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**THE RELATIONSHIP BETWEEN HUMAN RESOURCE
MANAGEMENT PRACTICES, ORGANIZATIONAL
COMMITMENT, CAREER CONCERN, JOB STRESS AND
TURNOVER INTENTION**

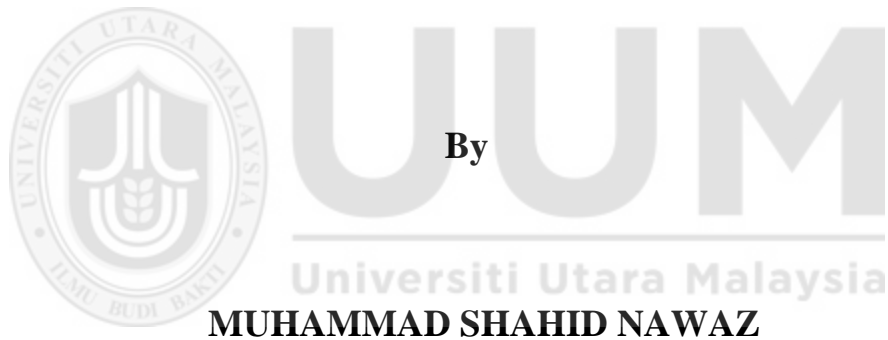
MUHAMMAD SHAHID NAWAZ



UUM
Universiti Utara Malaysia

**DOCTOR OF PHILOSOPHY
UNIVERSITY UTARA MALAYSIA
2016**

**THE RELATIONSHIP BETWEEN HUMAN RESOURCE
MANAGEMENT PRACTICES, ORGANIZATIONAL
COMMITMENT, CAREER CONCERN, JOB STRESS AND
TURNOVER INTENTION**



**Thesis Submitted to
School of Business Management
In Fulfillment of the Requirement for the Degree of
Doctor of Philosophy
University Utara Malaysia**

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Abstract

Any academic institution cannot survive and perform well without competent and committed academic staff. Therefore, it is important to address the issue of faculty turnover. It has been argued that faculty dissatisfaction with existing human resource practices such as no provision of equitable salary, performance appraisal, training and development, job stress and lack of career growth practices could lead to turnover. Hence, the focus of this study is to investigate the relationship between human resource practices, focusing specifically on examining the effect of salary, performance appraisal, training and development, and career growth (career goal progress, professional ability development, promotion speed, and remuneration growth) and employee's turnover intention. This study also investigates the mediating role of organizational commitment on these relationships, as well as the moderating role of career concern and job stress on the relationships between organizational commitment and turnover intention. Using a cross sectional survey technique, this study gathers data from a sample of 270 full time faculty members of private universities in Pakistan. The Partial Least Square (PLS) two step path modeling was used to test the direct and indirect hypotheses. The results indicate that salary and performance appraisal are significantly and negatively related to turnover intention. Besides, it was found that out of four dimensions of career growth, only promotion speed and remuneration growth, have significant direct relationship with turnover intention. Nonetheless, with regard to mediated relationships, it was found that organizational commitment mediates the relationships between performance appraisal as well three dimensions of career growth (career goal progress, promotion speed, remuneration growth) and turnover intention. The results verify that these relationships are mediated by organizational commitment except salary. Nevertheless, the results also show that career concern plays an important role in moderating the relationship between organizational commitment and turnover intention. This finding suggests that to reduce turnover intention amongst employees, organizations must realize that the impact of organizational commitment in reducing turnover intention is enhanced whenever the employees are concerned about their career growth. Hence, employees' career development should also be the concern of organizations.

Keywords: salary, performance appraisal, training & development, career growth, organizational commitment, job stress, career concern, turnover intention.

Abstrak

Mana-mana institusi akademik tidak boleh hidup dan berprestasi dengan baik tanpa kakitangan akademik yang berwibawa dan komited. Oleh itu, adalah penting isu lantikhenti fakulti diambil perhatian. Banyak hujah telah menekankan bahawa isu berkaitan rasa tidak puas hati dengan amalan sumber manusia yang sedia ada seperti tiada peruntukan gaji yang saksama, penilaian prestasi, latihan dan pembangunan, tekanan kerja dan kekurangan amalan pertumbuhan kerjaya adalah penyebab kepada lantikhenti. Oleh itu, fokus kajian ini adalah untuk mengkaji hubungan antara faktor pembangunan sumber manusia, dengan tumpuan khusus terhadap kesan gaji, penilaian prestasi, latihan dan pembangunan, pertumbuhan kerjaya (kemajuan matlamat kerjaya, pembangunan keupayaan professional, kecepatan promosi, dan peningkatan imbuhan) dan niat lantikhenti pekerja. Kajian ini juga menyiasat peranan perantara komitmen organisasi pada hubungan ini, serta peranan perantara kebimbangan kerjaya dan tekanan kerja pada hubungan antara komitmen organisasi dan niat lantikhenti. Dengan menggunakan teknik kajian keratan rentas, kajian ini mengumpulkan data daripada sampel yang terdiri daripada 270 ahli fakulti sepenuh masa universiti swasta di Pakistan. Permodelan *Partial Least Square* (PLS) dua tahap digunakan untuk menguji hipotesis langsung dan tidak langsung. Keputusan menunjukkan bahawa gaji dan penilaian prestasi berkait secara negatif dan signifikan dengan niat lantikhenti. Selain itu, didapati bahawa daripada empat dimensi peningkatan kerjaya, hanya kecepatan promosi dan peningkatan imbuhan mempunyai hubungan langsung yang signifikan dengan niat lantikhenti. Namun begitu, dengan mengambil kira pengantaraan hubungan, didapati komitmen organisasi menjadi pengantara dalam hubungan antara penilaian prestasi serta tiga dimensi peningkatan kerjaya (matlamat kemajuan kerjaya, cepatnya promosi, peningkatan imbuhan) dan niat lantikhenti. Keputusan mengesahkan bahawa hubungan-hubungan ini dapat dikaitkan dengan komitmen organisasi kecuali gaji. Walau bagaimanapun, keputusan juga menunjukkan bahawa kebimbangan kerjaya memainkan peranan yang penting dalam mengantarakan hubungan antara komitmen organisasi dan niat lantikhenti. Penemuan ini menunjukkan bahawa untuk mengurangkan niat lantikhenti dalam kalangan kakitangan, organisasi perlu sedar bahawa kesan komitmen organisasi dalam mengurangkan niat lantikhenti meningkat apabila pekerja mengambil berat tentang pertumbuhan kerjaya mereka. Oleh itu, pembangunan kerjaya pekerja juga harus menjadi keutamaan organisasi.

Kata kunci: gaji, penilaian prestasi, latihan dan pembangunan, pertumbuhan kerjaya, komitmen organisasi, tekanan kerja, kebimbangan kerjaya, niat lantikhenti

ACKNOWLEDGEMENT

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

I would like to praise and thank Allah SWT for his uncountable blessings and giving me the ability, strength and motivation to complete this study, without Allah' s blessing and help, it would never be possible for me to complete such a long journey.

First of all, I would like to give my sincere thanks to my honorable supervisor “Associate Professor. Dr Faizuniah Bt Pangil,” It has been an honor to be her Ph.D student. I appreciate all her contributions of time, ideas, and funding to make my Ph.D. experience productive and stimulating. The joy and enthusiasm she has for her research was contagious and motivational for me, even during tough times in the Ph.D. pursuit. Thank you, Dr Faizuniah, with my heartfelt feelings for all her contribution. She is such remarkable academician and researcher who have extended her greatest supports in assisting me to overcome all the obstacles that I have encountered in completing this study. Once again I would like to extend my genuine gratitude to her for all the superb wok she has done and wish her best wishes for her future endeavors.

I would also like to thank my co-supervisor, Dr. Muhammad Awais Bhatti. Thank you for always being inspiring, sharing, patient, and understanding. You are a wonderful supervisor, and I feel incredibly fortunate to have the chance to work with you.

I am very grateful for my father, Mian Allah Bakhsh, for earning an honest living for us. His support and his love encouraged me to work hard and to continue pursuing a Ph.D. project abroad. His firm and kind-hearted personality has affected me to be steadfast and never bend to difficulty. He always lets me know that he is proud of me, which motivates me to work harder and do my best.

To my late Mother, who sacrificed and invested all her life for my wellbeing, she was a strong and gentle soul who taught me to trust in Allah, believe in hard and that so much could be done with little. She had a high hopes for me but she is no more with me to see my success to date. I can only pray for Allah's mercy on her and May Jannat al Firdausi be her final place.

To my elder brothers & Sister, Qayyum Nawaz, he took upon my responsibility and took care of me; indeed, there are few brothers of your kind. I would like to thank Shah Nawaz, Ameer Nawaz, and Mrs. Qaiser for their moral support and love. I am glad that I did not disappoint you. I will always remember your valuable words of advice for me.

To my loving wife & Son, I would like to sincerely thank my wife and son for their unwavering support and love throughout this difficult journey. Prophet Muhammad (S.A.W) said “The whole world is a provision, and the best object of benefit of the world is the pious woman”. I whole heartedly thank my wife for her encouragement, support and love indeed there is no enough words to describe you.

I would like to express my gratitude to Dr. Arfan Shahzad, Senior Lecturer, OYA/GSB, at University Utara Malaysia (UUM). I thanks for his moral and knowledge based support in encouraging me to learn statistical software’s for my research thesis. Thank you for believing in me and for providing so many good comments from the perspective of an economist.

I would like to thanks Mazhar Abbas for his friendship, Care and Moral support in this long journey. He was always besides me to support and encourage me to complete most difficult tasks. I would also like to thanks my other friend, Adnan Ahmed Sheikh, who help and enabled me to present my thesis more fluently and clearly in English. I owe them both my sincere gratitude for their generous and timely help. I would also say thanks to Dr. Kausar Yasmeen for her kind help regarding my PhD Admission at UUM and her moral support during my research work.

Collective and individual acknowledgements are also owed to my friends particularly Sajjad Nawaz at University Utara Malaysia (UUM). Whose present somehow perpetually refreshed, helpful and memorable. To my respondents, my sincere appreciation for taking time and effort to participate in this research.

Finally, I would like to thank everybody who was important to the successful realization of my research thesis, as well as expressing my apology that I could not mention personally one by one.

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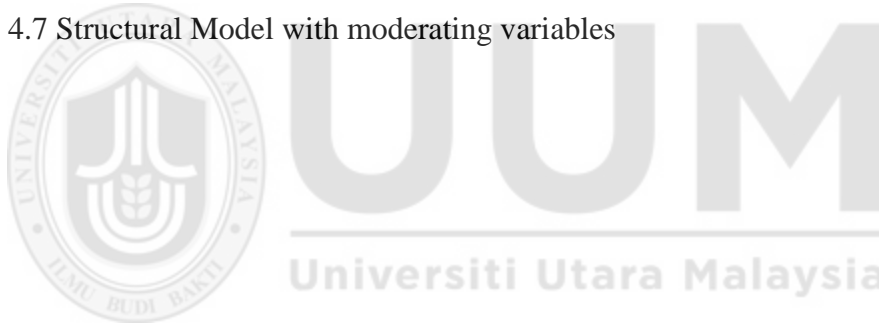
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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CG	Career Growth
CGP	Career Goal Progress
EM	Expectations Maximization algorithm
HRM	Human Resource Management
HEC	Higher Education Commission
JS	Job Stress
OC	Organizational Commitment
PA	Performance Appraisal
PAD	Professional Ability Development
PLS	Partial Least Square
PS	Promotion Speed
RG	Remuneration Growth
SA	Salary
SEM	Structural Equation Modeling
TD	Training & Development
TI	Turnover Intention

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Conference and Journal Publication

Based on this thesis, following work has been presented/ published and submitted in the respective International Journal and Conference.

Nawaz, M. S., & Pangil, F. (2016). The effect of fairness of performance appraisal and career growth on turnover intention. *Journal of Commerce and Social Science*, 10 (1).

Nawaz, M. S., & Pangil, F. (2016). The relationship between human resource development factors, career growth and turnover intention: The mediating role of organizational commitment. *Management Science Letters*, 6, 157–176.
doi:10.5267/j.msl.2015.12.006

Nawaz, M. S., Pangil, F., & Bhatti, M. A. (2015). The Relationship between Human Resource Development Factors and Turnover Intention : A Conceptual Framework. *International Journal of Academic Research in Business and Social Sciences*, 5(12), 297

Nawaz, M. S., Pangil, F., & Bhatti, M. A. (2014). Managing employee turnover and retention: The role of human resource management practices and organizational culture, The 7th NHRC conference proceedings and the *Procedia Social and Behavioral Sciences (Scopus Indexed)* published by Elsevier Ltd, 21-22 May, EDC Hotel, University Utara Malaysia.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In today's world of increasing competition and financial performance of the organizations, employee turnover remained significant focus of attention by researchers especially in institutions of higher education. However, in finding solution for such problem, there is the necessity to investigate the most important and valid factors which are influencing the employee turnover intention behavior in their organization. The main objective of this chapter is to clearly highlight the background information concerning with this study. Initially, this chapter will explain the overall structure of background information on the particular issues. Afterward, the problems which direct to the need for the present research are illuminated that being followed by the research questions, the research objectives, significance and scope of the study. To summarize the discussion, finally, the organization of the thesis studied in depth.

1.1 Background of the Study

In the time of globalization, turnover is a major problem in organizations. Due to employee turnover organizations face two kinds of cost. First is direct cost which include recruitment, selection, placement, loss of time-worked and the second one is indirect cost which includes a reduction of organizational performance. Today, a significant number of employees are switching their current jobs for better opportunities because the market

trends and perception of employees has been changed, switching to another job is no longer seen as something that is negative because employees has the right to search for more benefits to fulfill their goals and for career success. In fact, remaining with one employer or organization is now considered as an exception (Brooks *et al.*, 2005). However, in today's highly competitive business world, retaining employees is easier said than done.

Statistics around the world showed that even in developed countries for instance, USA and Australia, employee turnover is expected to be higher this decade as compare to previous decade, with about 161.7 million employees are anticipated to leave their jobs (Leow, 2013). In addition, Leow (2013) also mentioned that the trend is also expected to rise sharply soon in the Asia-Pacific, due to the mix of developed and emerging economies in this region. Similarly, Budhwar and Khatri (2001), also indicated that several Asian countries like Malaysia, Singapore, South Korea, Taiwan, Hong Kong and Pakistan are also experiencing the same turnover problem. For example, in Malaysia it was reported that the lower unemployment rate in Malaysia make contributions to the job-hopping trend among Malaysians (Long, Perumal, & Ajagbe, 2012). In fact, according to Tower and Watson (2013), the average yearly turnover rate in Malaysia has risen from 12.3% in 2012 to 13.2% in 2013. In another report, it was said that in Indonesia, companies could expect 25.8 per cent of their staff planning to pack their bags, while the figure is 21.3 per cent for China. Hence, employee turnover will continue to be a serious problem that is faced by all organizations around the world and employers need to be creative in handling this problem by identifying the various factors that contributes to it.

One profession that is experiencing high turnover and become major concern of employer and researcher is the universities faculties. Employee turnover has become a major concern of employers, as it indicates an ongoing challenge for current practitioners and researchers (Abdulkareem, Chauhan, & Maitama, 2015). A study in the United States of America (U.S.A.), approximately 7.7%, from the full-time faculty members from different universities and colleges had switched from their jobs for other institutions (Abdulkareem, Chauhan, & Maitama, 2015). Amongst these academicians, only 30% were being retired, whereas the remaining 70% had left their institutions for a number of reasons (Tower & Watson, 2013; Abdulkareem *et al.*, 2015). Similarly, Choi, Perumal, and Ajagbe (2012) and Abdulkareem *et al.* (2015) clearly highlighted that, in 2012, approximately 19,000 professionals left their jobs from Asia-Pacific region every year, these professionals includes medical staff and lecturers from various colleges & universities. They normally hunt better opportunities in the Western countries such as; Canada, Germany, United States, and United Kingdom etc.

Education is the supreme element which contributes significantly in human growth and development. Education is the pillar upon which highly developed cultures are made-up. In order to strengthen that pillar it is essential to highlight the importance and to upgrade the quality of education. Without quality the pillar becomes a weak foundation and deteriorates everything built upon it (Iqbal, 2015). The significance of effective faculty brought in lime light the overlooked issue of faculty turnover. Any academic institution cannot survive and perform well without competent and committed academic staff. Therefore universities are more reliant on the scholarly and resourceful abilities and loyalty of the faculty in comparison of the other institutions and sectors.

1.1.1 An Overview of Pakistani Culture and Education Sector

This research has been carried out in the prospective of private universities of Pakistan. Thus, a brief outline of Pakistani culture and education sector is presented. In general, Pakistan is empowered by the social class culture, high power distance and collectivist country, where 22.3 percent of people are living below the poverty line with a literacy rate of 58 percent (World Fact book 2013; Pakistan Education Statistics, 2013-14). The study of turnover intention is different in different societies and cultures (Merkin & Shah, 2014). Pakistan is comparatively high in power distance and is a collectivistic culture as compare to western countries like; United States, Canada, United Kingdom and Australia are low in power distance and have individualistic culture (Hofstede, 1980, 2011). Power distance refers to the extent to which less powerful individuals of a society accept inequality in power and considers it as normal (Hofstede, 1980, 2011). Hofstede (1980) stated that individualistic cultures normally stress on the individual goals, whereas collectivistic cultures normally stress on the group goals.

In addition to previous discussion, the prejudicial practices in the workplace are another problem in Pakistani society. Prejudice may be defined as “negative feelings about people belonging to certain groups”. As Pakistani society is usually prejudiced by the social class, groups, clans, biradris system and cultural groups. Thus, the victims of prejudice are offended by such discriminatory behaviors and this creates negative feelings in people and provoke them to leave the organization ultimately (Khan *et al.*, 2014).

On the other hand, the economy of Pakistan is already facing the disasters due to political instability, low foreign investment and the threat of terrorism, the situation in the country cannot support the job switching by people (Khan *et al.*, 2014). To support this study on more facts and figures, the researcher has also taken these factors into consideration as well. Likewise, the politics of Pakistan are constantly facing a state of flux. Religious and materialistic military rules swings back and forth as the country endeavors to find its permanent identity. This political instability and inconsistency in the policies get on a solid influence on the overall economic condition of the country (retrieved from: Central Intelligence Agency, World Fact book: Pakistan). As Pakistan is considered to be a developing economy, the number of job openings are not that much in-comparison with the developed economies. Therefore, the current research in a collectivism viewpoint must give more information in the context of employee turnover in the outlook of Pakistan precisely and also about Asia at a broader level.

Literature states that the Pakistan education sector has undergone many changes since 2002, the higher education commission (HEC) of Pakistan has established to expand and promote the higher education system of Pakistan. Before that higher education in Pakistan was lacking behind and neglected badly by the institutions. A little briefing on the background of the Higher education commission to explain about its structure and operations required to understand its role and contribution towards the universities, in fact, HEC is the body, which governs all institutions of higher education, that are mostly classified as universities or degree awarding institution (DAI) as well as the colleges, who are affiliated with other universities of Pakistan. According to the higher education Commission in 1980, there were nineteen universities and two institutes, who were

authorized in awarding the degrees in Pakistan. Over the last decade, the higher education sector of Pakistan had gone through from different major changes in the overall operations and standard procedures (Higher Education Commission of Pakistan, 2015).

Since HEC establishment in Pakistan, there are lot of progress in the private universities. These private universities are important because they helped in meeting the demand for higher education and therefore have absorbed the pressure of public universities (Irfan *et al.*, 2013). According to the Pakistan Education Statistics Report (2013-14), there are total of 139 universities are offering their educational services in Pakistan. However, out of these 79 universities (57%) are public universities, and 60 (43%) private universities. Therefore, the total faculty members are 70053, out of that number 54, 837 (78%) are working in public institutions, and 15,216 (22%) are working private universities (Pakistan Education Statistics 2013-14).

In the context of higher-education institutions of Pakistan, faculty turnover is an enduring problem at many private universities in Pakistan. A study on faculty turnover conducted by Shah *et al.* (2010), where researcher claimed that faculty turnover rate among the private universities varies from 10 to 15 percent per year, while it was only 2 to 3 percent in public universities. Similarly, Mubarak (2012) and Iqbal (2015), clearly present that faculty turnover is one of the major problems for private universities. They further explained that faculty turnover of private universities was significantly high as compared to public universities of Pakistan. Hence, based on the prior literature it can be concluded that faculty turnover is one of the major problems due to high switching of academicians as compared to public universities of Pakistan due to some reasons.

Like, employment opportunities and working conditions are perceived to be different both in public and private sector of Pakistan. People are normally more associated with the public sector due to the reasons like lack of permanent opportunities and short time projects in the Private sector, which ultimately increases the rate of un-employment. Furthermore, due to fullness of capacity in the public sector have let the employment rate increase in the private sector. According to Pakistan Labor Force Survey (2013-14), 60 percent individuals working in private sector and 40 percent working in the public sector. Apart from that, employment opportunities are not covering the growing population size of Pakistan, because now the total population of Pakistan is more than 19 billion.

Furthermore, there are some other issue that may also affect the employee turnover particular in Pakistan. For instance, the migration rate of highly skilled employees increase by more than 60% from 1992 to 2000 and situation has grown worst. Because more than two third of Pakistanis population wants go abroad for jobs due to lack of job opportunities, lack of respect, unfair merit system regarding recruitment and performance appraisal, unsatisfactory salaries which may directly impacts the economic development of the country (Khurshid, 2013). Hence, this outflow of qualified and skilled employees from country raised the issue of brain drain which may directly affect employee turnover.

To overcome the problem of employee turnover, many researchers in this regard have identified that set of human resource management practices which play an important role in retaining such employees (e.g. Boo & Kalshoven, 2014, Kadiresan, Selamat, Selladurai, & Spr, 2015, Long, Ajagbe, & Kowang, 2014, Shaw *et al.*, 2009). Indeed an employee's relationship with an organization is shaped by some HRM Practices and career growth

practices (e.g. Mohd Zin, Pangil & Othman, 2012, Raihan; 2012; Weng & McElroy, 2012) by which employees come to understand the term of their employment; How jobs are advertised (“great advancement potential, opportunity for salary growth”), the way an organization is portrayed during the recruitment interviews (“this organization provides plenty of training”), comments made in performance appraisal reviews (“keep up the good work and we will move you up”), career growth (remuneration and promotion based on time, rank or performance), all send strong messages to individuals regarding what an organization expects of them and what they can expect in return.

Hence these HRM practices are seen to play an important role as message senders, shaping terms of the psychological contracts with its employees; which leads to a strong sense of commitment from the employees. Therefore, it can be concluded that when an organization provide effective salary system, good training and development program, effective performance management system and career growth opportunities to their employees in order to improve their professional skill and growth, these employees are more ready to reciprocate by moral obligation to their organization and less likely to leave the job. Therefore, more attention should be paid on the relationship between HRM practices, career growth practices and employee turnover intention to understand the specific factors that are responsible for employees’ turnover decision.

