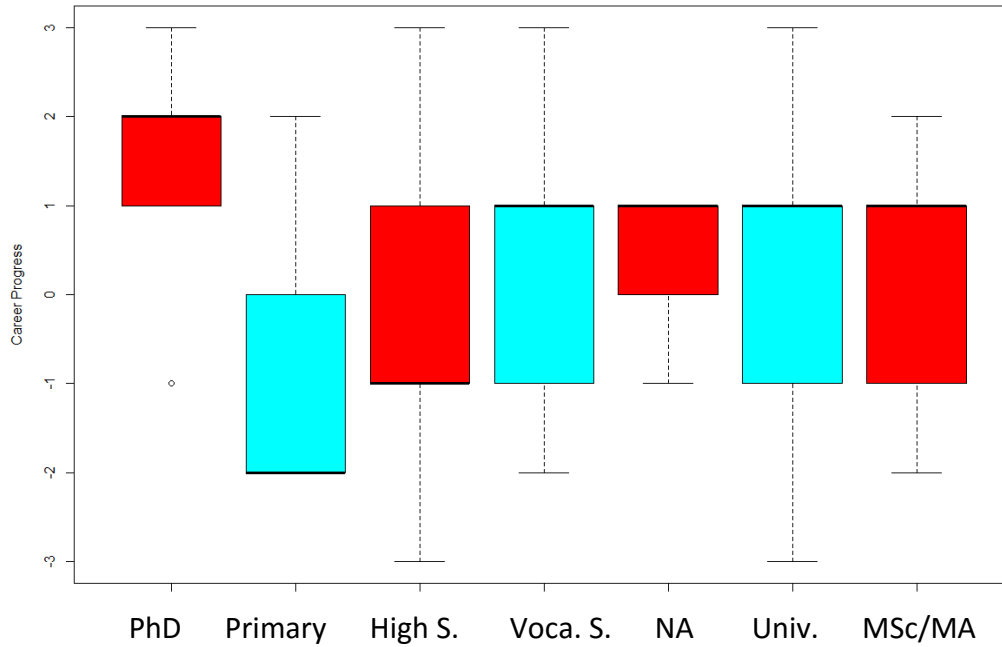
This boxplot shows that none of the females of age over age 40 are a member of a non-professional communities such as sports club, arts club etc. This is in alignment with reproduction model and Supers lifespan and lifespace theory. As over 40 age is within the settlement period and the priorities of women might be shifting to more family related aspects as highlighted in various literature.

Figure 5.4. Box Plot of Career Progress vs Graduation from Top Ten University



The graduation from a top ten university and career progress box plot analysis shows that while both groups experience +3, -3 promotion and downgrades, the group of top university graduates are promoting within a higher range of 1 and 2. This is in alignment with human capital theory that as professionals invest on their human capital their career attainments are expected to increase as well.

Figure 5.5. Box Plot of Career Progress vs Education Level



The box plot of career progress and education level, was one of the most interesting outputs of the analysis. Some of the interpretations are stated below:

- University and masters graduates possess a higher level of median of one level.
- The vocational school graduates have a better career attainment performance when compared to the university and masters graduates. Vocational school

graduates did not downgrade 3 levels which is better than university graduates and similar to MSc/MA graduates.

- The PhD holder professionals' career progress was quite different than all other educational levels. The PhD holders' career progress has been towards a promotion trend between 1 and 2 levels with a median of 2.
- Both the primary and high school graduates have a downgrade tendency with a median of -1 and -2.
- Another interesting fact is that masters and primary education graduates do not get to a third level career achievement.

Here the outputs are in alignment with human capital theory as the medians climb up the career attainment ladder as the educational degree increases.

6. CHAPTER VI

DISCUSSION ON FINDINGS

Up to this section, the quantitative research design is build and the research results are shared through multinominal logistic regression. Additional analysis have been conducted and interpreted as well.

This chapter is dedicated to the findings of this research which are the results of descriptive statistics, frequencies, correlation analyses, T tests and regression models that are shared in detail. Each of the findings are grouped under the three category of theory that are reproduction, lifespan, human capital and social capital.