Generally, the findings of employee turnover research are consequently questioned across the context and population of the research (Griffeth, Hom, & Gaertner, 2000). The majority of the research was conducted on employee turnover intention in a European perspective, primarily focused on the United Kingdom, United States, Canada and Australia has the

attributes of a developed economy, a relatively advanced level of education, and a certain set of cultural values (Klein & Salk, 2013). Nevertheless, the results of such studies cannot be generalized to the other perspectives, for instance, particularly in Pakistan, which is considered as high power distance that means lower ranking individuals of a society "accept and expect that power is distributed unequally" and also considered as a collectivist country that means much focused on group goals rather individual goals (Hofstede 1980, 2011). Therefore, it is anticipated that a research of employee turnover intention in a collectivism perspective, gives more information in the context of employee turnover. Therefore, current research is anticipated to enrich the literature of employee turnover in the perspective of Pakistan in specific and general.

1.2 Problem Statement

Employee turnover is one of the major problems in private universities of Pakistan due to tremendous growth of the education industry and high switching of academicians as compared to public universities (Mubarak, 2012; Shahzad, 2010; Yusoff & Khan, 2013; Khan *et al.*, 2014).

Undeniably, many studies have been conducted to see the reasons why employees might decide to leave the organization. For instance, major research on turnover intention has focused on various organizational, demographic, job related and contextual or work attitudes factors as predictors. Some of the organizational factors that have been found to have a significant impact on employees intention to leave include organizational justice (Kim *et al.*, 1996) and support (Kim *et al.*, 1996). Besides organizational factors, there are

also some job-related factors that are related to turnover intention such as person-organization fit (O'Reilly *et al.*, 1991), job incompatibility (Chun & Wang, 1995), work-value congruence (Werbel & Gilliland, 2001), job autonomy (Kim *et al.*, 1996), job stress (Kim *et al.*, 1996), pay (Kim *et al.*, 1996), promotional chances (Kim *et al.*, 1996), job alternatives, (Maertz & Campion, 1998). Attitudinal factors such as satisfaction, organizational commitment, perceived organizational support and job involvement (Mutchinsky & Tuttle, 1979), as well as citizenship behavior (Chen *et al.*, 1998) were also found to affect turnover intention. Other turnover intention predictors found were job performance (Martin *et al.*, 1981; McElroy *et al.*, 2001); absenteeism (Farrel & Stamm, 1998); and biographical characteristics (Porter & Steers, 1974). Basically, there are many individual, job-related and organizational factors that have been found to affect employees' intention to leave the organization. These findings provide good insights to the organizations regarding minimizing turnover in organizations. Besides that, there are quite a number of studies that examine the effect of HRM practices on turnover intention.

Recently majority of the empirical studies have been embarked to examine the relationship between salary, training & development, performance appraisal and turnover intention. Different conclusions have been found for example, researchers claimed that, salary, training & development and performance appraisal has a negative effect on employee turnover intention, which confirm that, when an employee perceives better salaries and good training programs for their career development and fair performance management system within the organization, they are less likely to leave the organization (Abdulkareem *et al.*, 2015; Thirapatsakun *et al.*, 2015; Naqvi & Bashir, 2015; Kadiresan, Selamat,

Selladurai, & Spr, 2015; Rubel & Kee, 2015). Secondly, some of the studies assure that, salary is not a significant issue for turnover intention (e.g. Griffeth *et al.*, 2000; Budhwar & Khatri 2001; Kim, 2005), training leads to better skilled and productive employees, who are more employable in other organizations, it implies that training & development has a positive relationship with turnover intention (e.g. Cheng & Waldenberger, 2013; Verhees, 2012), when performance appraisal is based on politics and become biased, then chances to leave or switch the organization by employees got increased (e.g. Aziz *et al.*, 2013; Poon, 2004; Salleh, Amin, Muda, & Halim, 2013).

Despite all the arguments that highlight the importance of salary, training & development and performance appraisal on turnover intention, studies related to these variables has few shortcomings (Verhees, 2012; Abdulkareem *et al.*, 2015; Aziz *et al.*, 2013). For instance, the inconsistency between the relationship of salary, training & development, performance appraisal and turnover intention needs further research to better understand the relationship.

Furthermore, studies that link various HRM practices and turnover intention are vast. However, there is still one practice that has not been given adequate attention, and that is career growth practice. Career growth practices is important because it argued that employees are very much concerned about their possibility of career growth whether in the organizations they are currently working for or in other organizations (Karavardar, 2014). Furthermore, Karavardar (2014) also argued that to retain employees, organization should

focus on career growth policies that could create psychological contract with its employees. As such, employees who expect progress and growth in their career will ultimately stay longer in the organization, which means turnover intention will become less.

This leads second reason to conduct the study. Currently available research which relate career growth to turnover intention is quite a few in numbers and some of them has been studied by Nouri and Parker (2013), Weng and Hu (2009), Weng and McElroy (2012). However, some of them (e.g. Weng & McElroy 2012; Weng & Hu 2009) were not able to confirm this four dimensional model. Thus, the model suggested by Weng and Hu (2009), needs further testing. So that is why, the researcher used career growth as multidimensional construct to test each dimension of career growth, which is less tested before with the relationship between organizational commitment and turnover intention.

Another interesting argument which leads to third reason of conducting this study is that HRM practices such as salary, performance appraisal, training and development and career growth don't usually affect turnover intention directly (e.g. Vandenberghe & Tremblay, 2008; Kantor, 2013; Si & Li, 2012; Raihan; 2012; Ikramullah *et al.*, 2012; Weng and McElroy, 2012). It has been highlighted by different authors (e.g. Raihan; 2012; Weng & McElroy, 2012) that there is a missing link between HRM practices and employee outcomes. Prominent researcher such as Raihan (2012) and Weng and McElroy (2012), indicated that the relationship HRM practices such as salary, performance appraisal,

training & development and career growth and turnover intention could be mediated by organizational commitment.

Researchers were previously focusing on studying direct relationship between HRM practices and turnover intention (Shaw *et al.*, 2009). However, a more detailed review of the literature reveals a significant disagreement in their viewpoints and suggests that HRM practices are distal antecedents of employee turnover intentions (Jiang *et al.*, 2012); while, organizational commitment is a proximal antecedent of their turnover intention (Griffeth *et al.*, 2000). Hence, it is important to test the impact of the employee attitudes, e.g. organizational commitment, by which HRM practices usually impact on turnover intention.

As such fourth reason of conducting this study is that, due to inconsistent relationship between organizational commitment and turnover intention there is need to introduce job stress and career concern as moderating variables. For example, a study conducted by Martin and Roodt (2008), found that organizational commitment has a significant negative relationship with turnover intention, but the strength of the relationship is weak because job satisfaction has a strong influence on turnover intention as compare to organizational commitment. This finding is consistent with study conducted by Ovadje (2009), within the African context also reported that organizational commitment is less important as well as not the best indicator of turnover intention. Other than that, some studies found that organizational commitment had no significant effect on employee turnover intention, for example, Verhees (2012). Hence, according to Baron and Kenny (1986), when there is inconsistent or weak relationship between independent and dependent variable there is need to introduce moderator variable to clarify the relationship.

In past the majority of the studies has used job stress as a predictor with job satisfaction, employee performance, organizational citizenship behavior, job burnout, organizational commitment and turnover intention (Javed *et al*, 2014; Velnampy, 2013; Salman Asad Rana, 2012; Jamal & Ph, 2011; Michael, Court, & Petal, 2009). On the other hand, studies that introduced job stress as intervening with turnover intention are not many, some of them has been studied by Heponiemi *et al.* (2016), Imam and Shafique, (2014), Wong and Laschinger, (2015). Furthermore, they argued that those employees who encounter high levels of stress were not the best performer as well as less committed to their job and organization, which ultimately increase the level of employee turnover intention. The use of job stress as an intervening variable having an indirect effect, instead of direct effect was also supported by Heponiemi *et al.*, (2016), who suggested a more marginal role of job stress in the withdrawal process.

Furthermore, studies that introduced career concern as m on the relationship between organizational commitment and turnover intention are not many; some of them are the study by Cohen (1991), Conway (2004) and Lin (2005), who found that the relationship between organizational commitment and turnover intention becomes weak by the inclusion of career concern as moderating variable. Hence, the findings of these studies might not be able to really capture the moderating effect of career concern on turnover intention.

1.3 Research Questions

Based on the problem statement and gap of the study discussed, the research questions of the study are:

1. Do HRM practices (salary, training and development, performance appraisal) influence employee turnover intention behavior?
2. Do career growth (promotion speed, remuneration growth career goal progress and professional ability development,) influence employee turnover intention behavior?
3. Does organizational commitment mediate the relationship between HRM practices (training and development, performance appraisal and salary) and turnover intention?
4. Does organizational commitment mediate the relationship between career growth (promotion speed, remuneration growth, career goal progress and professional ability development,) and turnover intention?
5. Does job stress moderates the relationship between organizational commitment and employee turnover?
6. Does career concern moderate the relationship-between organizational commitment and employee's turnover-intention behavior?

1.4 Research Objectives

Based on the problem discussion, the objectives of this study are:

1. To examine whether HRM practices (salary, training and development, performance appraisal) have influence on employee turnover intention behavior.
2. To examine whether career growth (career goal progress, professional ability development, promotion speed, and remuneration growth) has influence on employee turnover intention behavior.
3. To find out whether organizational commitment mediates the relationship between HRM practices (salary, training and development, performance appraisal) and turnover intention.
4. To find out whether organizational commitment mediate the relationship-between career growth (promotion speed, remuneration growth career goal progress and professional ability development) and turnover intention.
5. To examine whether job stress moderate the relationship-between organizational commitment and employee's turnover-intention behavior.
6. To examine the moderating role of career concern on the relationship between organizational commitment and employee turnover intention behavior.

1.5 Significance of the Study

The study aimed to investigate the factors that influence faculty turnover intention. Indeed a review of literature and the finding of this study enabled the researcher to enrich the literature on employee behavior specifically to couple some HRM practices (e.g. salary, performance appraisal and training and development) with career growth dimensions (e.g. career goal progress, professional ability development, remuneration growth and promotion speed) as important factors influencing turnover intention in the context of private higher education institution.

Most importantly, the main contribution of this study is that it combines the social exchange theory (SET), and career stage theory (CST) in explaining the relationship between HRM practices and turnover intention. This study also focuses on the effect of career growth on turnover intention. This variable has not been given adequate attention by previous researchers and therefore it could provide more perspective on the factors that affect turnover intention.

Besides that this study also examines the mediating role of organizational commitment and the moderating role of career concern and job stress. All these could add further knowledge to existing literature on the turnover intention. The combination of all these study variables is consistent to social exchange theory and career stage theory as framework to understand faculty turnover intention in the context of private universities of Pakistan.

The practical contribution is concerned; the findings of the present study possibly will facilitate the policy makers, education administrators, department head and particularly the private university management to progress effective step by step planning to maintain employees. Therefore, this study possibly will be used as the strategic instrument for managing employees. Moreover, to the best of researcher knowledge due to the lack of empirical research on employee turnover in the context of Pakistan, this study is anticipated to inspire other researchers and can broaden up the opportunities for further research initiatives.

1.6 Scope of the Study

The scope of this study was limited to the private universities and has not considered any other institutions like polytechnics colleges, public/ government universities as well as college of health technology, which are also the part of higher educational institution and expected to have more developed and integrated HRM practices.

Moreover, this research only focuses on the permanent faculty members such as lecturers, who are engaged in teaching and research activities in the private universities, and ignores the other levels of management such as director or chairman or dean. In addition to this, this study has been conducted only in the context of Pakistan. Other than that, only selected HRM practices and career growth practices have been used to identify their relationship with the organizational commitment and faculty turnover intentions.

1.7 Definition of Key Variables

Table 1.1

Definitions of Variables used in Study

Variables	Operational Definitions	Sources
Salary	“In this study, faculty salary has been defined as monthly financial benefits (i.e. Wages or salary) of the faculty for their service to the university that reflect their living standards”.	Tessema & Soeters, (2006)
Training and Development	Defined as far as “what employees receive training for their professional development from the organization. This refers to the current training and development activities for faculty members initiated by the management of private universities”	(Delery & Doty, 1996).
Performance Appraisal	Conceptualized as a periodic assessment of the performance of the employee by the direct supervisor. In this study, faculty performance evaluation and appraisal has been defined as the measure of teaching performance 'by the Department Head.	(Chang, 2005)
Career Growth	Conceptualized that “career growth is both a function of the employees own efforts in making progress toward their personal career goals and acquiring new skills and the organizations efforts in rewarding such efforts, through promotions and salary increases. This study proposed that employee career growth could be captured by four factors: career goal progress, professional ability development, promotion speed, and remuneration growth”.	(Weng & Hu, 2009)
Organizational Commitment	“Faculty organizational commitment refers to the commitment of individual faculty to the academic institutions”.	(Gould, Williams and Davies, 2005).
Job Stress	“Conceptualized that faculty work stress as one’s anticipation of his or her inability to respond adequately to perceived demand, accompanied by the	(Gmelch, Wilke, &

	anticipation of negative consequences such as faculty turnover intention for an inadequate response such as lower organizational commitment”.	Lovrich, 1986)
Turnover Intention	In this study, faculty turnover intentions have been conceptualized as members of the faculty intention to leave the institution during the future.	(Wayne <i>et al.</i> 1997; Lum <i>et al.</i> 1998).
Career Concern	In this study, career concern has been conceptualized on the basis of desire, needs and career concern of the faculty which are assumed to alter at diverse stages in their careers. Each stage of one’s career is characterized by several fundamental behavior and psychological adjustments that most faculty have to take up, regardless of their employment or background.	Perrone, Gordon, Fitch, & Civileto (2003)

1.8 Organization of Thesis

In the first chapter, the background of the study, problem statement with research gaps, research question aligned with a problem statement, research objective, and significance of the study have been presented. In Chapter no. 2 selected literatures on turnover intention, human resource management practices and its various functions such as salary, performance appraisal, training & development and career growth has been reviewed. In addition to this, a literature review on organizational commitment as mediating and career concern as well as job stress as moderating variable is also provided. Based on the reviewed literature, a theoretical framework and hypothesis of the study has developed. Chapter 3 mainly focuses on research method; also provide a detailed description of the sample, research instrument of the study, data collection method as well as statistical analysis is described. Chapter 4 presents the results of a questionnaire survey and the results of testing

the hypothesis formulated for the study. Chapter 5 summarizes the analysis and results of the study as presented in chapter 4, summarize the discussion into conclusions by highlighting both contribution of the study such as (theoretical and practical), and further discusses the limitation of the study and offer recommendations for future research.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The literature review chapter has been carried out to justify the research problems addressed in this study. The main subject of this study is to investigate the reasons of employee turnover intention and how HRM practices such as salary, performance appraisal, training & development and career growth affect turnover intention, with the mediating effect of organizational commitment and moderating effect of career concern and job stress. This chapter consists of five sections. Likewise, the first section will describes the issues pertaining to turnover, both in general and in academia, the second section reviews the literature on turnover intention. While, the third section will provide clear insight of relations between HRM practices such as salary, performance appraisal, training & development and career growth practices with respect to organizational commitment as mediating variable and turnover intention. However, the study is based on two underpinning theories such as the social exchange theory and career stage theory. After that, fourth section describes the moderating role of career concern and job stress and the final sections presents the development of hypothesis and theoretical framework.

2.1 Concept of Employee Turnover

The phenomenon of employee turnover has become a major concern of employers, as it indicates an ongoing challenge for modern practitioners and researchers due to some negative outcomes such as employee productivity, economic losses of organization, job efficiency and many more (Mowday *et al.*, 1982, 2013).

Consequently, in 1998, Shaw, Delery, Jenkins, and Gupta, conducted study on employee turnover; their results demonstrate that, employee turnover can be divided into involuntary and voluntary. Involuntary turnover happens, when the employer asked employee to leave the organization for a number of reasons including, poor performance or performance which is harmful for the organization. On the other hand, voluntary turnover occurs when employees deliberately want to leave the organization due to some causes. So this is a fact that, managers, which were considered to be a loyal personality of the organization, can be harmful to the overall productivity and performance of the same organization. A large number of researchers observed turnover and its delegation, turnover intentions is the procedure of withdrawal from work, which is strongly related to voluntary turnover (Shaw *et al.*, 1998; Price, 2001; Cotton & Tuttle, 1986). In 2001, Price initially defined turnover behavior as “the movement of employee to other organizations”, whereas the term turnover intention signifies. In addition, Mowday *et al.* (2013) defined turnover intention as “individuals own estimated probability that they are permanently leaving the organization at the same point in near future”. While in 2007 Jacqueline and Milton, defined turnover intention as “turnover intention is a time-consuming process from thinking of quitting, intention to search a new job and intention to quit or stay”.

Over the years, the large number of scholars concentrated to conduct research on employee turnover intention due to some following reasons such as;

- Availability of employee's data (Price, 2001)
- Single best predictor of turnover and employee behavior (Lee & Bruvold, 2003)

Best predictor actual turnover implies that, an employee has intent to stay with an organization that has a positive effect of voluntary turnover (Griffeth *et al.* 2000).

Indeed, many studies have been conducted for this purpose, however, in most studies turnover intention is studied instead of actual employee turnover because it is most challenging to measure the actual employee turnover behavior. In most cases, organizations were not able to disclose the information regarding employees (Mitchell, MacKenzie, Styve, & Gover, 2000), and therefore, it is hard to get access to the employee, who has left an organization and studied factors that lead to their decisions (Firth, Mellor, Moore, & Loquet, 2004). Nonetheless, Fang (2001) revealed that, turnover intention can safely use as a substitute of actual turnover behavior and indeed many researchers has been shown to do this. Some researchers have used the term “intent to leave” (e.g. Schnake, Williams, & Fredenberger, 2007; Paillé, Bourdeau, & Galois, 2010) to refer to turnover intention. While others use the term “perceived desirability of leaving” (e.g. Anderson & Milkovich, 1980). Regardless, all these terminologies have the same meaning, and hence, in this study, turnover intention is also known as both “employee's turnover intention” and “employee intends to leave”.

In the past, many researchers revealed that turnover intentions are positively correlated to the actual turnover behavior (Allen, Shore & Griffeth, 2003), at the same time, the two variables cannot supposed to measure turnover in the same manner. There are many contradictory results while considering an independent variable, for example the perception of organizational support (POS) that point out important differences when the outcome variable is actual turnover as opposite to intent to leave. However, Zhao, Wayne, Glibkowski & Bravo (2007) also observed that, POS is significantly correlated to turnover intention but not in relation to actual turnover.

Whereas, actual turnover provides a more precise demonstration of employee outcomes (Tanova & Holtom, 2008). Intention to leave has been studied in cross-sectional research to examine a potential relationship between the independent variable, for example satisfaction with performance appraisals and turnover intention as the dependent variable (Du Plessis, 2010; Veldtman, 2011). Employees who intend to leave might resign at some point in future, hence, longitudinal studies of the variables being examined would have used preferably as actual turnover in a future phase (Morrell & Arnold, 2007). With regard to turnover intentions and actual turnover, Vandenberghe and Bentein (2009), found a relation among affective commitment to managers and turnover intentions in two samples, whereas in the third sample, affective commitment to managers was the only important predictor of actual turnover.

In this current study of turnover, the actual turnover measurement is exceptionally challenging due to lack of information. Moreover, when the employees left the organization, they are unlikely to get traced and hard to gain approach to them.

Furthermore, the survey response rate is frequently low due to the mentioned reasons (Firth, Mellor, Moore, & Loquet, 2004; Johnsrud & Rosser, 2002). Moreover, organizational databases are not accessible by external researchers or might be imperfect or incorrect due to a number of reasons (Mitchell, MacKenzie, Styve, & Gover, 2000). Therefore, Fang, (2001) revealed that turnover intention can carefully be used as a substitute for actual turnover behavior. Inconsistent with this idea, Lambert and Hogan (2009) contended that, turnover intention is frequently used as final outcome variable in turnover research.

Hence, employee turnover will continue to be a serious problem that is faced by all organizations around the world and employers need to be creative in handling this problem by identifying the various factors to understand the reasons why employees might decide to leave their organizations (Grissom, Nicholson, & Keiser, 2012). Generally, most studies have suggested that why employees might decide to leave the organization (Abdulkareem *et al.*, 2015). For many years, major research on turnover intention has focused on various organizational, demographic, job related and contextual or work attitudes factors as predictors. Some of the organizational factors that have been found to have a significant impact on employee's intention to leave include "organizational justice" (Kim *et al.*, 1996).

Besides organizational factors, there are some job-related factors, that relate to turnover intention such as person-organization suitability (O'Reilly *et al.*, 1991), job incompatibility (Chun & Wang, 1995), work-value congruence (Leiter, Jackson, & Shaughnessy, 2009; Werbel & Gilliland, 2001), job autonomy (Kim *et al.*, 1996), job stress (Kim *et al.*, 1996), pay (Kim *et al.*, 1996), promotional chances (Kim *et al.*, 1996), job alternatives, (Maertz

& Campion, 1998). Attitudinal factors such as satisfaction, organizational commitment, perceived organizational support and job involvement (Muchinsky & Tuttle, 1979; Eisenberger, Cummings, Armeli, & Lynch, 1997), as well as citizenship behavior (Chen, Hui, & Sego, 1998) were found to affect turnover intention. Other turnover intention predictors found in this study was job performance (Martin *et al.*, 1981; McElroy *et al.*, 2001); absenteeism (Farrel & Stamm, 1998); and biographical characteristics (Weisberg & Sagie, 1999; Porter *et al.*, 1974). Basically, there are many individual, job-related and organizational factors that have been found to affect the employee's intention to leave the organization. These findings provide good insights to the organizations regarding minimizing turnover in organizations. Besides all these factors, there is an increasing body of research has also examined the relationship of HRM practices, career growth and turnover intention.

2.2 Theory and Literature Review

The relationship between HRM practices, organizational commitment, job stress, and career concern and turnover intentions has been derived from the set of different theories; there is a call for looking at the supporting theories in the mentioned areas. Prior studies in the domains have progressed from plain illustration of different theories to more complex appraisal and examination to conclude the relationships among the factors more efficiently. Indeed, this study has used following theories as theoretical lenses in order to examine the proposed research model. Most importantly, SET theory is used as main lens; whereas, CST theory are used as a secondary lens to understand the relationship between the study variables.

2.2.1 Social Exchange Theory

Social exchange theory (SET) is one of the theory can be used to explain the relationship between employee-employer. SET was initially introduced by Homan in 1961, who defined social exchange as “the exchange of activity, tangible or intangible, and rewarding more or less between at least two persons”. In 1964, in addition to Homans work other theorist particularly Peter M. Blau further continued to write about SET and mainly focused on technical, economic analysis, whereas Homans concentrated towards psychology and individual behavior particularly. This theory suggested that, all human relations are based on cost and benefit analysis of the comparison of substitutions. Indeed, dyadic relationship depends on the trust, responsibilities and obligations (Tansky & Cohen, 2001). Hence this theory postulate that all human being relationships are based on social and economic exchanges.

Prior literature on SET theory argued that HRM practices could be considered as a major input into social and economic exchange processes (Snape and Redman, 2010). In addition, some researchers also take into consideration that HRM practices are the core elements through which employees’ perceptions, attitudes and behaviors are shaped (Haines *et al.*, 2010). The use of these set of HRM practices such as salary, performance appraisal, training and development, and career growth by an organization will actually set up that the organization is committed to its employees and is concerned about their wellbeing, career development and also wishes to invest in them (Kwon, 2009; Shaw *et al.*, 2009).

The provision of these HRM practices in essence indicates that organization seeks to build a social exchange relationship with employees (Gould & Williams, 2005; Snape and Redman, 2010). According to the principle of reciprocity, employees will afterwards reciprocate in positive ways by showing positive attitudes such as, increased organizational commitment and staying decisions, which eventually benefit the organization (Kehoe & Wright, 2013; Jiang et al. 2012; Gould & Williams, 2005). Using SET, this study proposes that HRM practices such as salary, performance appraisal, training and development, and career growth can influence faculty organizational commitment and turnover intentions.

In essence, this theory highlights that when organizations invest in various HRM practices such as salary, performance appraisal, training & development and career growth, employees are presumed to take this as an expression of the organizational appreciation, trust and commitment to engage them in long term relationship (Gould & Williams, 2005). For example, monetary rewards, training & development may signal that, organizations valued its employees by investing in their future and career prospects. While, performance appraisal and career growth programs may indicate the trust, recognition and appreciation of employee's long term worth. Thus, SET postulate that all human being relationships is shaped with HRM practices that all send sends strong messages to individual what an organization expecting from them, reciprocally employees have obligation to be more committed and decision to remain in the organization

In essence with SET theory, it is argued that investment in HRM practices entails that organizations give value to their employees to establish a long-lasting employment relationships with them (Jiang et al. 2012; Gould & Williams, 2005; Allen *et al.*, 2003;

Kwon, 2009). Similarly, they also stated that appropriate HRM practices offered by the organization enhance employees' expertise and determination which eventually evolves into a positive influence on their organizational commitment and negative influence on their decision to quit the organization. Moreover, Gould and Williams (2005), revealed that if organizations provide their employees rewards, extensive benefits, fair performance appraisal system, training and development practices which give confidence to employees to stay committed to the organization (Gould & Williams, 2005). Hence, when employees are both satisfied with their jobs and committed to the organization, the bond with the organization will be strengthened and will result in greater commitment and reduced possibility of the quitting the organization.

On the basis of social exchange theory, current study proposes that, organizational commitment is a mediator of the relationship between various HRM practices such as, salary, performance appraisal, training & development, career growth and turnover intention. The significant role of organizational commitment as a mediating variable in the relationship between salary, performance appraisal, training and development and career management practices like career growth and employee's turnover intention can be supported by social exchange theory (Blau, 1964), which suggests that, employees' attitudes and behaviors' are considerably influenced by perceptions of organizational commitment. Hence, based on social exchange theory, it is suggested that when individuals perceived that, they are in a good social exchange relationship with their organizations, they are less likely to quit their jobs. Furthermore, when individuals developed positive perception in terms of salary, performance appraisal, training and development and career growth, they will reciprocate by remaining in their present jobs (Abdulkareem *et al.*, 2015).

However, few studies have empirically tested this proposed relationship (Vandenberghe & Tremblay, 2008; Kantor, 2013; Si & Li, 2012; A'yunnisa & Saptato, 2015).

Essentially, the use of these HRM practices and career management practices may indicate that, organizations are more supportive of their employees, which ultimately lead to the organizational commitment development (Abdulkareem *et al.*, 2015). For example fair compensation and high salaries may signal that, organizations are willing to invest in their employees and also cares about the wellbeing of its employees. Performance appraisal and training & development programs for employees may illuminate that, they are valued assets for the organization.

While, career growth opportunities also indicates that, organizations give value to its employees by investing in their future and career prospects in order to increase employee's inspiration and motivation towards their work and organization, whereby the underlying notion comes from social exchange theory (Blau, 1964) which postulates that all social behavior is the result of an exchange process. In principle, it is proposed that organizations should implement management practices that could help employees reach career aims, develop professional ability, speedup promotion and get salary increments on time, further (e.g Weng & Hu, 2009) validate that, by giving these benefits to employees, helps the organization in preventing employees from stop thinking about leaving the organization. In other words, it is assumed that with the implementation of various career management practices, which provides opportunities for career growth, could make the employees feel appreciated, and therefore most likely to reimburse the organization by their commitment

and contribution towards the organization. As a result, they will less likely to leave the organization.

Another main objective of this study was to answer research questions by examining whether job stress moderates the relationship between organizational commitment and turnover intention of employees, whereby the underlying notion comes from social exchange theory (Blau, 1964). The social exchange theory based on the assumption that, employees, which are working in the particular organization have positive and negative feelings about their organization, which makes them committed or dissatisfied with the particular organization. Reciprocity among other view of SET, it is useful to explain, how people experience and cope with stress at work. Consistent with this view, Stress experienced at the job would create a negative feeling about organizations, which ultimately lead to a number of negative outcomes for employees and organizations, including decreased work performance and commitment, absenteeism, burnout and turnover intention (Jenkins & Elliott, 2004; Malach Pines, 2002; Ptacek Jennifer, 2014).

2.2.2 Career Stage Theory

Career stage theory (CST) is one of the essential theories, which can used to explain the process of continuous lifelong process of developmental experiences that focuses on seeking, obtaining and processing information about self, occupational alternatives and role options". Career stage theory is career development theory which is developed by Super (1957) and this model proposes that people go through different stages of their careers precisely during their lifetime, and it is posited that the desire, need and expectation

of employees change at various stages of their careers. In addition, this theory also proposed that each stage of one's career is characterized by several fundamental behavior and psychological adjustments (i.e. organizational commitment or turnover intention) that people have to take up, regardless of their employment or background (Super, 1957; 1981).

In general, in this theory career is categorized into four stages. The first stage of career is an exploration or organization entry stage. In accordance with Super (1957), exploration stage is "to select a job and an organization in which to begin a career in one's chosen field of interest". That's the time, where employee's concern is learning about the organization culture and are evaluating the degree which suits their needs (including career exploration), at the same time, employees always keep options for alternative jobs that usually help them during the 1st year of service. The next stage is, the early or transition stage. This is the stage when employee's concerns are trying to gain the skills and expertise needed to be successful in their jobs (Greenhaus *et al.*, 2000). At this stage where employees start to explore out their niches within the organization to set their expectations regarding job and work (Greenhaus, 1987). During the third career stage, which is labeled as the mid-career building, where employee's concern shift their focus to "be accepted as a responsible employee to the organization and to make a place for themselves in employment and organization" (Greenhaus, 1987). At this stage, employees are trying to settle in the organization and wish to be promoted (Greenhaus *et al.*, 2000). The next stage is the later career stage where employee's concern to become established in the organization and focus not only on their place in the organization, but also in other facets of their lives, such as friends and family, as well as start to focus on retirement (Cohen, 1991; Greenhaus, 1987; Super, 1957).

In essence, this theory highlights that, if employees who are concerned about the status of their career are more likely to leave the organization with the hope to improve it. It is normal for people who are concerned about advancing their career to move from one organization to another. They do this, especially when the other organization offers a better salary or/and better position. In addition to that, having work experience in several organizations usually looks good on an individual's resume, and often builds up one's credibility. Hence, these cause such employees to move from one organization to another.

2.3 The Principal behind HRM Practices

In 1994, Lado and Wilson defined human resource practices as “the set of distinct but interrelated activities and practices executed by the institutional administration that are directed at attracting, developing, and maintaining of their employees are called HRMP’s”. Other than this, Armstrong, (2009) defined HRMP’s as “activities done by the administration to manage (attract, select, train, motivate and retain) their employees which are called Human Resource Management Practices”. In addition, Long, Ajagbe, & Kowang, (2014) argues that, in many organizations, human resource practices plays a key role of mediator between HRM strategies and HRM outcome such as employee commitment and turnover intention. Because of that, most of the organizations should develop and implement human resource practices and policies including training & development, performance management and career management which ultimately reflect their beliefs and maintaining relationships between management & employees. Further supported by Long *et al.*, (2014) who showed that, the effect of human resource practices

on employee performance, such as compensation, performance appraisal, training and development and HR planning helps to improve employer performance and productivity.

Traces back from the human resource management literature, it can be classified into external and internal fit. Likewise, certain studies in this field explain HRM as a strategic integration by focusing the effect of HRM practices on organizational performance such as training and development, organizational career growth, compensation, employee security and performance appraisal helps improve organizational performance, including employee productivity (Feng-Hui, Tzai-Zang, & Wann-Yih, 2010; Long *et al.*, 2014). Furthermore, a certain number of studies in this field concentrated on high commitment HRM practices which are typically considered as a group of practices designed to improve employee performance, e.g. Personalized training & development, opportunities for promotion, trust and commitment, performance appraisal as appreciation of their work (Gould & Williams, 2004; Kehoe & Wright, 2013; Whitener, 2001). Other than that, some studies focused on skill-improving human resource management practices for example; career development, training & development, promotion opportunities, performance appraisal and supervisory support were reported to have significant impact on employee attitude. While, behavior such as employee satisfaction, organizational commitment and turnover decision (Gardner *et al.*, 2001; Shaw, Dineen, Fang, & Vellella, 2009; Zheng, Morrison, & O'Neill, 2006).

Moreover, all these studies concentrated only on a specific human resource practice which is not sufficient to recognize the employees' level of commitment. Actually, the commitment level of employee is not changed or maybe different with the introduction of single practice in the organization (Ogilvie, 1986), relatively, a bundle of different practices

mostly devoted for employees' welfare will increase the commitment level of employee's and ultimately decrease their intention to leave (Chang, 2005; Giauque *et al.* 2010).

In fact, most of the studies related to human resource practices were reported and undertaken only within the context of western and developed countries as international prospective (Nasurdin, Hemdi, & Guat, 2008; Su & Yeganeh, 2008; Kehoe & Wright, 2013). However, in comparison with other parts of the world, the Pakistan has little literature related to the field of human resource management (Pirzada, Hayat, Ikram, Ayub, & Waheed, 2013; Saleem & Khurshid, 2014; Ahmad *et al.*, 2010; Shahzad, Bashir, & Ramay, 2008; Tiwari & Saxena, 2012). Apart from this, it is very hard to generalize the human resources practices of western context and adopt the western concept of HR practices in underdeveloped countries. The overall concept of HRM practices has been criticized due to the cultural diversity and norms or customs between the nations. Therefore, human resources practices differ considerably from country to country (Budhwar and Debrah, 2013; Newman & Nollen, 1996; Gardner *et al.*, 2001; Aycan *et al.*, 2000; Kossek, 2010). Researchers have described the main causes of such differences, in the human resources practices i.e. National culture greatly affects the organization's internal human resource management practices. Furthermore, people from various cultures have different pattern of behavior and norms (Hofstede & Hofstede, 2005, 2011).

Therefore, it would be considered that, the practices of HRM are not fixed, they differ from organization to organization (Tiwari & Saxena, 2012). Numbers of researchers have described several practices which are associated with the management of human resources; however, these practices can be grouped into various categories such as recruitment,

selection, training and development, motivation and maintenance and many more. But this study included only four practices with respect to their nature and context of the study, similarly the current study is also expected to fill the gap in our knowledge on human resource practices in the context of developing countries such as Pakistan.

2.4 Human Resource Management Practices and its Function

Human Resource management is a set of practices that define the nature of work and regulate the employment relation in order to attract and retain the right employee, according to its need (Armstrong & Taylor, 2014). Other than that, human resource management is also a function of an organization that focuses on recruitment and selection, training & development, compensation, human resource planning, performance appraisal, career planning and labor relation (Dessler, 2007). Similarly, each human resource function serves a variety of purposes. For example, monetary rewards, training & development may signal that organizations valued its employees by investing in their future and career prospects. While, performance appraisal and career growth programs may indicate the trust, recognition and appreciation of employee's long term value.

2.4.1 Salary and Turnover Intention

Compensation is one of the key meanings of human resource management and has been defined as “all forms of financial returns and tangibles services and benefits employees received as part of an employment relationship” (Gerhart, Milkovich, & Murray, 1992). According to Dessler (2009) and Kazi and Zadeh (2011), compensation have been divided

into two components, first is the direct financial payment for example salary, wages, bonuses and incentives. Well, these are paid to employees on the basis of performance and the second is the indirect payment, for example, employee benefits may include vacations, holidays, medical insurance, retirement plans, education assistance and many more.

In this era of globalization, direct financial payment, which is mainly concerned about financial return and give benefit to employees is considered to be part of an employment relation for instance, salary has become a significant focus of attention from researchers and academicians now a days. In 2008, Murphy and Olsen defined salary as “all cash incentives and the fringe benefits mix that an employee incurs from an organization”. On the other hand, Heathfield (2014) defined salary as “a fixed amount of money and compensation which is paid to an employee by an employer in return of work performed”.

According to Smart (1990) and Ehrenberg *et al.* (1991), the research on faculty turnover intention clearly shows a link between the monetary compensation and turnover intention, whereas the study by Weiler (1985) presented different outcomes in which the researchers postulate that salary was examined as a key reason for employee turnover intention in academia. Similarly, in the area of information technology, Igbaria and Greenhaus (1992) found that, salary is positively related to employee commitment and negatively correlated with intention to leave.

It is also highlighted by several researchers that, salary is negatively linked to turnover intention, which implies that, higher the salary lesser the employee turnover (Lum *et al.*, 1998; Grace & Khalsa, 2003). In the same year study by Boxall *et al.* (2003) found that,

employees are switching their job due to better salary in other organizations. Similarly, a study conducted by Chew and Chan (2008) found that, salary have strong influence on turnover intention. Consistent with this study, Ovadje (2009) have found a strong and a negative correlation between salary and turnover intention in the African context. Literature related to salary and turnover intention highlighted that, salary is one of the greatest significant components of turnover decision. Carrying forward to previous studies, the majority of the literature has disclosed that, when an employee perceives better and equitable salaries within the organization, they are less likely to leave the organization. Moreover, in recent years, many studies have shown that, when employees perceive better and equitable salaries within the organization, they are less likely to leave the organization, which confirms that, more employees feel satisfied with their salary, the lower the risk they leave the organization (Cao, Chen, & Song, 2013; Kroon & Freese, 2013; Naqvi & Bashir, 2015).

Perhaps the most important turnover over intention variable is financial reward such as “Salary” (De Gieter & Hofmans, 2015). On the other hand, Thirapatsakun *et al.* (2015) confirms the importance of salary in reducing the voluntary turnover rate. Besides, other relevant studies conducted by Griffeth *et al.* (2000) identified that, there is a significantly weak relationship between salary and voluntary turnover; whereas salary is not a significant issue for turnover research in Asian context (Budhwar & Khatri, 2001). Another study of Iverson and Deery (1997) on hospitality employees suggested that, salary has insignificant effect on their turnover intention decision within the Australian context. However, Kim (2005) found that, compensation is not statistically important cause for employee’s leaving the US state of the government information technology department.

Furthermore, in the context of Pakistan, Sattar and Ahmed (2014) claimed that, salary has been a major aspect of HRM in developing countries like Pakistan where employees are generally low paid with little remuneration growth and benefits. While Shahzad *et al.* (2008) revealed that, salary may be a good tool in retaining experienced and skilled faculty. However, organizations need to be aware that, human resource practices such as salary can significantly create links, make better fits and create greater potential sacrifices for employees who may be looking elsewhere for employment. In addition, Pakistan, is one of the least developed countries, where 22.3 percent of people living below the poverty line. In this regard, the number of job openings is not that much as compared with the developed countries, high inflation rate that makes the living expenses so high. Therefore, the money matters in such situation. However, the perception of salary among faculty is negatively related to turnover intention.

Nevertheless, research on monetary compensation such as salary has two shortcomings. First, in the past, some of the studies indicate inconsistency between the relationship of salary and turnover intention. Secondly, scholars have traditionally focused on non-monetary rewards, whereas recently both practitioners and scholars have highlighted and recommend the added value of focusing in the area of economic factors such as the role of salary in influencing employee turnover in the organization of Pakistan.

2.4.2 Training and Development and Turnover Intention

Training and development were acknowledged as one of the major components of human resource function in the area of human resource management. Training and development is a practice of human resource management which can provide a competitive advantage for organizations (Schuler & MacMillan, 1984). This factor was listed in the high performance human resource practices of the organization and has been defined as “An investment in the acquisition of the skill or improvement of employee productivity” (Mincer, 1962). Similarly, most of the organizations invest in their employees in order to increase the productivity and skill which ultimately decrease their intent to leave the organization (1962).

The relationship between training & development with turnover intention has received much more attention among academicians and researcher after Becker’s theory of investing in human capital by offering training programs which build skills and improve employee’s productivity (1962). Many studies have been undertaken from a different prospective to investigate that, how and why training and development influence turnover intention, for example, human capital (e.g.Chun and Wang, 1995; Becker, 1962), social exchange (e.g. Eisenberger *et al*, 2001) and human resource prospective (e.g. Chew & Chan, 2008). Previous studies explore the link between training & development and turnover intention. For instance, according to Grace and Khalsa (2003) and Rosser (2004), the research on faculty turnover intention clearly shows a link between the training and turnover intention, whereas the study by Martin (2003) claimed that, organization offers training to improve

the competency and skills of existing employees to tackle the turnover issue with the organization.

In the perspective of academia, training & development has been recognized as one of the most significant HRM practices which significantly influence on the employee turnover decision. Though, a study conducted by Rosser (2004) argued that, engagement in the research activities and professional development provides a faculty member with a feeling of vitality and intellectual inspiration. While, Winterton (2004) has revealed that, the failure to invest in training & development contributes to greater turnover. Similarly, the meta-analysis of Cotton and Tuttle (1986), and Lee and Bruvold (2003) discovered that, there is a negative association between training & development and employee turnover. Other than that, a study conducted by Dardar, Jusoh, and Rasli (2012) found that, the higher education institution may adopt different human resource practices to improve the skills and productivity of employees, but indeed the training is only to improve the productivity of existing employees which ultimately produce high level of commitment and reduce the intention to leave the organization.

In the past, the majority of the empirical studies have been embarked to examine the direct relationship between training & development and turnover intention. Different conclusions have been found in previous researches for example, researchers claimed that, training & development has a negative effect on employee turnover intention, which confirm that, when an employee perceives better and good training programs for their career development within the organization, they are less likely to leave the organization

(Abdulkareem *et al.*, 2015; Chew & Chan, 2008; Dardar, Jusoh, & Rasli, 2012; Naqvi & Bashir, 2015; Yean & Yahya, 2013; Samuel & Chipunza, 2009; Juhdi *et al.*, 2013).

Secondly, some of the studies assure that, training leads to better skilled and productive employees, who are more employable in other organizations, it implies that training & development has a positive relationship with turnover intention (Cheng & Waldenberger, 2013; Verhees, 2012). Thirdly, some of the studies assess that, training and development has no significant effect on employee turnover intention (Mincer, 1988; Egan *et al.*, 2004; Levine, 1993; Verhees, 2012).

Despite all the arguments that highlight the importance of training & development on turnover intention, studies that linked these two variables are limited in numbers. Nevertheless, the literature has so far focused on training & development which has two shortcomings. The first one is inconsistency between the relationship of training & development and turnover intention. Second short coming explained by several scholars is focused on western organizations, even though training and retention of employees presently highly needed by Pakistani organizations, particularly in academia with different context. So that's why, current empirical study conducted in an Asian context, particularly in the Pakistani context. Because Pakistan is facing a severe shortage of qualified employee's especially in higher education, which is harmful for its economic growth. So far, gone is the fantasy, attached with public sector, due to the lack of permanent opportunities and short time projects which ultimately increased the rates of unemployment. During the course of last one decade, private sector in Pakistan has grown to its maximum utility due to better compensation and benefits and giving training &

development programs for career growth. This disorder and saturation in the public sector have increased the employment rate in the private sector. Moreover, Pakistan Labor Force Survey (2013-14), highlighted that, 60 percent of the individuals are working in private sector and 40 percent are working in the public sector. So considering the other side, the employment opportunities are not covering the growing population size of Pakistan, which is comprised of more than 19 billion. Well, there is strong evidence that, most training practices and programs comes from the west and didn't meet the expectations and need in Pakistani context due to several cultural differences.

2.4.3 Performance Appraisal and Turnover Intention

Another factor explained here is, believed to have an impact on turnover intention is performance appraisal which is viewed as an important mechanism for changing employees' attitude and behaviors such as organizational commitment and turnover intention (Morrow, 2011). In 1962, Mincer initially defined performance appraisal as "the basic managerial function such as evaluation of the employee's performance period to improve the utilization of human resources within the organization". Some other authors like, Tower (1996) defined performance appraisal as "systematic review of the performance of staff, on a written basis, at regular time intervals; and the holding of appraisal interviews in which staff have the opportunity to discuss performance issues past, present and future, on a one-to-one basis, usually with their immediate line manager" (cited from Zhazykpayeva, 2011). Performance appraisal could be defined "as the basic managerial function such as evaluation of employees' job performance periodically in

order to determine the extent to which the employees performing effectively” (Griffin & Ebert, 2002).

The process of evaluating the performance of employees, i.e. performance appraisal is one of the most important issues due to its positive influences on the development of the human capital resulting in higher performance it increases the motivation and job satisfaction, whereas, neglecting those aspects would lead to negative effects which may increase voluntary employee turnover rate (Rubel & Kee, 2015; Zhazykpayeva, 2011). Furthermore, according to Al-Shuaibi and Shamsudin (2013), performance appraisal is a vital tool of organizations for a number of human resource development activities such as enhance employee performance and to develop their capabilities, it helps the organization to identify high achievers in order to distribute rewards such as merit pay, promotion and it also help to identify in order to give trainings for career development and to reduce employee turnover positively.

According to Kuvaas (2006) and Whiting and Kline (2007), the research on performance appraisal clearly shows a link between the performance appraisal and turnover intention, whereas the study by Guchait and Cho (2010) presented different outcomes in which the researchers postulate that, performance appraisal has been examined as a key reason for employee turnover intention. In the same years, Armstrong-Stassen and Schlosser (2010) found that, proper implementation of performance appraisal increases job satisfaction and reduce their intentions to leave the organization. Similarly, in the area of academics, Mustapha and Daud, (2012) confirm that, performance appraisal is positively related to employee career commitment and negatively correlated with intention to leave. Consistent

with this idea, current study believes that, employee's perception toward performance appraisal influence employee's intention to leave negatively.

For many years, the majority of the empirical studies have undergone to examine the direct relationship between performance appraisal and turnover intention. Different conclusions have been highlighted by researches for instance, researchers verified that, performance appraisal has negative influence on employee turnover intention, which explains that, when employees perceives their performance appraisal procedure along with other HR practices to be fair and just, their intention to leave the organization got minimized (Abdulkareem *et al.*, 2015; Kadiresan, Selamat, Selladurai, & Spr, 2015; Rubel & Kee, 2015; Yean & Yahya, 2013). Secondly, several studies argued that, when performance appraisal is based on politics and become biased, then chances to leave or switch the organization by employees got increased (Aziz *et al.*, 2013; Poon, 2004; Salleh, Amin, Muda, & Halim, 2013)

Despite all the arguments that highlight the importance of performance appraisal on turnover intention, studies related with these two variables are limited in numbers. Although, the majority of the studies related to performance appraisal carried out in the western context and mainly focuses on the banking sector, retailing sector and public sector. However, studies on academia are excluded in the context of Pakistan. In addition to that, in higher education institution performance appraisal was ignored in the previous studies. So that's why, current empirical study conducted in an Asian context specifically in the Pakistani context as opposed to western context.