6.1. FINDINGS ON REPRODUCTION AND SUPERS LIFESPACE LIFESPAN THEORY

6.1.1. Age

The results indicated that both one and two level career attainments are less likely as the professionals' ages. This is in alignment of Super's lifespan theory.

Hall and Nougaim, in alignment with Super, state that individual's progress through distinct occupational stages in their organizational careers (Hall and Nougaim, 1968; Super, 1984). As per Super's career model (Life space, Life span in section 2.3),

individuals go through a sequence of stages, starting with trial, where the focus is on identifying interests, capabilities, fit, and professional self-image, then going through establishment with an emphasis on growth, advancement, and stabilization, then towards maintenance where the focus shifts to accomplishments achieved earlier and maintaining one's self-concept, and finally to decline where individuals' emphasis is on developing a new self-image that is independent of career success. Super's model predicts that job attitudes of individuals are different with career stages (Super, 1984).

Kooij et al., state that several factors may intervene in the relationships between the different conceptualizations of age and the motivation to continue to work. Among these, they have exemplified health as a more likely factor to have an impact on the retirement decision in physically heavy professions, and stereotypes are more likely to have an impact on motivation when affecting management decisions (Kooij et al., 2008).

From an age point of view, this research tested Super's life span theory and the results indicated that as individuals age their achievement level decreases, which is in alignment with Super's model.

6.1.2. Gender

Gender analysis revealed that there is a difference among men and women regarding career attainments. The existence of a glass ceiling is also a suspicion we have in this study, as the descriptive analysis showed none of the women as promoting above 3 levels. This is in alignment with the reproduction theory on gender.

The survey results of 733 US employees, from 1991 General Social Survey indicate a similar trend in the gender differences on opportunity. In this research, Cassirer and Reskin, found out that men had a more favorable location in opportunity structures. They further stated that since men were more likely to be located in positions that encourage them to hope for promotions, men attached greater importance to promotions than women (Cassirer and Reskin, 2000).

In alignment with Cassier and Reskin, through an interview of 109 MIS employees, Igbaria and Baroudi found out that women were perceived to have less favorable chances for promotion than men based on supervisory ratings of the likelihood of promotion of the employee (Igbaria and Baroudi, 1995).

According to Locke and Latham goal setting theory, human behavior has a purpose such as people set goals, develop plans and engage in goal driven behaviors. Within this context people evaluate and adjust their behaviors depending on the progress being made (Locke, 2002). Wrosch et al., further argue that individuals have a tendency to focus on attractive goals and similarly to move away from unattractive ones, and they sometimes have to give up or modify desired goals (Wrosch et al., 2007). According to Carver and Scheier, this goal disruption can occur at the very broad level (e.g., to general life goals, such as being happy and safe), at the specific level (e.g., to studying a particular course or travelling overseas), and at the behavioral sequencing level (e.g., to routine day-to-day activities; Carver & Scheier, 1998). This reminds us the Maslow's triangle of needs (Maslow, 1943). From this perspective, "can women be prioritizing their families and children after the age of 40 and putting the career to a second level of priority?" is one of the questions whose answer could have lid light to the result of this output.

The literature search on gender, and descriptive statistics of the data revealed that there is a gender effect in career attainment and defined men as a privileged group when compared to women. However, the multinomial logistic analysis outputs has added an additional dimension in terms of comparing the career attainment through gender. When it comes to one level promotion, men when compared to women, have found to promote with a lower tendency, when compared to zero career change.

6.1.3. Marital Status

The marital status, although being evenly distributed among the data set, seem to have an effect on one and two level promotions. The results that revealed married professionals to have a lower tendency to promote one level.

In the literature, commonly marriage information is assessed together with gender on career attainment (Osipow, 1973, Landau & Arthur, 1992). Super's life span theory states that the roles that professionals get throughout their lives effect their career and choices. However, it focuses on a lifespan. When it comes to marriage, it could have happened throughout the lifespan in various periods once or multiple times. Thus, the result found from this study as, married professionals have a lower tendency to promote one level, is a result noted.