2.4.4 Career Growth and Turnover Intention

These days, people who seek to gain personal career growth often do it by switching the organizations, only they do that, if such opportunities are missing with their current employer. In general, career growth is defined as “the degree of professional upward mobility within the organization” (Chay, & Aryee, 1999). In 2009, Weng and Hu and in 2010, Weng, McElroy, Morrow, and Liu indicated that, career growth is multidimensional concept which includes reaching career aims, professional ability development, promotion speed and remuneration growth. Based on this work, it can be said that, there are several aspects to career growth. Aside from upward mobility (i.e. promotion), career growth could also mean professional development and increase in salary (i.e remuneration). Hence, for jobs that upward mobility is limited, organizations could also provide career growth in the form of professional development and high salary.

Although, the relationship between career growth practices and turnover intention has not been established yet, some studies indicate that, there is no significant relationship between them (e.g. Fairris, 2004), numerous earlier research showed that there is a positive and significant relationship between career growth practices and individual performances (Shahzad *et al.*, 2008; Teseema & Soeters, 2006; Delaney & Huselid, 1996). Furthermore, if the employee perceived that the career development practices inside the organization are unbiased and fair, their level of satisfaction increases and this can lead them to increase their performance. Ultimately, this can also decrease their turnover intention behavior (Foong-ming & Tan, 2008). This argument is in line with the meta-analysis of various scholars, who identified that, career growth were negatively associated with employee

turnover (Chen *et al.*, 2015; Karavardar, 2014; Weng & Xi, 2010). Thus, career management efforts (e.g. Career growth practices) are argued to be a good management practice that could be beneficial in preventing employees from leaving.

Looking behind the facts, in 2012, Weng and McElroy tested the Weng and Hu (2009) model by conducting a study on the impact of career growth and turnover intentions. However, the results of this study failed to confirm the four factor model, showing instead the need to collapse promotion speed and remuneration growth into a single surface i.e. rewards. Irrespectively, their findings found that, dimensions of career growth (career goal progress, professional ability development, promotion speed, and remuneration growth) were negatively related to turnover intention. Recently a study conducted by Karavardar (2014), claimed that, career growth and development is associated with low turnover of staff. Another recent study by Chen *et al.* (2015), and Sattar and Ahmad (2014), have notified that, employees' opportunity for career development has a small influence on faculty turnover intention decision. In relation to promotional opportunity, the study of Billah (2009) illustrates that, with commercial banks employee's, this factor most meaningfully related to employee's intention to leave. In principle, employers should practice such developmental opportunities in order to increase employee's inspiration and motivation towards their work. Consequently, the employees receiving such opportunities can repay their organization with the chance to outspread their self-realization, which will ultimately lead to reduce their turnover intention behavior.

Hence, the career growth model by Weng and Hu (2009) should be tested again by using the Weng and Hu (2009) model; it was argued that, the four career growth dimensions

could reduce employee's intention to leave the organization. This is in accordance to the social exchange theory (Blau, 1964), whereby it is suggested that, all social behavior is the result of an exchange process. In opinion, it is proposed that, organizations should implement management practices that could help employees reach career aims, develop professional ability, speedup promotion and get salary increment (e.g. Weng & Hu, 2009) to prevent them from leaving the organization. In other words, it is assumed that, with the implementation of various career management efforts, which provides opportunities for career growth, can make the employees feel more appreciated and therefore most likely to repay the organization by their commitment and contribution towards the organization. As a result, they will less likely to leave the organization.

Nonetheless, before it can be safely concluded that career management practices could indeed be beneficial to reduce turnover intention among employees, there is a need to determine whether employee turnover intentions are affected by their career growth and career concern or not. Currently available research that relates career growth to turnover intention a quite a few, and some of them are the study by Nouri and Parker (2013), Price (2001), Weng and Hu (2009), Weng and McElroy (2012). In 2009, Weng and Hu suggested that, the professional growth of employees could be charmed by four dimensions: career goal progress, professional ability development, promotion speed and remuneration growth. This multidimensional conceptualization means that, career growth is simultaneously a feature of employee efforts on making progress toward their career objectives and the acquiring new skills and the organization's efforts rewarding these efforts, by promotions and salary increases. However, Weng and McElroy (2012) were not

able to confirm this four dimensional model. Thus, the model suggested by Weng and Hu (2009) need to be tested further.

Despite all the arguments that highlight the importance of career growth on turnover intention, studies that link these two variables are limited in numbers. Nevertheless, the literature has so far been focusing on career growth have two shortcomings. First, in past some of the studies indicate inconsistency between the relationship of career growth and turnover intention. Secondly, scholars have traditionally focused on western organizations, even though career growth practices highly needed by a Pakistani organization particularly academia with different context.

2.4.5 Salary and Organizational Commitment

Salary is one of the key functions of human resource management to attract, retain and motivate good employees (Heathfield, 2014). According to Raihan (2012), salary and compensation is an important factor to engage and retain employees in the organization, especially in the private sector, where employees are conscious about their salaries and benefits.

It is also found that, salary is positively associated with organizational commitment, which implies when employees perceive higher salaries and better compensation system within the organization, the perception may bring individual commitment with organization, as a result of this, employee performance will be improved and also reduce their intention to leave the organization (Lum *et al*, 1998; Grace & Khalsa, 2003; Islam *et al.*, 2013; Raihan,

2012). Furthermore, study by Mowday *et al.* (2013), found that, employees are committed to their job due to better salary at another organization. Likewise, a study by Qiao, Luan and Wang (2007) indicated that salary has a strong influence on organizational commitment as compared to job satisfaction. Consistent with this study, Vandenberghe and Tremblay (2008) have found a strong, positive correlation between salary and organizational commitment. Literature related to salary and organizational commitment highlighted that, salary is one of the vital and significant components for organizational commitment. In this regard, the majority of the previous literature revealed that, when an employee perceives better and comparatively good salaries within the organization, they become highly committed with their organization.

For the last few years, studies showed that, when employees perceives better and equitable salaries within the organization, they are highly committed to the organization, which implies that more employees feel satisfied with their salary and the chances to organizational commitment will be increased (Raihan, 2012; Islam *et al.*, 2013; A'yuninnisa & Saptato, 2015).

In the past, many studies have been conducted to see the relationship between salary, organizational commitment and turnover intention, some of the studies also proved the mediated relationship between these variables. For instance, in 2008, Vandenberghe and Tremblay conducted a study to test the organizational commitment as mediator among the relationship between pay satisfaction and turnover intention. The findings of this study revealed that, pay satisfaction is directly or indirectly effect turnover intention, whereas organizational commitment was negatively correlated with turnover intention. Another

study conducted Rizqi (2015), on the effect of pay satisfaction and affective commitment on turnover intention. The findings of this study revealed that, effective commitment shows partial mediation among the relationship between pay satisfaction and turnover intention.

Nonetheless, research on monetary compensation such as salary has two shortcomings. Firstly, in the past some of the studies indicated inconsistency between the relationship of salary and organizational commitment. Secondly, scholars have traditionally focused on non-monetary rewards, whereas recently both practitioners and scholars have highlighted and recommend the added value of focusing in the area of economic factors such as the role of salary in influencing employee commitment in organization in Pakistan. Thirdly, aside from previous studies conducted on mediation analysis of organizational commitment among the relationship between salary and turnover intention, this study aim to examine the direct and indirect effect of salary and organizational commitment on turnover intention.

2.4.6 Training & Development and Organizational Commitment

Training & development were acknowledged as one of the major functions of human resource management which is defined as “an investment in the acquisition of skill and improvement of employee productivity”. Though, most of the organization adopts training and development programs to enhance employee performance, productivity and organizational competitiveness (Kadiresan *et al.*, (2015). It is also identified by Kadiresan *et al.* (2015) many organizations employed training and development programs to retain best employees by enhancing their skills, knowledge and capabilities to perform certain

tasks. Likewise, Obeidat *et al.* (2014) argued that, a series of training and development programs may enhance employee's professional skills, capabilities and experiences. Furthermore, Raihan, (2012) also argued that, to retain employees, organizations should focus on employee development programs, such as training & development that could create psychological contracts with its employees which leads to a strong sense of commitment from the employees. Therefore, it can be concluded that when an organization provide training and development to their employees in order to improve their professional skill and growth, these employees are more ready to reciprocate by moral obligation to their organization and less likely to leave the job.

The majority of the empirical studies has undergone in the past and verified that, training & development is positively associated to organizational commitment. Which clarify that, training leads to higher commitment, which means that employees act more committed when they received training & development programs from the organization in return they appreciate the organization's investment (Qiao *et al.*, 2007; Verhees, 2012; Raihan, 2012;N, A'yuninnisa & Saptato, 2015; Kadiresan *et al.*, 2015; Obeidat *et al.*, 2014). Therefore, the researcher develops following hypothesis.

Nonetheless, before it can be safely concluded that training and development could indeed to be beneficial to reduce turnover intention among employees, there is a need to determine that, training & development can improve organizational commitment by appealing psychological contracts between employees and thus reduces turnover intention. Currently there are limited literatures who relate the organizational commitment as mediating variable in the relationship between training and development and turnover intention and

some of them have studied by Verhees, (2012), Raihan, (2012), and Kadiresan *et al.*, (2015). However, studies conducted by Verhees (2012) and Raihan (2012) who were not able to confirm the mediating role of organizational commitment among the relationship between training & development and turnover intention. Thus, the mediating role of organizational commitment between training & development and turnover intention suggested by Verhees (2012), which need to be tested further.

2.4.7 Performance Appraisal and Organizational Commitment

Performance appraisal is one of the key functions for changing employees' attitude and behaviors such as organizational commitment (Morrow, 2011). Performance appraisal is defined as "the basic managerial function such as evaluation of employees' job performance periodically in order to determine the extent to which the employees performing effectively" (Griffin & Ebert, 2002).

According to Majumder (2012), performance appraisal has been used as a tool in the process of reward and recognition. Additionally, it was used to evaluate the employee's strengths and development needs. Although, it is costly to conduct performance appraisal, organizations still adopt this practice as it serves as a fundamental organizational decisions in certain situations, where promotions, bonuses and training needs are determined, which will ultimately create work motivation and commitment to the organization (Kadiresan *et al.*, 2015). Moreover, Getnet, Jebena, and Tsegaye (2014), argued that, performance appraisal is generally adopted by the organization in order to measure and rank the performance of employees. In the same year Obeidat *et al.* (2014) also enlighten that,

performance appraisal practice can be used to detect employee's perception, preferences, beliefs and developmental areas with regard to the organizational goals. Therefore, it is concluded that performance appraisal practice is an instinctive and, most important part of the organization due to its positive influences on the development of the human capital which results in higher performance, increased motivation and job satisfaction. All these facts, serve as factors for employee retention, enhancing the efficiency and increased responsiveness of the organizations. Whereas, neglecting those aspects would lead to negative effects, which may accelerate voluntary employee turnover.

Previous studies also found that performance appraisal is highly related to employee satisfaction, commitment, motivation and turnover intention. For instance, a study conducted by Levy and Williams (2004) illustrates that, employees are committed to their job when they perceived fair and effective performance management system in the organization. Likewise, another study conducted by Ikramullah *et al.* (2012) identified that, the commitment of employee's increases, when they observe fair and well-designed performance system. Other than that, some other studies also found that, commitment of employee will progress, when they perceived their performance appraisal procedure along with other HR practices to be fair and well designed (Lau & Moser, 2008; Armstrong-Stassen & Schlosser, 2010; Salleh, Amin, Muda, & Halim, 2008; Ikramullah *et al.* 2012; Yang *et al.*, 2013). Hence, based on previous discussed literature, it is proposed that, the employee performance appraisal procedures are fair in evaluating and measuring performance also experiences a high level of commitment, which ultimately reduces their intention to leave the organization.

2.4.8 Career Growth and Organizational Commitment

In 2009, Weng and Hu found that career growth is four dimensional concept which includes, career goal progress, professional ability development, promotion speed and remuneration growth. According to Weng & McElroy (2012), career growth is the multi-dimensional concept which motivates employees to make progress in achieving their career goals also help them to develop new skills and to put more efforts in their work. Hence, in return the responsibility of organizations to reward these efforts by providing compensation and promotion to worthy employees will become mandatory.

Furthermore, if the employee perceived that, the career growth in term of career goal progress, professional ability development, promotion speed and remuneration growth inside the organization are unbiased and fair, their level of satisfaction and commitment increases, and this can lead them to increase their performance. Ultimately, this can also decrease their turnover intention behavior (Foong-ming & Tan, 2008; Weng & Xi, 2010). This argument is in line with the meta-analysis of various scholars, who identified that career growth were positively associated with organizational commitment (Weng & Xi, 2010; Weng & McElroy, 2012). Thus, employees with better career growth opportunities to exhibit higher levels of commitment to their organizations and engage in a more proactive work behavior. In accordance with social exchange theory, it assumes that promoted employees feel valued by the organization or likely to reimburse the organization by their commitment and involvement (Blau, 1964).

Other than that, Rousseau (1998), has suggested two particular ways through which organizational commitment of employees can be increased like; (1) Organizations may improve perceived value of the employee's, which they are expecting from the organization; (2) To show the employees that, they are appreciated by the organization. Moreover, in past, for example, study by (e.g. Wang *et al.*, 2014; Weng and Xi 2010; Weng and McElroy, 2012) clearly identify that, the positive relationship between career growth and organizational commitment, which lead employees natural feelings in a better compatible way with the organization which creates desire among them to stay in the organization. As a result, employees achieve career growth by working on different tasks that are linked to their career goals or objectives and enable them to grow professionally.

Normally, employees perceived that, the organization is ready to reward them for their struggles which led them to high level of employee commitment. In comparison to those employees, who are facing difficulties in achieving their career objectives, goals and promotion, such individuals feel lack of employee commitment towards the organization.

Therefore, based on the discussed literatures, researcher conclude that, if the organization delivers a best career growth opportunities for their workers, through serving them to meet career goal and improve their professional abilities to reimburse through remuneration and promotions such employees are more likely to exchange moral obligation among employees and organization. Therefore, researchers concluded that, career growth is positively related with organizational commitment to employees.

2.5 Organizational Commitment and Turnover Intention

The concept of organizational commitment in the work setting is still one of the most important and challenging concepts in the field of organizational behavior, management and human resource management (Boon & Kalshoven, 2014; Weibo, Kaur, & Jun, 2010). Up till now, majority of the studies has been conducted to study the antecedents and outcomes of organizational commitment in the work setting and has been critically reviewed of organizational behavior, management and human resource management (Becker, 1960; Mowday, Porter, & Steers, 1982, 2013; Meyer & Allen, 1991; Cohen, 2003; Cooper-Hakim and Viswesvaran, 2005; Weibo, Kaur, & Jun, 2010; Kantor, 2013; Lee & Huang, 2014; Boon & Kalshoven, 2014; Weng & McElroy, 2012; Rubel & Kee, 2015). Likewise, primitive thinking about organizational commitment is based Beckers (1960), who initially defined commitment as “side bet or investments and suggests that employees make side bets as investments in the form of tenure, status, organization specific skills, pensions, etc.” This pulls them to continue their affiliation with the organization”. For some authors, commitment is defined as “the potential of a person involvement and identity with a particular organization (Mowday, Steers, & Porter, 1982). O’Reilly & Chatman (1986) also defined organizational commitment within the organizational settings as “the psychological attachment felt by the employee for the organization or psychological state of mind which binds the individual to the organization”.

Furthermore, in 1991 Meyer and Allen stated that commitment has three dimensions named as effective, normative and continuous commitment. In line with this view affective commitment is defined as “the relative strength of individual identifications and

commitment to an organization. Similarly, continuous commitment is defined as “the extent to which a person needs to stay with the organization due to benefits that he received as the cost of his investment in the organization. And finally normative commitment is defined as “the extent through by which an individual is obligated to stay with current work setting”.

The Majority of the evidence to date has demonstrated that, organizational commitment have been widely used as a multidimensional construct in different approaches such as behavioral approach, attitudinal approach and motivational approach (Meyer & Allen, 1997; Mckenna, 2005; Mayer *et al*, 2002; Somers, 2010; Nazari & Emami, 2012). In contrast with previous literature, some studies support the uni-dimensional construct of organizational commitment by highlighting the effect of commitment to organizational outcomes such as, turnover intention is high when multiple forms of commitment are combined to make a whole construct such as organizational commitment (Gould Williams and Davies, 2005). This argument is also validated by recent studies of Weibo *et al.* (2010) and A'yuninnisa and Saptato (2015).

On the other hand, there are many factors that can measure and improve the commitment of employees. In the past many variables have tested and been found to be related with organizational commitment such as employee performance (e.g. Chen & Francesco, 2003), employee engagement (e.g Albdour & Altarawneh, 2014), organizational change (e.g. Fedor, Caldwell, & Herold, 2006), corporate social responsibility (e.g. Ali, Rehman, & Ali, 2010), job performance (e.g. Riketta, 2002), job satisfaction (e.g. Azeem, 2010; Porter, Steers, Mowday, & Boulian, 1974), retention (e.g. Falkenburg & Schyns, 2007). Related

Studies showed that, organizational commitment has a positive relationship with all these variables. In general, the finding of all these studies confirms that commitment is important variables for various outcomes at the individual level.

Other than that, organizational commitment has been exposed to be more stronger and imperative predictor of both turnover and turnover intention among different occupational employees, for example call center employees (e.g. Zhou, Long, & Wang, 2009), employees working in hospitals (e.g. Rubel & Kee, 2015), employees working in universities (e.g. Raihan, 2012) etc.

Past empirical studies have been undertaken to examine the direct and indirect relationship among organizational commitment and job satisfaction and the extent to which these variables leads to identify the employee turnover intentions. Different conclusions have been found in previous researches for instance, researchers who claimed that organizational commitment have been exposed to be more stronger and imperative predictor of both turnover and turnover intention among different occupational employees, which indicates that, when employees are effectively and emotionally attached or committed with the organization, they will ultimately less likely to leave the current employment (Zhou, Long, & Wang, 2009; Rubel & Kee, 2015; Raihan, 2012; Chen, Ford, Kalyanaram, & Bhagat, 2012).

Some other correlated studies have consistently confirmed that, the influence of commitment to the organization on turnover intentions, where it is shown that increasing organizational commitment is the best strategy for decreasing absenteeism as well as

turnover intentions (Samad, 2006; Yang, 2009; Lane *et al.*, 2010; Tnay, Othman, Siong, & Lim, 2013; Chens *et al.*, 2012; Samad & Yusuf, 2012; Atif *et al.*, 2011).

Contrarily, a study provokes by Martin and Roodt (2008), enlighten that, job satisfaction has a strong influence on turnover intention as compare to organizational commitment. Furthermore, Ovadje (2009) conducted a study within the African context also reported that organizational commitment is less important as well as not the best indicator of turnover intention. Other than that, some studies found that organizational commitment had no significant effect on employee turnover intention, for example, Verhees (2012).

Despite all the arguments, that highlight the importance of organizational commitment on turnover intention, the studies linked these two variables are very limited in number. Nevertheless, the literature focusing on organizational commitment has some shortcomings. Likewise, in the past, some of studies indicate inconsistency between the relationship of organizational commitment and turnover intention. Secondly, scholars have traditionally focused on western organizations, even though commitment and retention of employees presently highly needed by a Pakistani organization particularly in academia with different context. So that's why, current empirical study conducted in an Asian context, particularly in the Pakistani context as opposed to western context also recommended by (Budhwar & Khatri, 2001).

2.6 Organizational Commitment as Mediator in the Relationship between Human Resource Management Practices (salary, training & development, performance appraisal, career growth) and Turnover Intention

As discussed in literature, each selected HRM practices such as salary, performance appraisal, training and development and career growth has been shown to have separately influence on the organizational commitment and employees' turnover intentions. The extent of direct effect of HRM practices on the employees' turnover intentions is vast but few attention have been paid to the mediating role of organizational commitment with respect to each dimension of career growth (Weng & McElroy, 2012). Moreover, Jiang *et al.* (2012) stated that employees' turnover is a distal outcome of organizational HRM practices. If this is the situation, then it could possibly be anticipated that this relationship can be mediated by another variable which could be proximal indicators. Furthermore, few researchers have mentioned that HRM practices have an impact on employees' attitudes first and then have an impact on their behavioral intentions in the organization (Raihan, 2012).

In past many studies have also argued that HRM practices, such as competitive salary, performance appraisal, training and development and growth in career give confidence to employees to stay committed to the organization (Vandenberghe & Tremblay, 2008; Raihan, 2012; Jiang *et al.*, 2012; Weng and McElroy, 2012, Abdulkareem *et al.*, 2015). These studies mentioned that when employees are satisfied with their jobs and committed to the organization, the bond with the organization will be strengthened and will result in greater cooperation and a reduced possibility of the quitting.

The significant role of commitment as a mediating variable in the relationship between salary, performance appraisal, training and development and career management practices like career growth and employee's turnover intention can be supported by social exchange theory (Blau, 1964), which postulates that employees' attitudes and behaviors' are substantially influenced by perceptions of organizational commitment. Hence, based on social exchange theory, it is suggested that, when individuals perceived that, they are in a good social exchange relationship with their organizations, they are less likely to quit their jobs. Furthermore, when individuals developed positive perception in terms of salary, performance appraisal, training and development and career growth, they will reciprocate by remaining on their present job (Abdulkareem *et al.*, 2015).

Organizational commitment as a mediating variable in the relationship between salary, performance appraisal, training and development and career management practices like career growth and employee's turnover intention, this notion was supported by recent studies. Like, empirical studies have demonstrated that, the relationship between salary and turnover intention is mediated by organizational commitment, if employees perceived higher, attractive and equitable internal salary system within the organization, they become positively attached to the organization and chance to quit the organization will minimize (Vandenberghe & Tremblay, 2008; Kantor, 2013; Si & Li, 2012; N, Rizqi, 2015). On the other hand, the importance of organizational commitment to the relationship between performance appraisal and employee turnover intention was supported by recent empirical studies, like study conducted by Rubel and Kee (2015), observed that, commitment of employees will enhance if they find fair and well designed performance system. Likewise,

some other studies which found that fairness and just in performance appraisal strengthen the feelings of the employees with the organization, this psychological experience of performance appraisal system leads employees to be more committed to the organization and limit their thinking of switching or quitting the job (Ikramullah *et al.*, 2012; Lau and Moser, 2008).

Furthermore, career management practices are important because it argued that employees are very much concerned about their possibility of career growth, whether in the organizations they are currently working for another organization (Karavardar, 2014). Furthermore Karavardar (2014) also argued that, to retain employees, organizations should focus on career growth and career concern policies that could create psychological contract with its employees. As such, employees who expect progress and growth in their career will ultimately stay longer in the organization, which means turnover intention will become less. Likewise, Weng and Hu (2009) and Weng and McElroy (2012) conducted empirical studies on career growth and their influence on occupational commitment and turnover intentions. According to their research, they argued that, career growth was negatively related to turnover intention and also found occupational commitment as partial mediator of the relationship. Furthermore, Hess *et al.* (2012) argued that, turnover intention is less among employees who work for organizations due to the perceptions they have for the organization in term of long term benefits. According to literature summary, it can be concluded that, when organizations provide career opportunities to their employees, by awarding internal promotions and remuneration to improve their professional skills and career goal progress, these employees are more ready to reciprocate by moral obligation to their organization and think less to leave the organization.

Hence, based on social exchange theory, it is suggested that, when individuals perceived that they are in a good social exchange relationship with their organizations, they are less likely to quit their jobs. Furthermore, when individuals developed positive perception in terms of salary, performance appraisal, training & development and career growth, they will reciprocate by moral obligation to their organization and think less to leave the organization.

So based on the social exchange theory and based on a number of previous literatures, this study proposed that organizational commitment mediates the relationship between salary, performance appraisal, training & development and career management practices like career growth and employee's turnover intention.

2.7 Job Stress

The term “job stress” has been reviewed by researchers on a limited number of times with relationship to organizational commitment and turnover intention. The relationship of this concept mostly implies an uncontrollable psychological factor, which relates to organizational functions and quality of work-life from two perspectives; one is employee perspective that relates to psychological well-being and another is organizational perspective that is associated with shared behaviors. In 1978, Beehr and Newman, defined stress as a process in response to the imbalance in demands and resources. Similarly, Gillespie *et al.* (2001) defined stress as “the force exerted on a person that causes tension”. Another author Kawada and Otsuka (2010), identified that “job stress results from job demands, absence in the decision making process and social problems”.

In the last decades the work-related stress has been a growing number of research attentions and is now perceived as a major concern for both employers and employees (Heponiemi *et al.*, 2016). Moreover, in past majority of the studies related to turnover intention highlights that, turnover intention introduced between the variables which occurs after continuous exposure to attitudinal and perceptual changes as well as job stress in employees (Arshadi & Damiri, 2013; Mosadeghrad, Ferlie, & Rosenberg, 2011). In addition, changes in today's key roles and responsibilities of employees, particularly in academia for instance, increasing the pressure for research, decreasing research funding, pressure of publication, resulting in even more pressure for academicians and have many adverse effects, such as decreased employee commitment, productivity declined, deterioration of health and well-being and increase employee turnover intention (Barnes *et al.*, 1998; Catano *et al.*, 2010; Kinman, 2008; Yusoff & Khan, 2013).

Theoretically, job stress has many adverse effects, such as decreased employee commitment, productivity declined, deterioration of health and well-being which in term put employees under pressure this leads them to take behavioral decisions for example turnover intention, absenteeism (Shikieri, 2012). Recently, on the other hand, many researchers who found that the greater the amount of stress, the higher will be the turnover intention of employees (Arshadi & Damiri, 2013; Golparvar, Abdoli, Adibi, & Mehryar, 2015; Javed, Khan, Yasir, Aamir, & Ahmed, 2014; Liu & Onwuegbuzie, 2012; Sattar & Ahmed, 2014). A positive relationship was also found between work-life conflict, stress, and turnover intentions by Noor and Maad (2008).

Although the relationship between job stress and turnover intention has not established properly and some studies claimed that, there is no significant relationship between them (e.g. Imam & Shafique, 2014), numerous earlier research illustrates that, there is a positive and significant relationship between stress and turnover intention (e.g. Yusoff & Khan, 2013; Kinman, 2008; Chen *et al.*, 2010; Jamal & Ph, 2011; Wong & Laschinger, 2015). Furthermore, if the employee perceived high level of stress in the organization, their level of satisfaction decreases, which ultimately increase employee turnover intention. In line with this argument, several researchers indicated that, job stress is positively associated with employee turnover (Arshadi & Damiri, 2013; Golparvar, Abdoli, Adibi, & Mehryar, 2015). Thus, employees who encounter high levels of stress were not the best performer as well as less committed to their job and organization which ultimately increase the level of employee turnover intention.

Besides, job stress or occupational stress is a strong and imperative predictor of both turnover and turnover intention among different occupational employees, for example on call duties physicians (Heponiemi *et al.*, 2016), front line manager (Wong & Laschinger, 2015), employees working in public sector organization (Arshadi & Damiri, 2013; Golparvar *et al.*, 2015), employees in banking sector (Imam & Shafique, 2014). Currently available research that relates job stress to turnover intention, particularly in higher education institution is a quite few and some of them e.g. (Gillespie *et al.*, 2001; Shikieri, 2012).

Moreover, job stress among employees in higher education institution is becoming a more interesting topic of research for academicians and researchers, due to high imbalance

between job demands and their ability to respond. Similarly, job stress within the context of Pakistani higher education sector occurs mainly due to certain factors, for example, inequitable distribution of rights and duties, no clear rewards policy and mostly ill-articulated but no written code of conduct. Lacks of training and counseling become a reason of job stress and employer's fail to cope up with the situations (Yusoff & Khan, 2013). These are the factors which put employees under pressure and state of job stress, which leads them to take behavioral decisions, for example; turnover intention, absenteeism contributes in job stress and knowledge worker turnover.

Most of the studies on job stress were conducted in developed countries as compared to developing countries. On the other side, job stress has been rarely focused in the context of Pakistan higher education. Thus, this study focuses job stress in academia, especially in Pakistani universities due to the high level of work-related stress among university professors like, professors who are generally satisfied with the intrinsic attributes of their job (for example, see themselves as each work to be meaningful), are growing frustrated with the extrinsic characteristics of their job, as their working load or acknowledgment received for good performance. Hence, noteworthy is that consequences of job stress could be an increased withdrawal behavior, job search behavior and turnover intention.

2.7.1 Moderating Role of Job Stress between Organizational Commitment and Turnover Intention

For the last decades, the work-related stress was a growing research attention and is now perceived as a major concern for both employers and employees (Heponiemi *et al.*, 2016). Moreover, a growing body of research shows that, the job stress is very prevalent and interlinked with many contrary effects, such as decreased employee commitment, productivity declined, deterioration of health, well-being and increase employee turnover intention (Catano *et al.*, 2010; Kinman, 2008).

The corresponding reason for introducing job stress as moderating variables is the inconsistency between the relationship organizational commitment and turnover intention which is validated by number of studies. For example, a study conducted by Martin and Roodt (2008), found that organizational commitment has a significant negative relationship with turnover intention, but the strength of the relationship is weak because job satisfaction has a strong influence on turnover intention as compare to organizational commitment. This finding is consistent with study conducted by Ovadje (2009), within the African context also reported that organizational commitment is less important as well as not the best indicator of turnover intention. Other than that, some studies found that organizational commitment had no significant effect on employee turnover intention, for example, Verhees (2012). Hence, according to Baron and Kenny (1986), when there is inconsistent or weak relationship between independent and dependent variable there is need to introduce moderator variable to clarify the relationship.

Furthermore, there are number of empirical studies which explain the effect of job stress either directly or indirectly on turnover intention. For example Akaba (2006) and Seers *et al.* (1983), argues that organizational commitment have less impact on attitude and behavior of employees if employees encounters a high job stress within the organization. Relationship between organizational commitment and turnover intention become weak when employees feel high job stress in the organization. This is because employees become less committed with organization if the job stress is impacting their attitudes and behavior in the workplace (Seers *et al.* 1983). Hence, stress experienced at the job would create a negative feeling about organizations, which ultimately lead to a number of negative outcomes for employees and organizations, including decreased work performance and commitment, absenteeism, burnout and turnover intention

Furthermore, prior studies used job stress as a predictor with job satisfaction, employee performance, organizational citizenship behavior, job burnout, organizational commitment and turnover intention (Javed *et al.*, 2014; Velnampy, 2013; Salman Asad Rana, 2012; Jamal & Ph, 2011; Michael, Court, & Petal, 2009). On the other hand, studies that introduced job stress as intervening variable with turnover intention are not many, some of them has been studied by Heponiemi *et al.* (2016), Imam and Shafique (2014), Wong and Laschinger (2015). Furthermore, they argued that those employees who encounter high levels of stress were not the best performer as well as less committed to their job and organization, which ultimately increase the level of employee turnover intention. The use of job stress as an intervening variable having an indirect effect, instead of direct effect

was also supported by Heponiemi *et al.* (2015) who suggested a more marginal role of job stress in the withdrawal process.

In addition to that, this notion is also supported by social exchange theory (Blau, 1964) which highlights that those exchanges which employees are doing at their jobs, linked with their positive or negative feelings for the organization. Moreover, along with other views of SET, it is useful to explain, how people experience and handle their work stress. Consistent with this view, job stress would create negative feelings about the organization, which ultimately lead employees to pre-assume the negative thoughts for the organization. These negative feelings lead to decreased work performance & commitment, absenteeism, burnout, and turnover intention (Heponiemi *et al.*, 2016). On the contrary, the research conducted by Imam and Shafique (2014) on the corporate banking sector has revealed no significant moderating effect of job stress with the negative relationship between organizational commitment and turnover intention.

Thus, the strength of the relationship between organizational commitment and turnover intention is moderated; but this relationship is in line with the social exchange theory and majority of previous literature clearly revealed that, behavior and attitude of employees got influenced by job stress at work. Hence, it has been suggested that, the level of job stress can weaken or strengthen the relationship or will have no effect on the negative relationship between organizational commitment and turnover intention.

Despite all the arguments that highlight the moderating role of job stress on the relationship between organizational commitment and turnover intention are limited in numbers.

Nevertheless, the literature has found that, the moderating role of job stress has two shortcomings; first, in the past, several studies indicated inconsistency related to the moderating effect of job stress on the relationship between organizational commitment and turnover intention. Secondly, scholars have traditionally focused on western organizations, even though the moderating role of job stress was highly needed by Pakistani organizations particularly in academia sector in different contexts.

2.8 Career Concern

According to Super (1957), working life of every individual would pass through from several development stages, which is known as career stages. Super suggested a theory, namely career stage theory, which indicated that people go through different stages of their careers precisely during their lifetime and it is suggested that, the desire, need and intention of employees change at various stages of their careers (Cohen, 1991). Each stage of one's career is characterized by several fundamental behavior and psychological adjustments that people have to take up, regardless of their employment or background (Levinson, 1986; Super *et al*, 1996).

According to Greenhaus (1987) and Super (1981), there are four stages of career which are described as; the first stage of career is an exploration or organization entry stage (Cohen, 1991). In accordance with Greenhouse (1987), exploration stage “is to select a job and an organization in which to begin a career in one's chosen field of interest”. That is the time where employee's concern is to learn about the culture of the organization as well as evaluate the degree which match their needs (e.g. career exploration); meanwhile, during

the initial year employment employees have lot of alternative options to switch from one organization to another organization (Ornstein *et al.*, 1989). After career exploration next stage is the transition stage, where employees are mainly concerned about to gain knowledge and skills to be successful in their jobs (Greenhaus *et al.*, 2000). At this stage of employment, mainly employees enthusiastic to explore their positions within the organization to set their goals regarding job and work (Greenhaus, 1987). After career exploration next stage is the career building stage, where employee's concern shift their focus to "be accepted as a responsible employee to the organization and to make a place for themselves in employment and organization" (Greenhaus, 1987). Likewise during this stage of employment, employees are eager to get settled and wish to be promoted within the organization (Greenhaus *et al.*, 2000). After career building next stage is late career stage, where employee's mainly not only focus on their position within the organization but also think about their life after retirement (Super, 1957; Greenhaus, 1987; Cohen, 1991).

Hence, other career related factor which could affect employee's intention to leave is career concern. In general, it is claimed that if employees who are concerned about the status of their career are more likely to left the organization with the hope to improve it. Although, no empirical study is available to confirm this, career concern has been linked to several different organizational outcomes such as job satisfaction, employee performance, organizational commitment and turnover intention (Cohen, 1991). The majority of the previous literature suggests that career concern affect the relationship between organizational commitment and several different outcomes like absenteeism, burnout and turnover intention, but there is a contradiction in their findings (Mowday *et al.*, 1982, 2013;

Super *et al.*, 1988; Cohen 1993; Morrow & McElroy, 1987, Bassham, 2009). In addition to that, these studies operationalized the career concern with combination of different variables, including age, position tenure and organizational tenure (Morrow & McElroy, 1987; Cohen, 1991, Allen & Meyer, 1993; Conway, 2004).

Due to the differences in terms of the operationalization of career concern, previous researchers found that, some significant differences in the relationship between career concern and behavioral outcome such as turnover intention (Allen & Meyer, 1993). Thus, it was suggested that, Adult, Career Concern Inventory (ACCI) should be used to measure and operationalized the career concern variable. With this, it is increasingly evident that there is a link between career concern and various job attitudes and work behavior variables (Ornstein, Cron, and Slocum, 1989; Jans, 1989; Isabella, 1988). However, the study of Flaherty and Pappas (2002) found that, employees differ in their commitment with organization and intent to remain on the basis of their career concern. Furthermore, the results of their study revealed that, any change in the attitude of sales person depends on the concern of their individual career. However, the study by Griffin, Hogan, and Lambert (2013) confirms the positive relationship between career concern and intention to leave, indicating that, when employees have high career concern then their intention to leave the organization will become higher.

2.8.1 Moderating Role of Career Concern on the Relationship between Organizational Commitment and Turnover Intention

Notwithstanding, a significant number of employees are leaving their current organizations to work for another because changing jobs is no longer seen as something that is negative and could hinder the advancement of an employee's career. In fact, remaining with only one employer is now considered as an exception (Brooks *et al.*, 2005). Moreover, the "career stage theory" argues that the need, desire and expectation of employees assume to change at various stages of their careers (Cohen, 1991). Likewise, "Career stage theory" also claims that, career concern of individual has a moderating effect of on different final outcomes such as organizational commitment and turnover intention (Super, 1957).

Since many researchers has used career concern or career need as a predictor with several organizational outcomes such as organizational commitment (Chang, Chou, & Cheng, 2007; Kaur & Sandhu, 2010; Olufemi, Lucas, & Peter, 2013), organizational citizenship behavior (Singh, 2010), job satisfaction (e.g. Chen, Chang, & Yeh, 2004), generational difference (Hess & Jepsen, 2009) and turnover intention (Griffin *et al.*, 2013; You & Conley, 2014) but there is a contradiction in their findings. On the other hand, studies that introduced career concern as moderating variable on the relationship between organizational commitment and turnover intention are not many, some of them is the study by Cohen (1991) and Lin (2005). Likewise, they argued that the relationship between organizational commitment and turnover intention become weak by inclusion of career concern as intervening variable.

In prior, number of empirical researches that were conducted by several authors to explore the moderating effect of career concern on the relationship between organizational commitment and employee turnover intention. Accordingly with the study of Cohen (1991) and Lin (2005) who found that employee attitude and behavior change according to their career concern at each stage of career, due to this change employee commitment with organization become more and less which lead to employee intent to leave the organization. This argument is also validated by Conway (2004) who stated that the negative association between organizational commitment and turnover intention is moderated by career concern of peoples, such that it is stronger for lower than for a higher level of career concern. Furthermore, Basham (2009) found that when employees experiencing a high level of career concern, perceived less organizational commitment will report high turnover intention. Similarly, Chang *et al.* (2007) claimed that if organization satisfy the career need of the employees at different career stages, then employee's commitment towards organization may increase and employees turnover intention may decrease.

So, the negative relationship between organizational commitment and turnover intention is moderated; but this relationship is in line with career stage theory and majority of previous literature clearly revealed that, behavior and attitude of employees were influenced by their career concern.

2.9 Conceptual Framework and Development of Hypothesis

On the basis of literature review, Figure 2.1 depicts the research framework that shows HRM practices such as salary, performance appraisal, training & development, career growth are independent variables. Similarly, career growth has four dimensions for instance; remuneration growth, promotion speed, professional development and career goal progress. In addition, current research extends previous literature by examining an organizational commitment as mediating variable by which HRM practices such as salary, performance appraisal, training and development and career management practices like career growth could be related to employee's turnover intention.

Furthermore, current study proposed that how career concern can weaken or strengthen the relationship between organizational commitment and turnover intention, especially where employees perceived job stress and career concern are high or low. Conversely, employees who perceive high level of career related concerns and job stress also have low commitment with organization which has a negative effect on turnover intention in the context of private universities of Pakistan. Therefore, seeks to contribute the human resource management, organizational behavior and career management literature by testing how and under what conditions employees commitment decrease the employee turnover behavior.

On the basis of literature review of related theories and paper, it illustrates the relationships among the studied variables. It is important to build up the relationship between study variables by developing hypotheses. The identified variables will then further build a

relationship and converted into the theoretical framework in order to obtain results from hypothesis itself:

Hypothesis 1

It is also claimed through several researchers that, salary is negatively associated with turnover intention, which implies that, higher the salary lesser the employee turnover (Liu, 2012; Cao, Chen, & Song, 2013; Kroon & Freese, 2013; Naqvi & Bashir, 2015). On the basis of the findings, the researcher develops the following hypothesis.

H1: Salary negatively influences the employee turnover intention.

Hypothesis 2

In the past, the majority of the empirical studies has been undertaken and claimed that training and development had negative effect on employee turnover intention which implies that when employees perceives better and good training programs for their career development within the organization, probably less likely to leave the organization (Chew & Chan, 2008; Dardar, Jusoh, & Rasli, 2012; Yean & Yahya, 2013; Samuel & Chipunza, 2009; Juhdi *et al.*, 2013; Naqvi & Bashir, 2015; Abdulkareem *et al.*, 2015;). Therefore, the researcher has developed following hypothesis.

H2: Training and development negatively influence the employee turnover intention.

Hypothesis 3

In recent year, the majority of the empirical studies has been undertaken and claimed that performance appraisal had a negative effect on employee turnover intention, which revealed that, when employees perceives their performance appraisal procedure along with other HR practices to be fair and just, their intention to leave the organization is minimized (Abdulkareem *et al.*, 2015; Kadiresan *et al.*, 2015; Rubel & Kee, 2015; Yean & Yahya, 2013). Therefore, the researcher developed following hypothesis.

H3: Performance appraisal negatively influences the employee turnover intention.

Hypothesis 4

Weng *et al.* (2010) found that career growth with four dimensions (promotion speed, remuneration growth, professional ability development and career goal progress) was negatively related to turnover intention. Recent literatures such as, Karavardar (2014) also claimed that career growth and development is associated with low turnover of staff another recent study by Chen *et al.* (2015) confirms this. Therefore, the researcher developed following hypothesis.

H4: Career Growth (promotion speed, remuneration growth, professional ability development and career goal progress) is negatively associated with employee turnover intention.

H4a: Remuneration growth is negatively related with turnover intention

H4b: Promotion speed is negatively related with turnover intention

H4c: Professional ability development is negatively related with turnover intention

H4d: Career goal progress is negatively related with turnover intention

Hypothesis 5

Study by Vandenberghe and Tremblay (2008) and Naqvi and Bashir (2015) verified that salary is positive associated with organizational commitment, which implies that if employees perceived higher, attractive and equitable internal salary system within the organization, they become positively attached with the organization. Therefore, the researcher developed following hypothesis.

H5: Salary positively influences organizational commitment.

Hypothesis 6

For recent years, many empirical studies has been undergone by researchers who claimed that, training & development is positively associated with organizational commitment, which implies that training leads to higher commitment, which means that employees act more committed when they received training & development programs from the organization in return they appreciate the organization's investment (Qiao *et al.*, 2007; Verhees, 2012; Raihan, 2012; A'yunnisa & Saptato, 2015). Therefore, the researcher developed following hypothesis.

H6: Training and development positively influence organizational commitment.

Hypothesis 7

Empirical study conducted by Rubel and Kee (2015), who found that commitment of employees with organization will enhance if they find fair and well designed performance system. This finding is also correlated with other studies, which found that performance appraisal have positive effect on organizational commitment of employees (Lau & Moser, 2008; Salleh *et al.*, 2008; Armstrong-Stassen & Schlosser, 2010; Ikramullah *et al.* 2012; Yang *et al.*, 2013). Therefore, the researcher developed following hypothesis.

H7: Performance appraisal positively influences organizational commitment.

Hypothesis 8

Weng and McElroy (2012) found that there is positive relationship between dimensions of career growth (promotion speed, remuneration growth, professional ability development and career goal progress) and organizational commitment. Recent literatures such as, Wang *et al.* (2014) also claimed that each dimension of career growth is positively correlated to organizational commitment. Therefore, the researcher developed the following hypothesis.

H8: Career Growth (promotion speed, remuneration growth, professional ability development and career goal progress) is positively associated with organizational commitment.

H8a: Remuneration growth is positively related with organizational commitment.

H8b: Promotion speed is positively related with organizational commitment.

H8c: Professional ability development is positively related with organizational commitment.

H8d: Career goal progress or career choice is positively related with organizational commitment.

Hypothesis 9

In the past, the majority of the researchers who claimed that, organizational commitment have been exposed to be more imperative predictor of turnover intention among different disciplines which implies that, when employees are effectively and emotionally attached or committed to the organization, probably less likely to leave the current employment (Zhou, Long, & Wang, 2009; Rubel & Kee, 2015; Raihan, 2012; Chens *et al.*, 2012). Therefore, the researcher developed following hypothesis.

H9: There is a negative relationship between organizational commitment and turnover intention.

Hypothesis 10

A number of empirical studies have demonstrated that the organizational commitment mediates the relationship between salary and turnover intention, this means that if employees are satisfied from the salary system within the organization, they become positively attached to the organization and chance to quit the organization will minimize (Vandenberghe & Tremblay, 2008; Kantor, 2013; Si & Li, 2012; A'yunnisa & Saptato, 2015). Therefore, the researcher develops following hypothesis.

H10: The relationship between salary and turnover intention is mediated by organizational commitment.

Hypothesis 11

It is evident from the study of Kadiresan *et al.* (2015), who found that the relationship between training and development and turnover intention is mediated by organizational commitment which means that employees becomes more attached and committed with organization when they perceive training & development is beneficial for their career development, so they want to repay the organizations' investment which has subsequently decreased their intention to leave the organization. Therefore, the researcher developed following hypothesis.

H11: The relationship between training & development and turnover intention is mediated by organizational commitment.

Hypothesis 12

Organizational commitment considered being an important variable in relationship between performance appraisal and employee turnover intention was supported by recent empirical studies, like study conducted by Rubel and Kee, (2015) who claimed that commitment of employees will enhance if they find fair and well deigned performance system. Likewise, some other studies which found that fairness and just in performance appraisal strengthen the feelings of employees the organization, this psychological experience of performance appraisal system leads employees to be more committed to the

organization and limit their thinking of switching or quitting the job (Ikramullah *et al.*, 2012; Lau & Moser, 2008). Therefore, the researcher developed the following hypothesis.

H12: Organizational commitment mediates the relationship between performance appraisal and turnover intention.

Hypothesis 13

Weng and McElroy (2012) found that the relationship between each dimension career growth and turnover intention is mediated by commitment of employees toward organization. Furthermore, Hess *et al.* (2012) argued that, turnover intention is less among employees who work for organizations that are perceived to help employees with career management. Based on the discussed literature, it can be concluded that, if employees perceived their career goals are met, promotion speed in the present institution is fast, probability of being promoted is high as compared to colleague and also perceived growth in salaries, they positively committed and attached with organization ultimately they less likely to leave the organization. Therefore, the researcher develops following hypothesis.

H13: Organizational commitment mediates the relationship between career growth (promotion speed, remuneration growth, professional ability development and career goal progress) and turnover intention.

Hypothesis 14

Studies that examined the moderating effect of job stress on the relationship between organizational commitment and turnover intention are not many; some of them is the study

by Heponiemi *et al.* (2016), Imam and Shafique (2014), Wong and Laschinger (2015). Likewise, they argued that employees who encounter high levels of stress were not the best performer as well as less committed to their job and organization which ultimately increase the level of employee turnover intention. Therefore, the researcher develops following hypothesis.