6.2. FINDINGS ON THE HUMAN CAPITAL THEORY

6.2.1. Top Ten University Graduate

The results have clearly indicated that although not being a majority of the overall data, among the professionals who have achieved one and two levels of career attainment there is a significant contribution from the top ten university graduates.

Including Dale and Krueger (2002) for the US; Daniel, Black, and Smith (1995) for Canada, and Ono (2004) for Japan, many researches have contributed to the career literature by lightening the relationship among top university graduation and having higher occupational outcomes. On top of that Kawaguchi and Ma have tried to identify the direct effect of top university graduation on promotion as occupational outcome and possible causes behind this relationship (Kawaguchi and Ma, 2008).

The result of this study as graduating from a top ten university supporting career progress is in alignment with the human capital theory.

6.2.2. Educational Degree

When focusing on the various education levels, the results did not reveal any association among the education level and career attainment such as, as education level increases, the career attainment increases. However, a particular trend has been identified among graduates above and below university degree. When checking the

model at university and non-university graduate levels, the model outputs showed a trend for the non-university graduates.

The professionals who have a lower level of education, which is below the university degree, are found to possess a lower tendency to promote two levels in the management line.

The boxplot of the educational levels revealed a clearer picture as the medians of all of the educational levels showed a consistent increase as the educational level increased.

This is supported by university and masters graduates possessing a higher level of median of one level. Also, the PhD holder professionals' career progress being towards a promotion trend between 1 and 2 levels with a median of 2 was another supportive fact. In addition to this, both the primary and high school graduates possessed a downgrade tendency with a median of -1 and -2.

The different trends among PhD graduates is also in alignment with Christa Countee-Gilliam's study on social work leadership. In her study, Christa has highlighted that although the individuals highest degrees are not significant with being a leader, more than 72% of the doctorate degree professionals were leaders (Countee-Gilliam, 2016). These results are in alignment with the human capital theory.

6.2.3. Area of Expertise – Rotation

The findings on the area of expertise indicate that the professionals who are specialized in HR only, IT only and HRIT combination and HRNA combination are more likely to get a one and two levels of promotion, when compared to other possible career changes.

The analysis indicated that individuals, who promoted, have different areas of experience such that they did not stay in HR only but also circulated among different areas such as finance.

Area of experience can be considered as one of the aspects of work experience in the model. This is associated with the human capital theory.

Jans and Judy, highlighted the fact that within the military while high rates of job rotation may be justifiable for some career categories such as junior officers, commanders, and senior leaders, they are less viable for staff officers and for enlisted personnel (Jans and Judy, 2004)

6.2.4 Number of Job Changes

The Number of job changes within the last five years is negatively correlated with the age, at a significance level of 0.01, which indicates that as age increases the tendency to change a job decreases. This is in agreement with Super's Lifespan and Lifespace theory.

The number of job changes can be considered as one of the aspects of work experience in the model. This is associated with the human capital theory.

The professionals with two job changes have found to have a higher tendency to promote one level in the managerial line.

6.2.5. Total Number of Months Worked

The total number of months worked can be considered as one of the aspects of work experience in the model. This is associated with the human capital theory. These results indicate that as the professionals' total number of experience increases, their tendency to achieve especially a one level promotion decreases. Christa Countee-Gilliam emphasized that the years of experience is a significant factor to be a leader (Countee-Gilliam, 2016).

The total number of months is found to be negatively correlated with gender which means that men are working longer than women as the number of months worked increases. This is in agreement with Super's Lifespan and Lifespace theory (Super, 1984).

6.2.6. Foreign Language Knowledge

Similar as education level, the foreign language knowledge can be considered as one of the means of human capital. This study showed that the professionals who know a foreign language have a higher tendency to promote one and two levels.

The foreign language knowledge is positively correlated with gender meaning that women are investing on their human capital through foreign language. This is in alignment with reproduction model theory and also with the literature, where the disadvantaged groups are advised to invest on their human capital to decrease the gap between them and the privileged group.

6.3. FINDINGS ON THE SOCIAL CAPITAL THEORY

6.3.1. Istanbul Residence

Place of residence being Istanbul, is found as not a significant factor on career attainment.