H14: Job stress moderates the relationship between organizational commitment and turnover intention.

Hypothesis 15

In the past, a number of empirical studies that were conducted by several authors to explored the relationship between career concern, organizational commitment and turnover intention. However, with regard to study of Cohen (1991) and Lin (2005), who found that employee attitude and behavior change according to their career concern at each stage of career, due to this change employee commitment with organization become more and less which lead to employee intent to leave the organization. This argument is also validated by Conway (2004) who stated that the negative relationship between organizational commitment and turnover intention is change by the inclusion career concern as third variable, such that it is stronger for lower than for a higher level of career concern. Furthermore, Bassham (2009) found that when employees experiencing a high level of career concern, perceived less organizational commitment will report high turnover intention. Therefore, the researcher develops following hypothesis.

H15: Career concern moderates the relationship between organizational commitment and turnover intention.

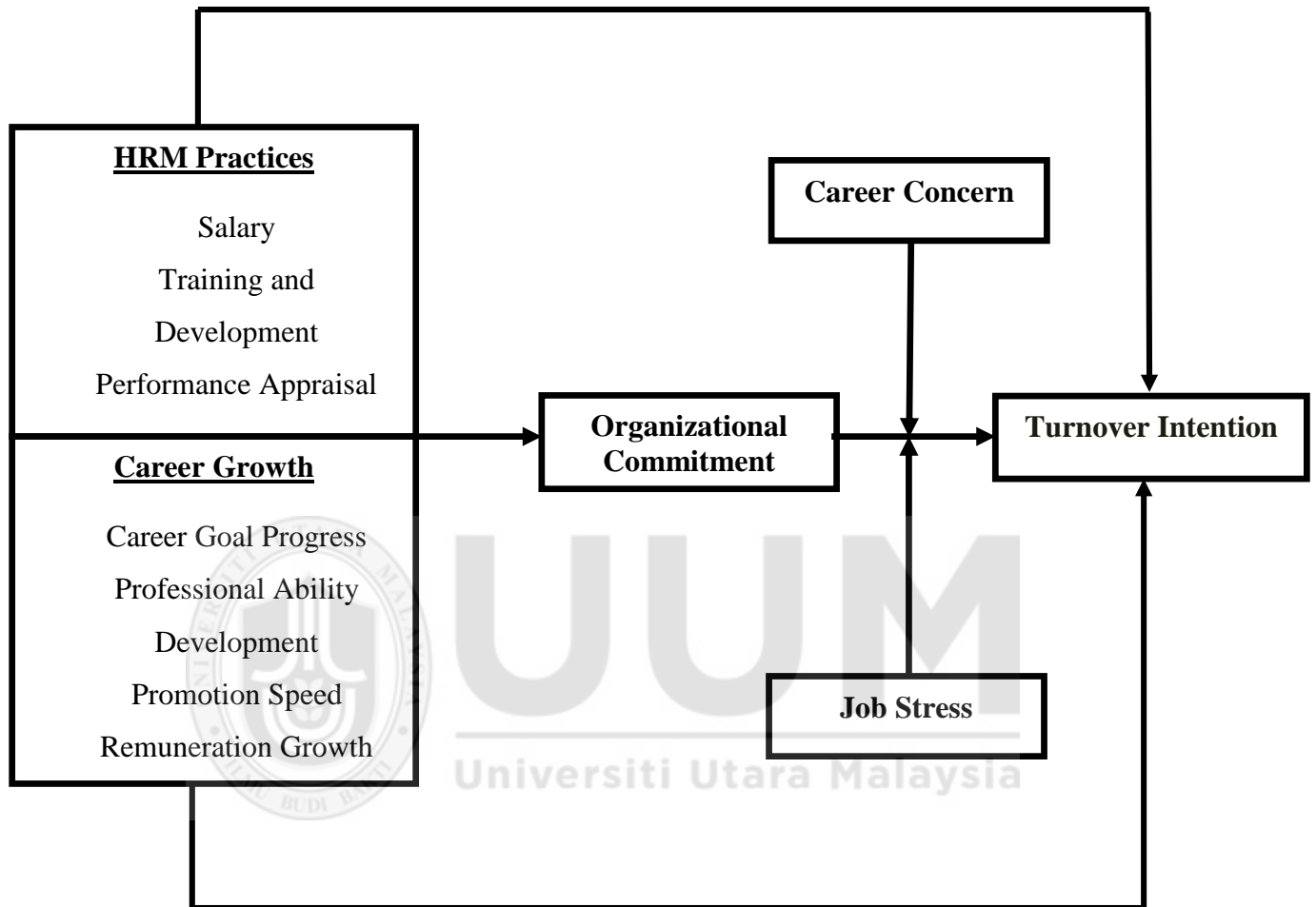
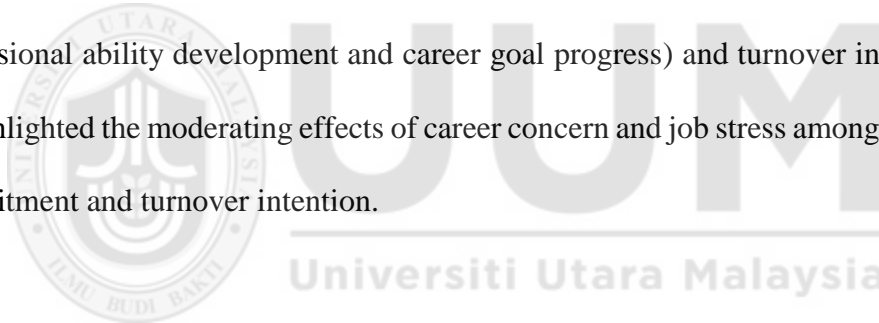


Figure 2.1
Conceptual Framework

2.10 Conclusion

This chapter states the concepts of employee turnover and the antecedents of employee turnover on the organizations. Besides to that, it described the relationship among the variables based on two underpinning theories such as social exchange theory and career stage theory.

The researcher also reviewed past studies carried out on employee turnover intention in various contexts. Finally, this chapter also highlighted the importance of mediation effect between HRM practices, career growth (promotion speed, remuneration growth, and professional ability development and career goal progress) and turnover intention as well as highlighted the moderating effects of career concern and job stress among organizational commitment and turnover intention.



CHAPTER THREE

METHODOLOGY

3.0 Introduction

The aim of this chapter is, to discuss the methodology of this study, by defining research design, operational definition of the variables, population and sampling. In general, research design of the study provides a structure for data collection, as well as analysis and it also reveals the type of research and the priorities held by the researchers. It also includes, the research approach, sampling design and sample, measurement of the variables, the data collection procedures and additionally the analysis techniques to examine the relationships between HRM practices and turnover intention through organizational commitment, job stress and career concern as intervening variables. Other than that, the current study is quantitative in the nature. The researcher had employed the questionnaire survey method for the collection of data in order to study faculty turnover issue and its significant reasons in the private universities of Pakistan.

3.1 Research Design

Research design of any study is based on the type of research (Ghauri & Grónhaug, 2005). It can be quantitative, qualitative or mixed depending upon the problem to be answered in the study; all approaches are different in terms of the nature of data. Meanwhile, qualitative research is based on the data which contain observations, sentences, words, symbols and photos. On the other side, quantitative research is based on the data which contain numbers

(Cooper, Schindler, & Sun, 2006). While the mixed research method is based on both quantitative and qualitative approaches (Creswell, Clark, Gutmann, & Hanson 2003). In this study, the quantitative research method has been applied, which is based on justifications and also discussed in the subsequent paragraphs.

In line with the suggestion of Cooper *et al.* (2006), it is also confirmed that, quantitative research design is the most appropriate method, in order to investigate the relationship between the variables, for applying theories, models and hypotheses. Likewise, Creswell (2013) also recommends that, quantitative research design is appropriate to analyze the association between groups and rationalization of dependency among variables and it is the most suitable way of testing hypotheses. Apart from that, quantitative approach is based on positivist ontology and an objective (Bryman, 2012). As the study aims at examining the direct and indirect relationships between HRM practices such as (training and development, career growth, salary and performance appraisal) and faculty turnover intention through career concern and job stress as moderating variable. Some studies (e.g. Raihan, 2012, Wang *et al.*, 2014) also used a quantitative approach for identifying the effect of human resource practices on turnover intention.

Furthermore, intention to meet the objectives of the study, the survey method approach was employed. It involves the use of questionnaires as the main data collection technique for statistical analysis. Regarding the technique, the cross sectional strategy is used, whereby the data were collected once to answer the research questions. However, the unit of analysis selected for current study is the individuals, whereas the sample is the permanent faculty members of private universities in Pakistan.

3.2 Population and Sampling Design

The process of sampling begins with the identification of the population. As illustrated by Sekaran (2009) who defines that, “population relates to the overall group of people or organization which might be the interest to the researcher”. The target population of this study is full time lecturer of the private universities in Pakistan. The present study is examines how faculty members’ perceptions influence their turnover decision (i.e. turnover intention), the researcher included only full-time faculty members working at various private universities which are mainly located in Punjab and Khyber Pakhtunkhwa in Pakistan. The current study, selection of full-time faculty members (lecturers) as the unit of analysis is most appropriate for a number of reasons.

Firstly, in the past various studies have used the same sample of faculty members for studying the turnover intention (e.g. Markowitz, 2012; Min, 2015; Park, 2015; Raihan, 2012; Rosdi & Harris, 2011; Ryan, Healy, & Sullivan, 2009; Tumwesigye, 2015; Zahra *et al.*, 2013). These all researchers have studied on this aspect of turnover intention. Therefore, researchers only considered full-time faculty members for the survey in the present study because full-time faculty members are the individuals who are expected to build long term relationships with the organization (Park, 2015). In addition to this, full-time faculty is usually more dedicated to the organization as compared to part-time or contractual faculty (Raihan, 2012), thus the organizations are more concerned about full-time employees. Secondly, they are the most active, knowledgeable and important assets in any academic institution. Because, any academic institution can well performed and survive without effective faculty. Added to this justification, faculty in private universities

of Pakistan faced quite number of challenges like lack of job security, un bearable work stress, less paid in relation to economic situation in the country that deserve more attention. Lastly, the nature of turnover attitude among permanent lecturers in private universities needs further investigation.

According to Pakistan Education Statistic (2013-14), there are 64 private universities in Pakistan. However, this research has only considered 32 private universities which are located in Punjab and Khyber Pakhtunkhwa. For the present study, researcher did not include those twenty nine private universities in this study, which were located in various parts of the country like Sindh, Peshawar and Baluchistan. The main reason is that, those areas were not easily approachable due to country politician's conflicts, political instability and the government missions in these areas to remove terrorist attacks and suicide bombing (Babar, 2014; Ferya, 2014; Yusoff & Khan, 2013). Practically, it is almost impossible to cover all the elements of the population in the survey study (Cooper *et al.*, 2006; Sekaran, 2006). Thus, due to law and order situation in the country, researcher only considered 32 private universities located in the Punjab and Khyber Pakhtunkhwa, which were considerably clear of any disputes.

In line with the previous discussion, the faculty members who were working full-time in these 32 private universities have been considered as the total population in the current study. As revealed in Educational Statistics report of Pakistan (2013-14) that, about 7912 faculty members working as full-time in 32 private universities in the area of Punjab and Khyber Pakhtunkhwa Pakistan. Therefore, the population of the study is considered to be 7912 which were full-time faculty members.

The main reason is that, researcher requested Higher Education Commission of Pakistan for the complete lists of faculty members of 32 private universities for conducting surveys. Because, Higher Education Commission is the only government regulatory authority who is dealing with all the matters of both public and private universities of Pakistan, but researcher failed to get the complete lists from HEC. In fact, the list was not available for two reasons. Firstly, the document (faculty list) was not updated, thus it may give misleading information about the number of faculty members at the private universities. Secondly, the faculty list was incomplete because many of the private universities do not notify detail lists of their faculty members. Lastly, updated list of faculty members of each private university was not available on the official website of HEC (Higher Education Commission) Pakistan or from the registrar office of the universities.

Therefore, the researcher had to depend on the total population of 32 private universities. The researcher only considered the private universities, which are mainly located in 9 different areas of Punjab and Khyber Pakhtunkhwa.

Table 3.1

Selected Numbers of Private Universities under Each Area

Area in Punjab and KPK	Total Universities in Punjab and KPK
Lahore	18
Gujaranwala	1
Multan	2
Faisalabad	1
Texila	1
D I Khan	1
Peshawar	6
Topi	1
Noshehra	1
Total	32

3.2.1 Sample Size

Selecting a right sample is always considered as a crucial part in the achievement of any research. Moreover, the sample size could be determined, either by using the statistics or by the rule of thumb (Aaker, Kumar, & Day, 2001; Teddlie, 2007). Selecting a right sample is crucial because practically it is not possible to gather data from every portion of the population due to high cost, time constraint and lack of research assistants to collect information. That's why, Cooper *et al.* (2006) and Zikmund *et al.* (2010) revealed that, the sampling technique must be used to collect the data from the targeted population instead of collection of the data from every element of population. Moreover, selecting suitable sample from targeted population is expected to give more consistent and reliable results for the current study (Sekaran, 2003).

Furthermore, in 2011, Hair *et al.* suggests that, good sample size for the statistical analysis would be at least 10-20 times more than the variables used in the study. Likewise, Hair *et al.* (2011, 2014) recommended that, minimum sample size for PLS-SEM analysis is about 200 respondents. Hence the required sample size of the present study is 220 which appear to be suitable for statistical analysis as 11 variables has been used in this study. Other than that, few studies have been conducted on the universities by choosing academicians as the study sample. Moreover, it was stated that, the response rate were 49% by Gardner (2012), 56% by Ahmad, Bodla, and Hussain (2014), in the context of Pakistan. Based on these figures, current study has distributed 550 questionnaires to get the required sample. Therefore, sample for this study was 550 responses. Practically, a bigger sample size is preferable to avoid the possibility of non-response bias (Sekaran, 2003).

3.2.2 Sampling Technique

In general, sampling could be segregated into two major sections: Probability sampling and non-probability sampling. The unique characteristic of probability sampling is that, all respondents in the target population have equal chances of selection. While, the probability sampling categorically divided into systematic sampling, systematic sampling stratified random sampling, simple random sampling and cluster sampling. In simple random sampling, each sample has got an equal chance to be drawn from the whole target population. While, in stratified random sampling, firstly, the population would be categorized into strata and after that, independent random samples will be drawn from each stratum. On the other hand, in cluster sampling, firstly, the population will be categorized into normal groupings or areas and then, random sample of clusters has drawn from that grouping. Even though, systematic sampling is a method of selecting a random sample from whole target population by selecting a fixed interval in the population and then random samples are drawn by using constant interim (Sekaran, 2003). While on the other side, in case of non-probability sampling, each sample doesn't have equal chances to be drawn randomly from the whole target population. Non-probability sampling is further categorically divided into convenience, purposive and quota sampling.

As for this study concerned, researchers have selected cluster area sampling method for this study. The main reason is that, the simple random sampling was not possible because of the updated list of faculty members of each private university was not available on the official website of HEC (Higher Education Commission) Pakistan or from the registrar office of the universities. Secondly, due to law and order situation it was difficult to visit

all the universities scattered in Punjab and KPK. Therefore, the survey was limited to a specific area as selected randomly.

Thus, for the current study, an area sampling method was used to collect the required number of data for statistical analysis. According to Gay and Diehl (1992), selection of sample in this method requires five steps begins with the defining the population of the study. The population of the present study is 7912 faculty members working in the 32 private universities in the Punjab and KPK (Pakistan Education Statistics, 2013-14). Next, the sample size of 550 was determined. This step follows the definition of a logical cluster. The logical cluster in the present study was the each location (area) in Punjab and KPK Area. All the private universities in Punjab and KPK Area were located in nine different locations. After this, the average number of population element per cluster was determined by dividing the population size (i.e. 7912 faculty by the number of clusters (i.e. 9 locations), which resulted in 879 faculty per cluster. Finally, the number of clusters was determined by dividing the determined sample size (i.e. 550) by the calculated size of a cluster (i.e. 879). This resulted in .45 clusters.

This indicates that minimum one cluster needs to be randomly selected to achieve the targeted sample size. Thus, one cluster in Punjab and KPK area was randomly selected for survey data. If the number of samples does not meet the determined sample size, then an additional location needs to be randomly selected.

Keeping in mind the explanation of cluster probability sampling given by Gay and Diehl (1992), the division is based on the two provinces of Pakistan such as Punjab and KPK

which have nine clusters. Among these nine clusters, Lahore was selected for current study. The corresponding reason for choosing Lahore is, among 32 private universities of Pakistan which are total population of the study, 18 universities are located in Lahore which covers 50 percent of the whole population of the study. Thus, it was decided that all private universities which are located in Lahore, Pakistan would be considered as the sample of the study. So, the selected location was Lahore Punjab Pakistan Area. The names of the private universities under this location were given in Appendix C. Indeed, once the location have been identified, the next step was to collect data from respondents of each selected university. Conveniently, 30 faculty member have been selected from each university on the basis of their availability.

3.3 Quantitative Research

The main objective of the quantitative research is to investigate the cause and effect relationship among the variables and it also provides the generalization ability to the population of this study (Hopkins, 2008). Therefore, the whole information is about the quantifying relationships among variables. At the current study point of view, researchers employed the survey method which most accepted and most commonly used technique in the management and social sciences research that is also recommended by different researchers, for example Myers (2009), Veal (2005), Hair, Ringle, and Smarted (2011). Secondly, the survey method is used for obtaining very precise statistical information (Whitfield and Strauss, 1998). Thirdly, this method is also regarded as the simplest and less expensive as compare to other samplings, especially, when the target sample population was widely spread in a geographical manner (Bryman, 2001). Fourthly, a very

important benefit of this survey method is; the probable anonymity of the respondent, that could lead to more straight and valid responses. Finally, because of high standards and access of a survey method that is considered important from a data analysis point of view, results could be generalized (Ghauri & Gronhaug, 2005; Kay Wong, 2013).

Furthermore, the researcher selected cross-sectional study method to find out the insights of the respondents regarding HRM practices such as salary, performance appraisal, training & development and career growth in their institution, their commitment, job stress and career concern according to their diverse career need and expectation towards the institutions and their turnover behavior at certain times. Generally, the survey method helps the researcher in collecting a huge number of data in a very quick and easy way, thus it can also be generalized to a large population. In addition to that, various statistical techniques can also be used to analyze the data (Myers, 2009; Kay Wong, 2013).

3.4 Design of Questionnaire

The scales used to measure all variables are included in this study; they have been adapted from previous researchers with appropriate modification which are suitable for the sample. The survey questionnaires consist of two main components. First component comprised of several Likert-type scale items, and the second component described the demographic information of the faculty members (the respondents) of this study. The Likert scale is formulated to study, how strongly the respondents will agree or disagree with a particular statement (Sekaran, 2003). The objective of a 7-point Likert scale is to offer respondents

with more options or choice and to better capture the variability in their attitudes and feelings as well (Hinkin, 1995).

The present study focused on permanent faculty member's perception (i.e. what faculty members think) regarding HRM practices such as salary, performance appraisal, training & development and career growth in their institution, their commitment, job stress and career concern, according to their different career need and expectation towards the institutions and their turnover behavior at certain times. Faculty members are suggested to express their important opinions with the help of seven scales (options) with highest from 'strongly agree' refers to '7', and lowest at 'strongly disagree' refers to '1'.

Hence, based on the given reasons, researcher has used a seven-point Likert-scale in the current study, as this is the most widely used method of scaling in the social as well as in the behavioral sciences research (Chomeya, 2010). First reason of using this scale is supported by the study of Chomeya (2010), according to their study, the 7-point Likert scale have a tendency to provide values of discrimination and reliability that are greater and accurate than 5 points Likert scale. Accordingly with the reliability and value as a whole, the given Likert's scale, 7 point gives the reliability, by Cronbach's Alpha Coefficient which is higher than the Likert's scale, 5 points (Chomeya, 2010). Moreover, 7 point Likert scale is much appropriate according to the current research because it has several variables along with their dimensions, so, it proceed with the test as a whole, which has the appropriate number of items and it cannot burden the respondents, while the reliability is acceptable according to the standard of psychology test (Chomeya, 2010).

Moreover, this Likert scale is much easier to construct and very reliable as compare to other scales (Dumas, 1999). Researcher has used a seven-point Likert scale because there was no specific rule for using the five-point or seven-point Likert scale. However, several studies have argued that, seven-point scale is more preferable, one of the major reasons is that, it reduces the respondent's confusion (Solnet, 2006; Fornell, 1992). Therefore, seven-point Likert scale, offers the respondents with much more simple options from where they can easily go for their assortment. That is why, in order to confirm reliability between all the variables, researcher has measured all the objects by using 1 to 7 point scale, whereas '1=strongly disagree', '2=moderately disagree', '3=disagree', '4=neutral', '5=agree', '6=moderately agree', and '7=strongly agree'. The structured questionnaires have been used for the collection of data of each study variable.

The survey questionnaires were circulated personally to each of the respondent. The Researcher will use the drop-off and pick up method where questionnaires were left with respondent and collected the following week. This method is also validated by the study of Burns and Bush (2002).

Other than that, the unit of analysis was, i.e. permanent faculty members who were working in private universities of Pakistan. The aim of this study is to have understanding about the individuals of faculty member perceptions from various HRM Practices (e.g. salary, performance appraisal, training & development and career growth) and other factor such as job stress and career concern in their institution. The individual level of analysis was considered because it provides sufficient cases for statistical analysis and data was expected to be available for every variable of the study. Finally, the variables used in this

study can be measured better at individual level. According to Ryan (2009), it is often preferred because summative assessments at the department or institutional level tend to favor larger organizations.

3.5 Variables and Measures

3.5.1 Salary

In this study, salary is defined as “a financial benefit (i.e. .wages or salary) acquired at the end of the month in return of services or task performed in order to achieve company objectives”. Similarly, to measure salary, 5- items scale by Tessema and Soeters (2006) was adapted. For instance ‘the salary at my institution that reflects individual faculty performance’ and ‘the salary at my institution that reflects the standard of living’. According to the study of Tessema and Soeters (2006), the value of Cronbach alpha for this measure is .83. Recently a study conducted by Terera and Ngirande (2014), also used the same construct for measuring the salary of hospital nurses in South Africa.

Table 3.2*Items represent the Salary Scale*

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Salary	In this study, faculty salary has been defined as monthly financial benefits (i.e. wages or salary) of the faculty for their service to the university that reflect their living standards”.	1. There is an attractive salary at my institution 2. There is an equitable internal salary system at my institution 3. The salary at my institution that reflects individual faculty performance 4. The salary at my institution that encourages better performance 5. The salary at my institution that reflects the standard of living.	.83	(Tessema & Soeters,2006)

3.5.2 Training & Development

To measure training & development, 3- items scale by Delery and Doty (1996) was adapted. In the current study, every item of this construct identify that what type of training employees receives their professional development of the organization. According to the study of Delery and Doty (1996), the value of Cronbach alpha for this measure is .88. A study conducted by Bell, Lee, and Yeung (2008), also used the same construct for measuring the training & development in Chinese service industry.

Table 3.3*Items represent the Training and Development Scale*

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Training and Development	Defined as far as what employees receive training for their professional development from the organization. This refers to the current training and development activities for faculty members initiated by the management of private universities.	1. My institution provides, extensive training for faculty development 2. My institution provides, developmental training programs for faculty every few years 3. In my institution, there is formal developmental training to teach new faculty members the skills they need to perform their jobs 4. My institution provides, formal developmental training to faculty members in order to increase their promotion ability in this institution.	.88	(Delery & Doty, 1996)

3.5.3 Performance Appraisal

In this study, faculty performance evaluation and appraisal is defined as “the measure of teaching performance 'by the Department Head’”. Performance appraisal is measured with the help of 3-items scale by Chang (2005) was adapted. Example items are ‘my institution’s performance appraisal was based on concern objectives. According to Chang, (2005) the Cronbach alpha value was .63. Recently a study conducted by Raihan (2012) also used the same construct for measuring the performance appraisal of university faculty in Bangladesh.

Table 3.4*Items represent the Performance Appraisal Scale*

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Performance Appraisal	Conceptualized as a periodic assessment of the performance of the employee by the direct supervisor. In this study, faculty performance evaluation and appraisal has been defined as the measure of teaching performance 'by the Department Head.	1. The university has adopted standardized procedures for appraising my teaching performance 2. My institution provided, enough information regarding specific methods of the performance evaluation systems 3. I am allowed to formally communicate with supervisors (Head of department) regarding the appraisal results	.63	(Chang, 2005)

3.5.4 Career Growth

Career growth (promotion speed, remuneration growth, career goal progress and professional ability development) is a 15-item scale by, Weng and Hu (2009) were employed. Example item is “My promotion speed in my present organization is fast,” and “My salary is growing quickly in my present organization”. According to Weng and Hu (2009), the Cronbach alpha value was .90. Recently a study conducted by Wang *et al.* (2014) also used the same construct for measuring the career growth with subsequent behavior of employees.

Table 3.5*Items represent the Career Growth Scale*

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Career Growth	Conceptualized that career growth is, both a function of the employee's own efforts, in making progress toward their personal career goals, and acquiring new skills, and the organization's efforts, in rewarding such efforts, through promotions and salary increases. Career growth has four dimensions; career-goal progress, professional-ability development, promotion-speed, and remuneration-growth.	1. My present job moves me, closer to my career goals. 2. My present job is, relevant to my career goals and vocational growth. 3. My present job sets, the foundation for the realization of my career goals. 4. My present job provides, me with good opportunities to realize my career goals. 5. My present job encourages me, to continually gain new and job-related skills. 6. My present job encourages me, to continually gain new job-related knowledge. 7. My present job encourages me, to accumulate richer work experiences 8. My present job enables me, to continuously improve my professional capabilities. 9. My promotion speed in the present institution is fast. 10. The probability of being promoted in my present organization is high. 11. Compared with previous organizations, my position in my present one is ideal. 12. Compared with my colleagues, I am being promoted faster. 13. My salary is growing quickly in my present organization. 14. In this organization, the possibility of my current salary being increased is very large. 15. Compared with my colleagues, my salary has grown more quickly.	.90	(Weng & Hu, 2009)

3.5.5 Organizational Commitment (Mediator)

This study defined organizational commitment as commitment of individual faculty to the academic institutions. Organizational commitment a 6-items scale by Gould, Williams and Davies (2005) was employed. Example items are ‘In my work I like to feel I am making some effort, not just for myself but for the organization as well’ and ‘The offer of more money with another employer would make me think of changing my job’. According to Gould and Williams and Davies (2005), the Cronbach alpha value was .74. Recently a study conducted by Rubel and Kee (2015), also used the same construct for measuring the organizational commitment with nursing turnover intention.

Table 3.6
Items represent the Organizational Commitment Scale

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Organizational Commitment	“Faculty organizational commitment; refers to the commitment of individual faculty, to the academic institutions”.	1. I am proud to be able to tell people who it is I work for. 2. Even if the department was not doing too well, I would be reluctant to change to another employer. 3. In my work, I like to feel, I am making some effort, not just for myself but for the organization as well. 4. The offer of more money, with another employer, would make me think, of changing my job. 5. I would not recommend a close friend to join our organization 6. To know that my own work had made a contribution to the good of the organization would please me.	.74	Gould, Williams and Davies, (2005)

3.5.6 Job Stress (Moderator)

In this study, faculty job stress has been defined as negative faculty response as a result from imbalance demand and resources, work overload, lack of recognition, inequitable distribution of rights and duties due to favoritism, inadequate funding related to research publication that affect their personal life. Job stress a 17-items scale by Gmelch's (1986) was employed. Example items are 'I receive insufficient institutional recognition for research and teaching performance', 'I feel the inequitable distribution of rights and duties due to favoritism and 'I feel too much pressure of research publication'. According to Gmelch's (1986) the Cronbach alpha value was .86. Similarly, a study conducted by Moeller and Chung-yan (2010), also used the same construct for measuring the job stress of professor.

Table 3.7

Items represent the Job Stress Scale

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Job stress	“In this study, job stress has been defined as, negative faculty response, as a result from imbalance demand and resources, work overload, lack of recognition, inequitable-distribution of rights and duties, due to favoritism, inadequate funding, related to	1. I receive insufficient institutional recognition for research and teaching performance. 2. I participate in too many departmental or university committees 3. I spend too much time writing letters, e-mails and responding to other paperwork. 4. I have too heavy workload, one that I cannot possibly finish during the normal workday. 5. I am too often, unable to resolve differences with my Department Head	.86	Gmelch, Wilke, & Lovrich, 1986)

research
publication that
affects their
personal life”.

6. I have no way of influencing
my Department Head’s actions
and decisions that affect me.

7. I do not know, how my
Department Head evaluates my
performance.

8. Not knowing, how to secure
funding for my research
activities.

9. I feel the inequitable
distribution of rights and duties
due to favoritism.

10. There is no written code of
conduct

11. I feel, there is too much
organizational politics.

12. I feel, insecure in the job
due to lack of research
publication.

13. I feel, too much pressure of
research publication.

14. I receive, inadequate
funding related to research
publication

15. General lack of time for
research and Work life
imbalance.

16. Supervisors have too much
power to influence one’s career

17. Impossibility to purchase
high-quality research
equipment.



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3.5.7 Career Concern (Moderator)

Career concern was measured with 12-items scale by Perrone *et al.* (2003) was adapted.

Example items are ‘Finding the line of work that I am suited for’ and ‘Planning how to get ahead in my established field of work’. According to Perrone *et al.* (2003) the Cronbach

alpha value was 0.87. In addition, a study conducted by Hess and Jepsen (2009), also used the same construct for measuring the career concern of employees.

Table 3.8
Items represent the Career Concern Scale

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Career concern	In this study, career concern has been conceptualized, on the basis of desire, needs and career concern, of the faculty, which are assumed to alter at diverse stages in their careers. Each stage of one's career is characterized by, several fundamental behavior and psychological adjustments that most faculty have to take up, regardless of their employment or background.	1. Finding, the line of work, that i am best suited for. 2. Finding a line of work, that interests me. 3. Getting started in my chosen career field 4. Setting down in a job I can stay with. 5. Becoming especially knowledgeable or skillful at work. 6. Planning; how to get ahead. in my established field of work 7. Keeping the respect of people in my field. 8. Attending meetings and seminars on new methods 9. Identifying new problems to work on. 10. Developing easier ways of doing my work. 11. Planning well for retirement 12. Having a good place to live in retirement.	.87	Perrone <i>et al.</i> , (2003)

3.5.8 Turnover Intention

In this study, turnover intention mean employee intends to leave the organization. Similarly, with regard to this study employee means who work in universities. Turnover intention was measured with 5-item scale by Wayne *et al.* (1997) and Lum *et al.* (1998) was adapted. Example items are ‘I am actively looking for a job outside this institution’ and ‘As soon as I can find a better job, I will leave this institution’. According to Wayne *et al.* (1997) and Lum *et al.* (1998), Cronbach alpha value of this turnover intention scale was .63.

Table 3.9
Items represent the Turnover Intention Scale

Variable	Operational Definition	Number of Item	Cronbach Alpha	Sources
Turnover Intention	In this study, faculty turnover intentions have been conceptualized as members of the faculty intention to leave the institution during the future.	1. I am actively, looking for a job, outside this institution 2.As soon as, I can find a better job, I will leave this institution 3. I am seriously thinking about quitting my job 4. In the last few months, I think seriously about looking for a job in the other sector/s 5. Taking everything into consideration, there is likelihood that I will make a serious effort to find a new job within the next year.	.92	(Wayne <i>et al.</i> 1997; Lum <i>et al.</i> 1998).

3.6 Pilot Study

Before conducting the actual survey, a pilot test was conducted to enhance the quality of the questionnaire. The pilot test was undertaken to measure the internal consistency of the instrument by calculating Cronbach Alpha values of each construct. As suggested by George and Mallery (2003), the Cronbach Alpha value ranges from; “ $\alpha > 0.9$ - Excellent, $\alpha < 0.8$ - Good, $\alpha < 0.7$ - Acceptable. This pilot study is conducted to make sure the content, simplicity, clarity, comprehensiveness of the questionnaire prior to a formal survey. After pilot testing, the improved questionnaire was then used for a formal survey to collect data. For this study, the pilot test was conducted by using a sample of 30 faculty members from three different universities from the end of December, 2014 in early January, 2015. The result of pilot study highlights that, all the constructs in the questionnaire have reliability from 0.644 to 0.945 which is above the 0.60 indicating that the instrument is reliable for conducting further study.

Based on the respondents feedback final questionnaire was designed after analyzing the respondent's background and perception level, that's why, most of the respondents, which were academicians and well educated in their particular area have easily understand the overall questionnaire and gave positive response. On the other hand, few of the respondents have faced little difficulty in filling up the questionnaire like some words were difficult to interpret. However, the researcher considered those issues seriously and made the questionnaire more simplified by replacing few difficult and technical terms with easily understandable words for the respondents. The modified items of construct were given in Appendix B.

Table 3.10*Reliability statistics for Pilot Study (n=30)*

Variables	Cronbanch's Alpha	No of Items
Salary	.855	5
Training and Development	.851	4
Performance Appraisal	.761	3
Career Goal Progress	.683	4
Professional Ability Development	.644	4
Promotion Speed	.819	4
Remuneration Growth	.740	3
Organizational Commitment	.945	6
Career concern	.737	12
Job Stress	.774	17
Turnover Intention	.880	5

3.7 Data Collection

In the present study, the data was collected by distributing the questionnaires among the faculty members of the targeted and selected private universities in Pakistan with a cover letter, which explains the purpose of the current study. The cover letter was mainly enclosed with the survey questionnaires to inform the individual faculty about the survey that it would be used for academic purpose only and treated as confidential.

Firstly, for data collection researcher went personally and distributed the questionnaire to the respondents and also briefly discussed about the purpose of the particular survey. It was the personal observation of the researcher that self-distribution of questionnaires can creates a sense of importance in the mind of respondents. Secondly, the researcher has offered a small token gift to respondents as an appreciation of their efforts in completing

the survey and time given for it. Thirdly, along with a booklet format printed survey questionnaire researcher had attached a UUM brochure, particularly a brochure for SBM post-graduate with the survey document. The main reason for attaching brochure is that most of the respondents of this study completed a master's degree and was the lecturer. So this brochure might draw their attention for pursuing higher studies, thus they may feel obligated to fill the questionnaires. The researcher observed that most of the respondents find it unique presentation of survey questionnaires. Usually, respondents did not experience this pattern in the context of Pakistan. In fact, this unique nature establishes the credibility of researcher to the respondents which in turn increases the response rate. Fourthly, a reminder call to the faculty members has done by the researcher after a week or two as convenient for the respondent's increases the response rate of the study.

3.8 Techniques for Data Analysis

Intention to meet the research questions and the objective, SEM (called path analysis) is appropriate to identify multiple relationship effects such as direct effect and indirect effect by including mediation (Resampling bootstrapping technique) and moderation (product indicator approach). Thus, at the current study point of view, researchers employed SEM-PLS due to some following reasons. Firstly, it is most accepted and most commonly used technique in management and social sciences research which is recommended by different researchers (e.g. Henseler *et al.*, 2009; Hair *et al.*, 2014). Secondly, it is wide spread recognition in academic research and practice (Hair *et al.*, 2012; Ringle *et al.*, 2012). Thirdly, it is most important for testing theories (Hair *et al.*, 2014; Hair *et al.*, 2013). Fourthly, it was recommended by many researchers that SEM-PLS is most suitable for

Prediction-oriented models or extension of an existing theory (Hair *et al.*, 2011; Henseler *et al.*, 2009). Fifthly, it can be conveniently applied to minimum sample size and measurement scales (Hair *et al.*, 2014). Sixthly, SEM-PLS was employed because when theory is not well developed; then researchers mostly prefer PLS-SEM over CB-SEM, because of their approach to answer the research questions (Hair *et al.*, 2014). For instance, SEM-PLS is normally expected with a regression-based technique, that is AMOS (Analysis of Moment Structures) and also LISERAL (Linear Structural Relations) which are most commonly estimated, using a covariance approaches (Hair *et al.*, 2014). Seventhly, SEM-PLS has the capability to even estimate the models which consists of one-and two-item scales, although, in this case of AMOS and LISERAL approaches, it will be more difficult to estimate the models, when the number of items are very low (Hair *et al.*, 2014). Last but not the least, SEM-PLS has been preferred because of its parsimonious usage, one of the major reason is that, it has the capability to developed stronger model by testing the theory on a specified relationships.

This study used structural Equation Modeling (SEM) Path analysis, using SmartPLS 2.0 (e.g. Ringle *et al.*, 2005) software to test the inter-relationship between dependent and independent Variables. In 2007, Le and Wu argued that “Path analysis is an extension of multiple regressions because it involves various multiple regression models or equations that are estimated simultaneously”. In multiple regression analysis it is assumed that the dependent variable is directly affecting all the independent variables. The major purpose of using SEM was to find out the consistency of data collected with hypothesized theoretical model (Lei & Wu, 2007). In response to the research questions and the objective, SEM (called path analysis) is appropriate to identify multiple relationships of

dependent, independent, and (product indicator approach) used for moderating variables (Hair, Black, Babin, & Anderson 2006; Wong, 2013). Meanwhile, according to Hair *et al.* (2011), PLS-SEM provides evaluation for a sequence of individual regression formula. Similarly, PLS- SEM method is to check the outcomes and, therefore, it has delivered extra trustworthiness, as it allows for the requirements and examining of complicated path models and can also apply to small sample size (Hair *et al.*, 2011). Hence this study have several relationship effects such as direct effect and indirect effect by including mediation and moderation, So that's why, this study used partial least squares to assess the reliability and validity as far as testing the structural model in line with recommendation of (Ringle *et al.*, 2005; Chin *et al.*, 2003; Hair *et al.*, 2014). Eventually this study applied following steps of Henseler *et al.* (2009) for conducting the (PLS-SEM) path analysis. It is described into two models, first is measurement model and the second is the structural model.

In the model evaluation, measurement model starts by examining the individual item reliability. With regard to individual item reliability, researchers examined loading and cross loadings of all items of the study variables to point out any problem which serve as a pre-requisite for measurement model. In model evaluation, the measurement model was undertaken to ensure about the model validity and reliability. As mentioned earlier in this chapter, all the items of the variables were adapted from previous studies, although this study undertaken only confirmatory factor analysis by using SmartPLS 2.0 M3 (Ringle *et al.*, 2005) which have built in feature of the CFA. In line with the recommendation of Hair *et al.* (2010), the large sample size required to perform CFA, where the minimum sample required is 150. In addition to this, Vinzi *et al.* (2010) gave the rule of thumb for outer loading. According to their rule of thumb outer loading should be 0.5 and above, as average

variance extracted, it should be above than 0.5. Based upon the following argument all the items in outer loading which is below than 0.5 should be deleted one by one with lower value, this technique is also validated by Hair *et al.* (2014) because it improves the quality of data.

On the other hand, internal consistency reliability refers to the “extent to which all items on a particular sub scale are measuring the same concept” (McCrae, Kurtz, Yamagata, & Terracciano, 2011). As for this study is concerned, the Cronbachs Alpha values of each construct was calculated to determine the internal consistency of the data. Other than that, the discriminant validity was determined by using the AVE as anticipated by Fornell and Larcker (1981). Discriminant validity has been obtained by making a comparison of the correlation between the latent variables and with the square root of the AVE (Fornell & Larcker, 1981). In line with recommendation of Fornell and Larcker (1981), the square root of AVE must be greater than latent variables which indicate discriminant validity.

After execution of measurement model, next moves towards the structural model that deals about the dependence of the relationships in the hypothesized model of the study. According to Hair *et al.* (2014) structural model gives an inner modeling, analysis of the direct relationship between the constructs of the study and their t-values are path coefficients. As revealed by Henseler, Ringle, and Sinkovics (2009), the path coefficient is same like standardized beta coefficient in regression analysis. Where beta values of the coefficient of the regression and t-values are examined to decide the significance. Following the rule of thumb by Hair *et al.* (2014), t – value greater than 1.64 is considered to be as significant, which is further used for making decisions on the proposed hypothesis.

Furthermore, this study has several related effects such as direct effect and indirect effect by including mediation and moderation. As for mediation concerned, there are several techniques that have been used for mediation test such as Baron and Kenny (e.g. Baron & Kenny, 1986), Sobel test (e.g. Sobel, 1982) and bootstrapping (e.g. Preacher & Hayes, 2004; Hayes *et al.*, 2009). So far current study point of view is concerned, resampling mediation technique (bootstrapping) was used by researcher to test the indirect effect of each potential. Additionally, this study has adopted the current testing procedure of mediation which is also called “bootstrapping the indirect effect”. The Majority of the researcher revealed that, Bootstrapping is a non-parametric resampling procedure which was getting more attention for prospective researcher, because this is one of the most exact and prevailing process for testing the effect of mediation (Hayes *et al.*, 2009; Zhao *et al.*, 2010). According to Hair *et al.* (2014) this bootstrapping for mediation analysis is said to be best suited for PLS-SEM because it could applied to little sample size. In line with suggestion of Hair *et al.* (2014) when testing the mediating effect the researchers has to follow the Preacher and Hayes (2004, 2008) and also bootstrap the given sampling distribution of the indirect-effects, which works for simple and multiple models.

Other than that, for moderating variable, there are a series of techniques for testing the moderating effects such as hierarchal regression procedure which based on three steps, but the drawback of this technique was to calculate interaction terms manually by using functions, transforms, compute and taking the product of each pair. Another technique is to apply the moderating variable as additional construct using the cross products of the indicator of the independent variable and the moderator (Chin *et al.*, 2003).

In this current study, the researcher has used SmartPLS 2.0 M3 by introducing the interaction term in the model (Ringle *et al.*, 2005). This model is called as the main effect model and also the R square will be noted before, introducing the term interaction. This study used moderating variables as an additional construct using the cross product of the indicator of the predictor variable and the moderator (Chin *et al.*, 2003). This method of testing is called a product indicator approach.

Table 3.11
Analysis Technique for Answering Research Questions

Research Question	Technique
RQ1	Path Analysis
RQ2	Path Analysis
RQ3	Resampling mediation technique (bootstrapping)
RQ4	Resampling mediation technique (bootstrapping)
RQ5	Product indicator approach
RQ6	Product indicator approach

3.9 Conclusion

This chapter has thoroughly described the research methodology of the study by discussing the logic behind using quantitative research technique for the study. According to the requirement of quantitative technique, the measurement of each variable and its dimension adapted from past studies, which has ultimately developed the basis for instrument development of this study, which is further used for the collection of the data from the respondent through survey. Before sending questionnaire for data collection, the content of the questionnaire is validated by two academicians. After completing the content validity of the instrument, a pilot study has been conducted in order to check the reliability of the

instrument by using the Cronbach Alpha statistics. After pilot study the questionnaire was distributed and collected from faculty in private universities of Pakistan. In addition, the gathered data passed through from statistical analysis by using SmartPLS in order to accept or reject the hypothesis.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.0 Introduction

Aligned with chapter three the objective of this chapter presents the results of questionnaire survey and the results of testing the hypothesis formulated for the study. First the response rate of each respondent in each universities of Pakistan was highlighted. The next section demographic profile of the respondents was presented. This chapter was representing the results of present study using PLS path modeling. Results of descriptive statistics for all variables exogenous and endogenous discussed. Next the main results of the present study presented into two main sections, first discussed the measurement the model which was based on loading item reliability, internal consistency reliability, discriminant validity and convergent validity. Part two represent the structural models describing coefficient significance of variables for testing hypothesis and effect size, and predictive relevance of model and finally level of the R-square value. Finally results of the complementary PLS-SEM analysis, which analyze the moderating effects of career concern and job stress as well as mediating effect of organizational commitment on the structural model, are presented.

4.1 Response Rate

According to data collection procedure a total of 550 questionnaires were distributed to the full time permanent faculty member of Pakistani universities face to face and series of

reminder calls and emails were sent to the concerning academic staff of selected universities, this technique is also validated by the study of Shah (2009). The entire questionnaire received back by mail (courier) from the stated universities of Pakistan. Out of 550, the questionnaires were returned 290 (53%), out of that 270 (49%) questionnaires were valid, and other twenty four (24) were rejected because the major part of the questionnaire was left as a blank. The distribution and collection of questionnaires were carried out in period of five months from dated November, 2014 to March, 2015.

Table: 4.1
Response Rate of the Questionnaires

Response	Frequency/Rate
No of Questionnaires	550
Questionnaires Returned	294
Returned and Useable Questionnaires	270
Returned and Excluded Questionnaires	24
Questionnaires not returned	256
Response Rate	53%
Valid Response Rate	49%

Hence, Table 4.1 shows that only 270 questionnaires were useable for subsequent analysis that gives a valid response rate 49%. The response rate was obtained comparable to other several past studies using academics staff as the study sample, the response rate was such studies is 49% by Gardner (2012) and 56% by Ahmad Bodla, Hussain, and Chen (2014), in the context of Pakistan. According to Hair *et al.* (2010) good sample size for statistical analysis at least 10-20 times more than variables. Hair *et al.* (2010, 2014) recommended that minimum sample size for SEM analysis is about 200 respondents. Hence the sample

size of present study is 270 which appear to be suitable for statistical analysis compare to eleven (11) variables used in this study.

4.2 Demographic Profile of the Respondents

Table 4.2 describes the profile of respondents. In demographic analysis the distribution of respondent's preliminary based on the age, illustrate that majority of the respondents fall within the age less than 30 years (53%), about 30% fall within the age of 30-40 years and 13% are between the age of 41-50 and remaining 3% are falling above the age of 50 years.

Male respondents having dominated response rate with 59% as compare to 40% who are females. In Pakistani culture the male having the dominant position over the female especially in universities. With respect to marital status it was observed that most of the respondents are married. Moreover it was also observed that over 77% of the responses come from the respondent who are holder of master degree, these consist of lecturer 58%, senior lecturer 17%.

The remaining 19% who are holder of PhD or Equivalence with 23% was shared between assistant professors and the 2.6% were associate professors and only 2.6% of the response comes from the professors.