Living in Istanbul is negatively correlated with the age and total number of months worked, at a significance level of 0.01, which indicates that as age and total number of months worked increase, the tendency to find professionals working in Istanbul is decreasing.

This is in agreement with Super's Lifespan and Lifespace theory, where decline phase as the final stage of career, is defined with individuals' emphasis shifting to developing a new self-image that is independent of career success (Super, 1984) and moving out of a metropolitan city can be an example for this.

6.3.2. Professional Affiliation Attainment

The results of this study showed that professional affiliations are not found to be a significant factor for career attainment.

Professional affiliations are negatively correlated with marital status, indicating that as professionals get married their social capital investment is decreasing. This is in alignment with Super's lifespan lifespace theory.

6.3.3. Non-Professional Affiliation Attainment

Non-Professional affiliations are negatively correlated with marital status, indicating that as professionals get married, their social capital investment is decreasing. This is in alignment with Super's lifespan lifespace theory.

The professionals who have a non-professional affiliation, have a higher tendency to promote two levels, when compared with others with a p value of 0.19 and a positive beta value of 0.453 indicating a positive tendency. Hence, it is partially supported.

6.3.4. Early Career Affiliation Attainment

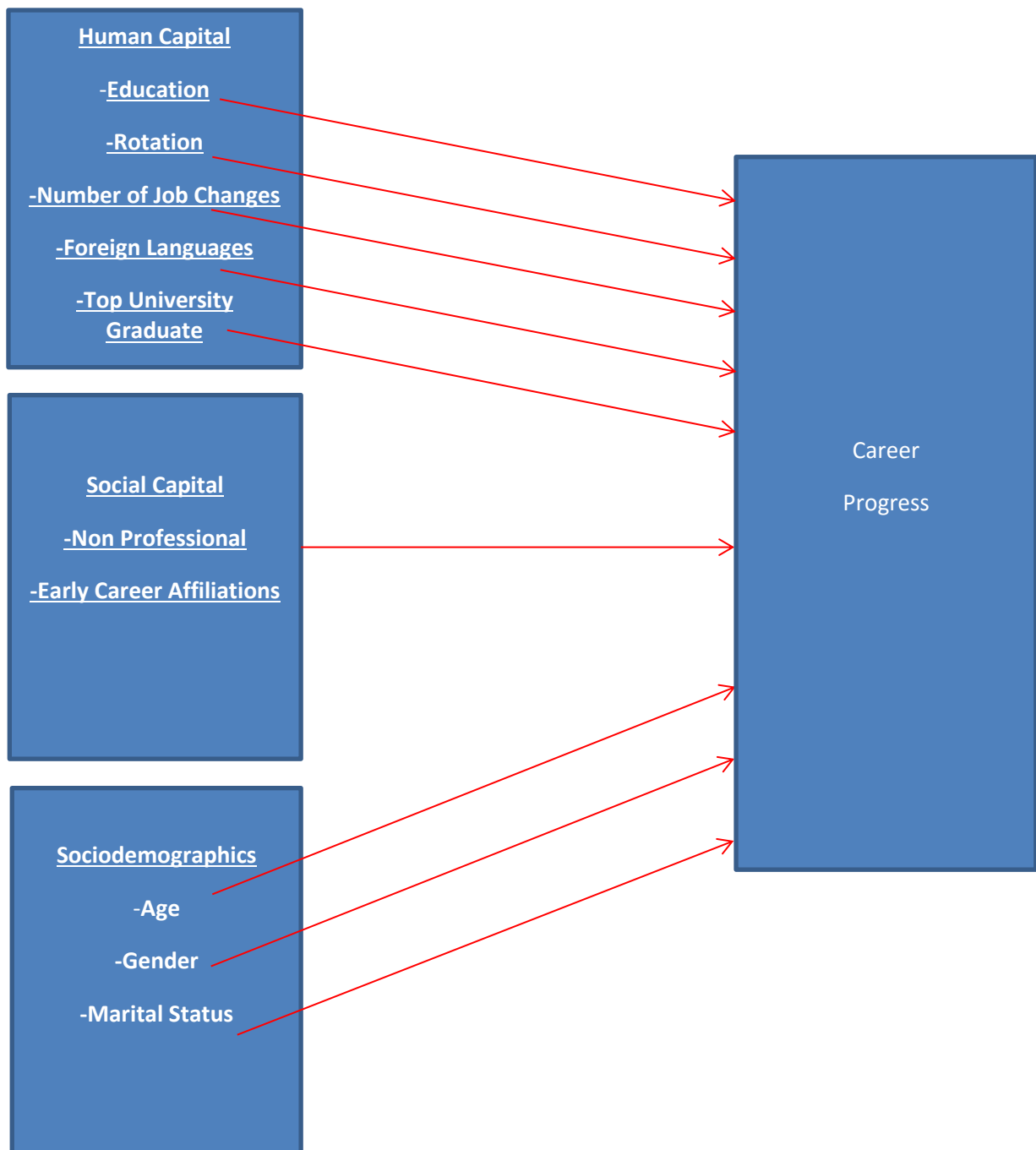
The professionals who have an early career affiliation, have a higher tendency to promote two levels, when compared with others. This result is a contribution to the Social Capital Theory.

Besides a social capital factor, within the literature, the engagement in early career exploration programs, is stated to be a mitigating element to reduce the risks associated with erroneous decision-making concerning long term career choice (Galliot et al., 2015; Laughland-Booÿ et al., 2015).

As per the discussion on findings, the initial theoretical framework is updated. The next section is dedicated for this new framework.

6.4. REVISED MODEL

Figure 6.4. Revised Model



7. CHAPTER VII

CONCLUDING REMARKS

After reviewing the findings, this section is dedicated to the implications for theory and practice.

7.1. IMPLICATIONS

This research aimed to clarify the career progress of professionals through various capital sources, such as human capital, social capital as well as socio demographics. The finding of this study has come up with implications for theory, as well as practice.

7.1.1. Implications for Theory

The career research literature, although states that human and social capital should not ignore one another on career development, the social and human capital is investigated separately and in a particular perspective.

The social capital definition for example, is mainly taken as networks of the professionals within the corporation that they are working for, or through certain academic interactions networks. There has not been any study that takes social capital from professional, non-professional and early career affiliations perspective. The pool of professionals mainly has homogeneity, though industry, corporation or university.

As a result, there was a gap of hybrid approach on social and human capital aspects on career progress.

As stated by Durbin, professional networks provide an opportunity to meet influential people, identify business opportunities, and learn new skills (Durbin, 2011).

This study showed that early career and non-professional affiliations support career progress. The contribution to theory is that early career affiliations and non-professional affiliations, which can be grouped under soft social capital contributes to professional career progress.

This studies outputs on social affiliations, is in alignment with the concept of soft social capital, as studied by Emmerik, from a gender perspective among faculty members. The results of this study indicated that men are more effective using team-related resources to create both hard and soft social capital, where hard social capital is defined as accumulated task-oriented resources that can be used to achieve valued career outcomes and soft social capital is defined as as emotional support resources that can be used to achieve socio-emotional support like counseling, friendship. Emmerik's hypothesis that strong ties affect the creation of soft social capital received support (Emmerik, 2006). This socio-emotional support, that Emmerik has highlighted is in alignment with the social capital build through the non-professional and early stage career affiliations.

As a result, implications to theory from this study are summarized as follows:

- * Early Career Affiliations have an impact on career progress, through social capital
- * Non Professional Affiliations have an impact on career progress, through social capital

The social capital analysis results, together with the hybrid approach of social and human capital analysis through this variety of professionals are the areas that, this study is contributing.

7.1.2. Implications for Practice

The implications to the practice can be grouped under three categories which are implications for corporations, implications for professionals and finally implications for the universities and juniors, such as high school/ university students.

Starting from the corporations, the outputs of this study highlighted that foreign language and above university graduation have a positive impact on career progress.

In agreement with Sorokin, who stated that the schools represent one of the most important channels of vertical circulation (Sorokin, 1927/1959), corporations are encouraged to support their employees personal development on foreign languages and also corporations that want to build their management team from inside, are encouraged to support their employees educations especially at PhD level.

Another implication for the corporations were on rotation programmes. As a result of this study, corporations that want to build their management team from inside, are highly encouraged to support internal rotation programs. Also, corporations are encouraged to invest on their female employees. Job rotation can be defined as the transfer of employees among different positions which requires different skills and responsibilities. Through this various set of expectations and qualifications, individuals are encouraged to extend their skills and develop. As stated by Huang, job rotation is a developmental technique that has been widely used (Huang, 1999) but, surprisingly, received little attention in human-resources studies. According to Beatty et al. empirical research in this regard is sorely needed (Beatty et al, 1987). This study has served the purpose of this and as a result rotation programmes have indicated a positive impact on career progress and hence corporations are encouraged to have internal rotation programs.

Regarding professionals, the results of this study encourages the professionals to seek for social club memberships, throughout their career. This will be supporting them to build up their soft social capital which is expected to serve for their career progress.

Another implication for practice for the professionals is to invest on their human capital, through foreign languages, attaining education level higher than university degrees.

Last but not least, the results of this study encourages universities to support club memberships as well as alumni memberships. Also, high school teenagers are encouraged to enter top ten universities for climbing up their potential career ladder. As stated by Dale and Krueger (2002) for the US; Daniel, Black, and Smith (1995)

for Canada, and Ono (2004) for Japan, many researches have contributed to the career literature by lightening the relationship among top university graduation and having higher occupational outcomes. It is not only the salary effect, as highlighted within the literature but also the career progress, which plays a key role for.

7.1.3. Implications and Suggestions for Further Studies

As the data is taken from Turkey's one of the biggest recruitment portal through data agreement, there has been restrictions and limitations on the data access, which build up the major suggestions for the further studies. These can be summarized as follows:

The data included self reported data and it would have been interesting to extending the research scope by including the professionals especially external career networks.

Another point is that this self reported data might be extended by some personal interactions. Such as extending the research scope by reaching out to individuals and collecting more personal and professional preferences information like commitment, family details such as number of children. Also gathering information on personal and professional targets would be interesting. For example for the elderly employees, who do not possess any career attainment, it would be interesting to verify if their personal and professional preferences have changed to verify Super's theory from the individuals point of view.

The data focuses the period between Jan 2011 and Feb 2016, which is an economically unstable period of time for Turkey. There might be some hidden implications of this socio political instability.

The age and gender analysis can be further detailed and extended such as extending the study by identifying possible trends among before and after 40 ages of men and women, as well as interviews to identify possible glass ceiling effect.

Again due to data restriction, extending the scope of the analysis with industry information, as well as company specific information, such as focusing on SME's, global corporations would have been interesting as the career opportunity dynamics are different among global corporations and SME's.

7.1.4. Limitations of the Study

The CV data information did not include any additional personal and professional information such as number of children, organizational commitment and internal networking.

As stated by Meyer, Allen, & Smith, the commitment of professionals not only to organizations but also to other entities are significant in professionals' satisfaction at work (Meyer et al., 1993). As job satisfaction is an important subject in professional career movements, it would have been interesting to have added such factors in the analysis. On the other hand, Lin's studies on women's social capital indicated that the having children has an effect on women's social capital (Lin, 2000). In addition to this, Goudard and Lubrano's results on internal and external networking is also one of the limitations of this study as we do not have the internal social capital of the professionals that might have affected their career moves within the corporation (Goudard & Lubrano, 2013).

Data - Self-reported data limitation: As the data is coming from individuals' data entry to the career portal, it is assumed that the professionals have entered their data correctly and the data set is reliable.

The lack of company information, due to data security, prevented the opportunity to have a dimension on the enterprise structure effect as SME's and big corporate organizations career path opportunities might vary. It would have been interesting to show differences of the career dynamics according to the company structure.

As per Sears, definition of career development as the total constellation of economic, sociological, psychological, educational, physical, and chance factors that combine to shape one's career (Sears, 1982), none of the literature including this one has a model to include the chance factor. According to this definition extending this research with additional factors on economy, psychology would have been interesting.

7.2. CONCLUSION

This research focuses on employees' sociodemographic aspects including age, gender, marital status; and employees' human capital characteristics including education level, number of foreign languages, graduation from a top university, place of residence: Istanbul or not, total months of experience, rotational experience in different functional areas, also social capital characteristics including number of professional and non-professional affiliations and early career affiliations and their effect on the career progress. The period of focus of the career progress of the professionals is between 2011 and 2016.

In alignment with the literature, the findings of this research demonstrated that, human and social capital contribute positively to career progress. Within this scope age, gender, marital status, graduation from a top ten university, number of months worked, number of job changes, rotation, education level equal and above university degree, knowledge of foreign language are found to be predictors of career progress. Results also showed that social capital that is defined through non-professional affiliations and early career affiliations are also predictors of career progress. The professional affiliations did not possess a strong relationship with career progress. Similarly, the results also did not indicate any contribution of place of residence being Istanbul, on career progress. In contrast to previous studies' findings, the educational level is not found to be a strong predictor of career progress. However, graduating from a university or higher level supported career progress.

This study contributed to the literature with a hybrid model of career progress including human and social capital together. Another contribution is that early career affiliations and non-professional affiliations are found to be significant in the overall career achievements from a social capital perspective. The study has also contributed to the practice of human capital management as well. The major implications to practice are for the corporations. The corporations can encourage their employees to invest on their foreign language knowledge and educational level especially university levels and above. Corporations that want to build their management team from inside, are encouraged to support their internal rotation programs and their employees education, especially PhD degrees.

Another set of implications is for the professionals. The professionals are encouraged to have nonprofessional affiliations, to learn foreign languages and to increase their education level. One suggestion for the universities is to promote the early career affiliations of the university students which would pay back through the increased social capital of the individuals, serving for their career achievements. Finally the high school teenagers are encouraged to target for the top ten universities.

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9. APPENDICIES

Correlations

		Career Progress	Number of job changes	Area of spec.	Total Months of Exp.	Age	Marital Status	Gender	Prof. Aff. Exists	Top 10 Univ Graduate	Istanbul Resident	Edu. Level	Non Prof. Aff. Exists	Early Career Aff. Exists	Foreign Lang. Know.
Career Progress	Pearson Correlation	1	0,014	-0,012	0,001	-0,005	-0,008	,040*	-0,01	-,060**	-0,009	0,031	0,001	-0,021	-0,031
	Sig. (2-tailed)		0,472	0,53	0,967	0,791	0,683	0,042	0,609	0,003	0,649	0,115	0,969	0,299	0,124
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Number of job changes	Pearson Correlation	0,014	1	,291**	-0,013	-,090**	0,034	-0,036	-0,024	-0,033	0,022	,067**	-0,036	-,065**	-,163**
	Sig. (2-tailed)	0,472		0	0,521	0	0,084	0,068	0,237	0,096	0,279	0,001	0,073	0,001	0
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Area of spec.	Pearson Correlation	-0,012	,291**	1	-,192**	-,159**	,060**	0,034	-,073**	0	,056**	-,112**	-0,028	-,086**	-,050*
	Sig. (2-tailed)	0,53	0		0	0	0,003	0,086	0	0,983	0,005	0	0,153	0	0,011
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Total Monts of Exp.	Pearson Correlation	0,001	-0,013	-,192**	1	,368**	-,326**	-,108**	,092**	-,066**	-0,038	,053**	0,031	0,004	-0,039
	Sig. (2-tailed)	0,967	0,521	0		0	0	0	0	0,001	0,053	0,008	0,117	0,834	0,052
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529

Correlations

		Career Progress	Number of job changes	Area of spec.	Total Months of Exp.	Age	Marital Status	Gender	Prof. Aff. Exists	Top 10 Univ Graduate	Istanbul Resident	Edu. Level	Non Prof. Aff. Exists	Early Career Aff. Exists	Foreign Lang. Know.
Age	Pearson Correlation	-0,005	-,090**	-,159**	,368**	1	-,382**	-,110**	,134**	-,086**	-,039*	,126**	0,026	-0,009	-,057**
	Sig. (2-tailed)	0,791	0	0	0	0	0	0	0	0,049	0	0,189	0,652	0,004	
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Marital Status	Pearson Correlation	-0,008	0,034	,060**	-,326**	-,382**	1	0,037	-,100**	,046*	-0,003	0,008	-0,033	-0,002	,064**
	Sig. (2-tailed)	0,683	0,084	0,003	0	0	0,062	0	0,019	0,875	0,675	0,098	0,935	0,001	
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Gender	Pearson Correlation	,040*	-0,036	0,034	-,108**	-,110**	0,037	1	-0,033	-0,03	0,028	-,049*	0,038	0,026	,077**
	Sig. (2-tailed)	0,042	0,068	0,086	0	0	0,062	0,094	0,131	0,153	0,014	0,056	0,196	0	
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Prof. Aff. Exists	Pearson Correlation	-0,01	-0,024	-,073**	,092**	,134**	-,100**	-0,033	1	-,062**	-0,029	,171**	-,068**	-,109**	-,092**
	Sig. (2-tailed)	0,609	0,237	0	0	0	0	0,094	0,002	0,152	0	0,001	0	0	

Correlations

		Career Progress	Number of job changes	Area of specialization	Total Months of Experience	Age	Marital Status	Gender	Prof. Aff. Exists	Top 10 Univ Graduate	Istanbul Resident	Edu. Level	Non Prof. Aff. Exists	Early Career Aff. Exists	Foreign Lang. Know.
Top 10 Univ Graduate	Pearson Correlation	-,060**	-0,033	0	-,066**	-,086**	,046*	-0,03	-,062**	1	,123**	-,192**	,151**	,111**	,104**
	Sig. (2-tailed)	0,003	0,096	0,983	0,001	0	0,019	0,131	0,002	0	0	0	0	0	0
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Istanbul Resident	Pearson Correlation	-0,009	0,022	,056**	-0,038	-,039*	-0,003	0,028	-0,029	,123**	1	-,115**	,095**	,084**	,057**
	Sig. (2-tailed)	0,649	0,279	0,005	0,053	0,049	0,875	0,153	0,152	0	0	0	0	0	0,004
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Edu. Level	Pearson Correlation	0,031	,067**	-,112**	,053**	,126**	0,008	-,049*	,171**	-,192**	-,115**	1	-,116**	-,135**	-,258**
	Sig. (2-tailed)	0,115	0,001	0	0,008	0	0,675	0,014	0	0	0	0	0	0	0
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529

Correlations

		Career Progress	Number of job changes	Area of specialization	Total Months of Experience	Age	Marital Status	Gender	Prof. Aff. Exists	Top 10 Univ Graduate	Istanbul Resident	Edu. Level	Non Prof. Aff. Exists	Early Career Aff. Exists	Foreign Lang. Know.
Non Prof. Aff. Exists	Pearson Correlation	0,001	-0,036	-0,028	0,031	0,026	-0,033	0,038	-,068**	,151**	,095**	-,116**	1	,544**	,093**
	Sig. (2-tailed)	0,969	0,073	0,153	0,117	0,189	0,098	0,056	0,001	0	0	0	0	0	0
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Early Career Aff. Exists	Pearson Correlation	-0,021	-,065**	-,086**	0,004	-0,009	-0,002	0,026	-,109**	,111**	,084**	-,135**	,544**	1	,139**
	Sig. (2-tailed)	0,299	0,001	0	0,834	0,652	0,935	0,196	0	0	0	0	0	0	0
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529
Foreign Lang. Know.	Pearson Correlation	-0,031	-,163**	-,050*	-0,039	-,057**	,064**	,077**	-,092**	,104**	,057**	-,258**	,093**	,139**	1
	Sig. (2-tailed)	0,124	0	0,011	0,052	0,004	0,001	0	0	0	0,004	0	0	0	0
	N	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529	2529

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

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