Aligned with previous discussion none of the respondents whose responses were acquired have working experience that is in between 1-3 year as could be dominated (94) with a 35% followed by those having less than one year (68) with a 25% as well as (61) with 23%

having experience in between 4-6 year and only (34) with 13% of the respondents having experience in between 7-10 years and remaining (13) with 13% having experience above than 10 years as describe in the table

Table 4.2
Demographic Profile of Response

Demography	Description	No. of Responses	%
Gender	Male	160	59.3
	Female	110	40.7
Marital Status	Married	132	48.9
	Not Married	130	48.1
	Divorced	8	2.6
Age	Less than 30 Year	144	53.3
	30-40 Year	81	30.0
	41-50 Year	36	13.3
	More than 50 Year	9	3.3
Present Position	Lecturer	157	58.1
	Senior Lecturer	47	17.4
	Assistant Professor	52	19.3
	Associate Professor	7	2.6
	Professor	7	2.6
Working Experience	Less than 1-Year	68	25.2
	1-3 Year	94	34.8
	4-6 Year	61	22.6
	7-10 Year	34	12.6
	More than 10-Year	13	4.8
Qualification	Master or Equivalent	208	77.0
	PhD or Equivalent	62	23.0

4.3 Test of Non-Response Bias

After the confirmation of valid returned questionnaires this study, went ahead to check any differences between respondents and non-respondents, independent T test was conducted. The independent T test was conducted on study variables including exogenous and endogenous variables of the study to determine whatever the responses receive from

respondents who responded late (e.g. after a three weeks) significantly differed from those who responded earlier (e.g. within the three weeks). According to Malhotra *et al.* (2006) non response bias might affect the results. As a result of that, the current study used independent T test analysis to determine the non-response bias by comparing mean, standard deviation and standard error mean of the study variables such as salary, performance appraisal, training and development, career growth, organizational commitment, job stress, career concern and turnover intention

A period of three weeks was selected as benchmark to differentiate among early and late response. The time period is assume to be suitable for the participants to complete the questionnaires. In line with Malhotra *et al.* (2004) that late response to item by respondents is an indication of their unwillingness to complete those questionnaires. Based on the returned questionnaires there were 192 responses classified as early response and 78 were classified as late response. The benchmark used to check non response bias in current study has been based on the study variables where a descriptive statistics done by the researcher indicates that there were no significant differences among the variables. Therefore the results revealed that most of the questionnaires that were received late have been those from the senior lecturers and professors who were always working on busy schedule and some extra administrative responsibilities. The confirmation of above discussion might be drawn from Table 4.3.

Table 4.3
Test of Non Response Bias

	Period	N	Mean	Std. Deviation
Salary	Early	192	3.5042	1.15209
	Late	78	3.1103	.61551
Training and Development	Early	192	4.4570	1.14968
	Late	78	4.8686	.78099
Performance Appraisal	Early	192	4.4809	1.34924
	Late	78	4.2179	1.47986
Organizational Commitment	Early	192	3.9991	1.36113
	Late	78	2.8568	.76811
Career Growth	Early	192	4.3302	.78512
	Late	78	4.0299	.70460
Career Concern	Early	192	4.2969	.83702
	Late	78	4.2981	.87695
Job Stress	Early	192	4.2215	.96235
	Late	78	5.1161	.87260
Turnover Intention	Early	192	3.7177	1.25765
	Late	78	4.0846	1.05954

Hence based on the Table 4.3 it can be concluded that non response bias will not affect the generalizations of the findings, all two hundred and seventy (270) responses were utilized in data analysis.

4.5 Data Coding

With respect to categorization of data coding Churchill (1999), revealed that data coding have two categories. The first category presumes that the code number should be assigned

to each of the construct for ease of identification and data analysis and secondly, the items would be come out to adopt the constructs in the study such as every construct might have its own different aspect that asks questions about it. Consistent with the argument of Churchill and Iacobucci (2004), the questions should be arranged in confirmatory with construct. The variables used in the current study were coded as follows shown below in the table

Table 4.4
Variable Coding

Variables	Code
Salary	SA
Training and Development	TD
Performance Appraisal	PA
Career Growth	CG
Career Goal Progress	CGP
Professional Ability Development	PAD
Promotion Speed	PS
Remuneration Growth	RG
Organizational Commitment	OC
Career concern	CS
Job Stress	JS
Turnover Intention	TI

4.6 Data Screening and Preliminary Analysis

As discussed earlier in chapter three, data screening process was undertaken on data survey to identify the relevancy of data for multivariate data analysis. The importance of data screening in data analysis particularly in quantitative research provides a solid ground work for obtaining significance results. This argument is also supported by Hair *et al.* (2010) that quality of analysis must be based on quality of preliminary data screening. Needless for

the management of the incomplete data the identification of missing and incomplete questionnaires answered was done. Out of 294 questionnaires received 24 questionnaires were not valid due to incomplete response. So according to Hair *et al.* (2010) the incomplete questionnaires were excluded from further data analysis. After the screening process 270 questionnaires remain for further analysis and this total response is suitable to utilize in subsequent data analysis Hair *et al.* (2010).

The preliminary data analysis involved two procedures: missing value analysis and descriptive analysis of the latent variables. First, the missing value analysis has been undertaken to examine and produce complete data set for subsequent model estimation. Second, the descriptive analysis latent constructs provides estimates of the characteristics of the data. With regard to descriptive of the data such as the mean, variance and correlation among variables have been also analyze for appropriateness preceding to estimation of the measurement models. It is also essential to examine that there are no coding errors, that variables were recorded adequately; these two procedures have been carried out and are detailed below.

4.6.1 Missing Value Analysis

In line with recommendation of Hair *et al.* (1995) missing data imputation has been thought to be suitable to apply to this data. Number of researchers for example Honaker *et al.* (2010, 2011) and Dempster, Laird, and Rubin (1997) recommended Expectations Maximization algorithm to impute missing data by multiple imputation and bootstrap. In line with recommendation of previous authors, the researcher selected Expectations Maximization

imputation for number of reason. First, it is acceptable to implement the EM algorithm because it does not change the nature of the association between the variables (Honaker, King, & Blackwell, 2011). Another benefit of using EM algorithm is that, it maintains the sample size and provides more powerful and accurate statistical test. Secondly, replacing missing data with mean centered also has beneficial in modeling interaction but before to creating product interaction terms. Replacement with mean centering also can help to remove the multicollinearity effects which are produced when working with interaction terms (Kay Wong, 2013). Therefore, replacing missing values with Expectation Maximization algorithm eliminate bias particularly in moderation studies (Newman, 2009) and EM algorithm was commonly used in other studies (Enders, 2010).

4.6.2 Descriptive Analysis of Latent Construct

After preliminary analysis the statistical description of the study variables is determined by using descriptive analysis, where the statistical value of all constructs such as dependent variables, independent variable, mediating and moderating variables were analyzed. The descriptive statistics for study variables as shown in the Table 4.5 which presents the minimum and maximum scores, the values of standard deviation and mean of the study variables as employed in this study, as previously mentioned in chapter three the questionnaire was used in this study was designed on seven point likert scale ranging from 1 to 7.

The mean scores of the study variables are within the range of 3.40 to 4.59, the value of standard deviation for the study variables ranges from 0.790 to 1.399. In the present study

mean scores of less than 3.00 have been categorize as low, mean scores between 3.00 and 5.00 categorize as moderate and mean scores higher than five were categorize as high.

Table 4.5
Results of Descriptive Statistics of the Study Variables

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
SA	270	1	7	3.40	1.006
TD	270	1	7	4.59	1.087
PA	270	1	7	4.40	1.399
OC	270	1	7	3.68	1.327
CG	270	1	7	4.24	.790
CS	270	1	7	4.30	.851
JS	270	1	7	4.48	1.020
TI	270	1	7	3.83	1.218
Valid N	270				

4.7 Assessment of PLS-SEM Path Model Results

In line with suggestion of Henseler and Sarastedt (2013), goodness- of- fit (GOF) index is not suitable for model validation and recently another study conducted by Haire *et al.* (2014) support the above statement. Although, using the PLS path models with simulated data, results of this study indicating that goodness-of-fit index is not suitable for models validation due to it would not be valid separate models from invalid model by (Hair, Ringle, & Saratedt, 2013). Recent research and development of PLS path modeling unsuitability in models validations. This study following the two step process to evaluate and generate results of PLS SEM path, proposed by by Henseler *et al.* (2009) present study adopt two-step process one is assessment of measurement model and second one measurement of

structural model as showing in figure 4.1 (Henseler *et al.*, 2009; Hair *et al.*, 2012; Hair *et al.*, 2014).

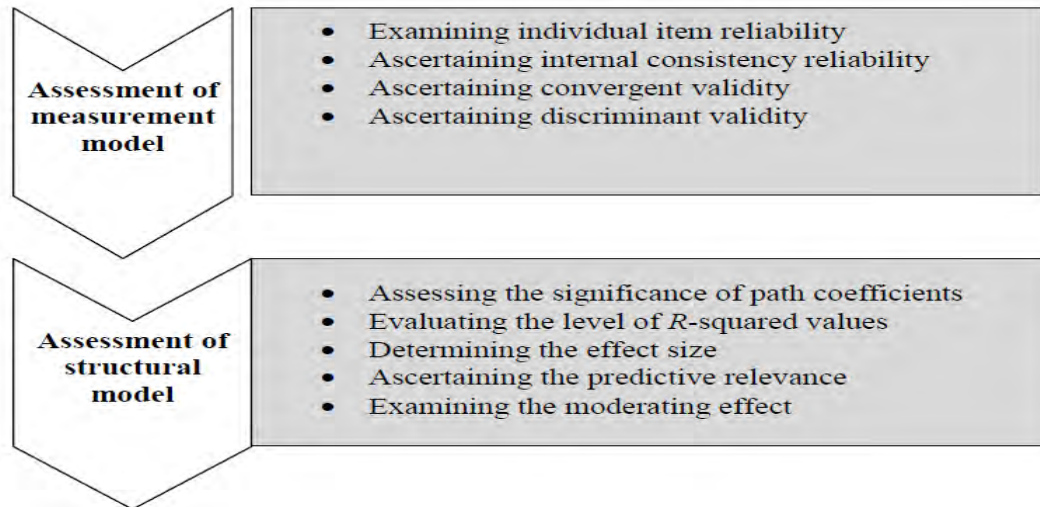


Figure 4.1
Two-Step Process of PLS Path Model Assessment
 Source: (Henseler *et al.*, 2009)

4.8 Assessment of Measurement Model

In model evaluation the measurement model was undertook to insure about the model validity and reliability. In line with arguments of Vinzi *et al.*, (2010) who given the rule of thumb for outer loading. According to their rule of thumb outer loading should be 0.5 and above, as for as for the average variance extracted it should be above than 0.5. Based upon the following argument all the items in outer loading which is below than 0.5 should be deleted one by one with lowest value, this technique is also validated by (Hair *et al.*, 2013; 14) because it improves the quality of data.

4.8.1 Individual Items Reliability

Before determining the convergent validity the researcher examined loading and cross loadings of all items of the study variables to point out any problem which serve as a pre requisite for measurement model. In model evaluation the measurement model was undertaken to insure about the model validity and reliability. As mentioned earlier in chapter three all the items of the variables were adapted from previous studies, although this study undertaken only confirmatory factor analysis by using SmartPLS 2.0 M3 (Ringle *et al.*, 2005) which have built in feature of the CFA. In line with recommendation of Hair *et al.* (2010) the large sample size required to perform CFA, where the minimum sample required is 150. In line with arguments of Vinzi *et al.* (2010) who had given the rule of thumb for outer loading. According to their rule of thumb outer loading should be 0.5 and above, as for as for the average variance extracted it should be above than 0.5. Based upon the following argument all the items in outer loading which is below than 0.5 should be deleted one by one with lowest value, this technique is also validated by Hair *et al.* (2013, 2014) because it improves the quality of data.

As argues by Hair *et al.* (2010, 2014) convergent validity is obtained when the factor loading of all the items higher than 0.5 and no loading of any item from other construct have higher loading than the one which think to measure. Regarding the findings of this study revealed that out of 67 items, 21 were deleted because they showed loadings below the threshold 0.5. thus in the whole model only 46 items retained because they have their loadings between 0.586 to 0.945 which are above than 0.5 as shown in the above Table 4.6 which are bolded items. The PLS output table is given in Appendix D.

4.8.2 Internal Consistency Reliability

Internal consistency reliability refers to the “extent to which all items on a particular sub scale are measuring the same concept” (McCrae, Kurtz, Yamagata, & Terracciano, 2011). According to Fornel and Larcker (1981), and Hair *et al.*, (2014), the composite reliability should be accepted at least 0.70 and AVE should be at 0.50. As shown in the Table 4.6 which is given below, all the constructs have high reliability and their average variance extracted (AVE) is greater than cut off point of 0.50 which is indication of reliability of the measurement model. This study calculated Cronbach’s Alpha to find out internal consistency of the data. Furthermore, George and Mallery (2003), provide the rule of for deciding the value alpha; “ $\alpha > 0.9$ - Excellent, $\alpha < 0.8$ - Good, $\alpha < 0.7$ - Acceptable. The Table 4.6 which is following given below poses the Cronbach’s alpha, composite reliability and average variance extracted (AVE) values of all constructs.

Table 4.6

Construct Reliability, Cronbach’s Alpha, Composite Reliability and AVE of all the Latent Variables

Construct	Item	Loadings	Cronbach’s Alpha	Composite Reliability	Average Variance Extracted
Career Goal Progress (CGP)	CGP1	0.725	0.638	0.805	0.579
	CGP3	0.754			
	CGP4	0.801			
Professional Ability Development (PAD)	PAD3	0.928	0.819	0.917	0.847
	PAD4	0.913			
Promotion Speed (PS)	PS1	0.693	0.644	0.789	0.556
	PS2	0.703			
	PS3	0.833			
Remuneration Growth (RG)	RG1	0.874	0.740	0.885	0.793

Career Concern	RG2	0.907			
	CS1	0.747	0.873	0.898	0.527
	CS10	0.586			
	CS12	0.707			
	CS3	0.820			
	CS4	0.700			
	CS6	0.700			
	CS7	0.719			
Job Stress	CS8	0.805			
	JS10	0.762	0.886	0.903	0.511
	JS11	0.711			
	JS12	0.790			
	JS14	0.751			
	JS15	0.706			
	JS17	0.633			
	JS2	0.692			
	JS4	0.745			
	JS7	0.624			
Organizational Commitment	OC1	0.760	0.886	0.917	0.690
	OC3	0.838			
	OC4	0.883			
	OC5	0.871			
	OC6	0.794			
Performance appraisal	PA1	0.946	0.838	0.906	0.766
	PA2	0.715			
	PA3	0.945			
	PA4	0.945			
Salary	SA2	0.871	0.779	0.871	0.692
	SA3	0.777			
	SA4	0.845			
Training and development	TD1	0.771	0.633	0.803	0.576
	TD2	0.717			
	TD4	0.787			
	TD5	0.787			
Turnover intention	TI1	0.842	0.800	0.862	0.559
	TI2	0.645			
	TI3	0.792			
	TI4	0.673			
	TI5	0.767			

As for as this study concerned Table 4.6 indicates that all constructs have Cronbach's Alpha value more than 0.6. So this is the indication of all the variables in the study have good consistency. Furthermore, as shown in the Table 4.6 which is given above, all the

constructs have high reliability and their average variance extracted (AVE) is greater than cut off point of 0.50 which is indication of reliability of the measurement model.

4.8.3 Discriminant Validity

Farrell and Rudd (2009), defined discriminant validity as “the extent to which a particular latent variable is different from other latent variables”. With respect to this study, discriminant validity was determined using AVE as proposed by Fornell and Larcker (1981). Discriminant validity was obtained by comparing the correlation between the latent variables with square root of AVE (Fornell and Larcker, 1981). According to the rule of thumb of Fornell and Larcker (1981), for evaluating discriminant validity recommends the use of average variance extracted with score of 0.50 or more. In line with recommendation of Fornell and Larcker (1981), the square root of AVE must be greater than the value of latent variables which indicates discriminant validity.

To examine discriminant validity, this study undertaken discriminant validity to assure the external consistency of the model, based on the comparison between the latent variables as shown in the Table 4.7 which summarily, the AVE of the variables are: Career Goal Progress (CGP) = 0.760; Professional Ability Development (PAD) = 0.920; Promotion Speed (PS) = 0.745; Remuneration Growth (RG)= 0.890; Career Concern (CS) = 0.725; Job Stress (JS) = 0.714; Organizational Commitment (OC) = 0.830; Performance Appraisal (PA) = 0.875; Salary (SA) = 0.832; Training and Development (TD) = 0.759 and Turnover Intention (TI) = 0.747.

Table 4.7
Discriminant Validity Matrix

	CGP	PAD	PS	RG	CS	JS	OC	PA	SA	TD	TI
CGP	0.761										
PAD	0.527	0.920									
PS	0.498	0.644	0.746								
RG	0.639	0.332	0.345	0.891							
CS	0.341	0.415	0.376	0.247	0.726						
JS	-0.016	-0.104	-0.151	-0.028	-0.031	0.715					
OC	0.107	0.259	0.441	0.242	0.048	-0.137	0.830				
PA	0.168	0.225	0.161	0.149	0.212	-0.017	0.164	0.875			
SA	0.305	0.118	0.300	0.280	0.095	-0.009	0.238	0.164	0.832		
TD	-0.289	-0.227	-0.305	-0.337	-0.219	0.044	-0.198	-0.177	-0.538	0.759	
TI	-0.369	-0.388	-0.507	-0.412	-0.381	0.086	-0.360	-0.301	-0.365	0.368	0.748

Note: All the values shown in diagonal and bolded represent the square route of average whilst those of the diagonal represent latent variable correlations

Table 4.7 shows that square root of AVE have been greater than correlation among latent variable, indicating adequate discriminant validity (Fornell & Larcker, 1981). At first of this study delivered an explanation of framework and indicated the links of the relationship among the variables based on what has been obtained in the previous literature that probably has to be revised and modified due to the confirmatory factor analysis which was undertaken. After performing CFA in this study none of the variable was dropped even the deletion of many items because in line with recommendation with Hair *et al.*, (2013) the entire variables retained at least two items as a condition not to be deleted.

4.9 Structural Model

In this study there are three structural model which are direct relationship structural model, mediation structural model and structural model which includes moderating variables.

4.10 Assessment of Significance of the Structural Model

4.10.1 Direct Relationships with Turnover Intention

This segment treats with structural model after the evaluation of measurement model direct relationships as pointed out by Hair *et al.*, (2006) structure model deals about the dependence of the relationship in the hypothesized model of the study. In PLS, structure model gives inner modeling analysis of the direct relationship among the constructs of the study and their t-values as for as path coefficients. As argued by Henseler *et al.* (2009), the path coefficient is same like standardized beta coefficient in regression analysis. Where beta values of the coefficient of the regression and t-values are examined to decide on the

significance. Following the rule of thumb by Hair *et al.* (2014), t – value greater than 1.64 is considered to be as significant, which is further used for making decisions on the purposed hypothesis.

Firstly, the basic purpose of this study is to focus on model evaluation with examination of direct relationships and secondly test the hypothesized relationships among the constructs through structural model. In this study eight (08) hypothesis which have direct relationships with turnover intention were tested, out of eight (08) five (05) were proven to be supported and three (3) were not supported. Figure 4.2 explains the direct effect of every latent variable on the dependent variable.

The Figure 4.2 displays the output results from the SmartPLS 2.0 M3 (Ringle *et al.*, 2005) which shows the path coefficient values, t -values, p - values as well as standard error. On the basis of these standard values, the hypothesis were supported or not by the researcher. The t -values in this study derived from bootstrapping (with 500 sampling iterations for 270 cases / observations. As argued by Hair *et al.* (2013), bootstrapping will serve as a proxy of parameters empirical standard error.

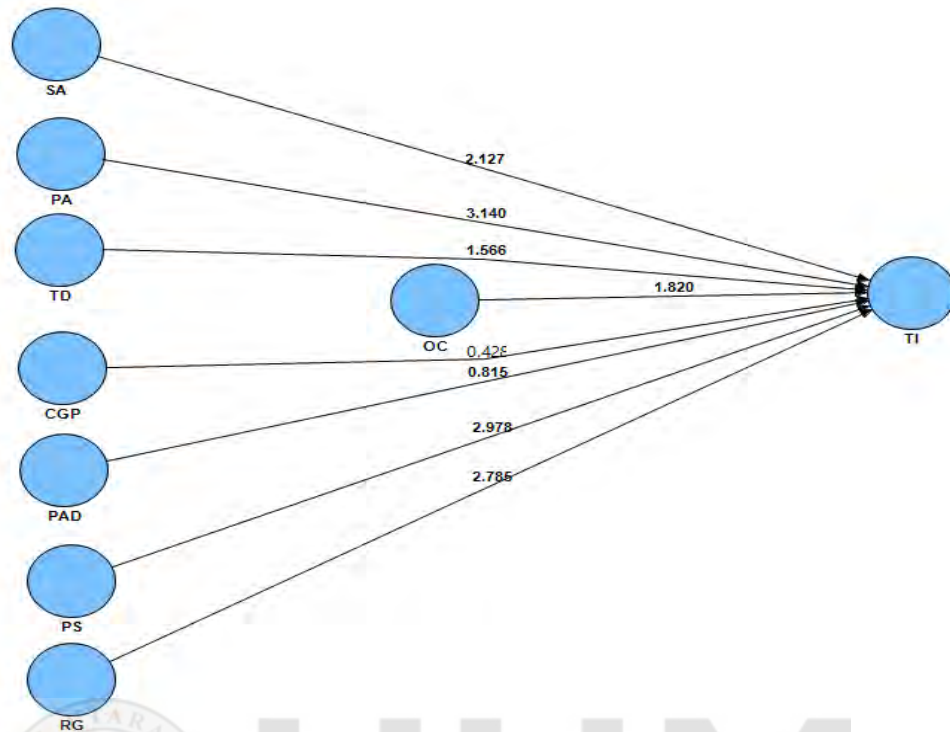


Figure 4.2

Structural Model Direct Relationships (Turnover Intention) bootstrap

At the outset, hypothesis 1 predicted that salary is negative related to turnover intention. Figure 4.2 demonstrate a significant negative relationship between salary and turnover intention ($\beta = -0.126$, $t = 2.12$) supporting hypothesis 1. Hypothesis 2 predicted that training and development is positive related to turnover intention. Figure 4.2 demonstrate insignificant but positive relationship between training and development and turnover intention ($\beta = 0.09$, $t = 1.56$) not supporting hypothesis 2. Hypothesis 3 predicted that performance appraisal is negative related to turnover intention. Results (Figure 4.2) demonstrate a significant negative relationship between performance appraisal and turnover intention ($\beta = -0.169$, $t = 3.14$) supporting hypothesis 3. Similarly, in examining the influence of career growth on turnover intention, Hypothesis 4 predicted that under four dimension of career growth, two dimensions named as promotion speed and remuneration

growth are significant ($\beta = -0.264$, $t = 2.97$) and ($\beta = -0.201$, $t = 2.78$) supported hypothesis 4.

Hypothesis 5 predicted that organizational commitment is negative related to turnover intention. Results (Figure 4.2) demonstrate a significant negative relationship between organizational commitment and turnover intention ($\beta = -0.105$, $t = 1.82$) supporting.

Table 4.8

Results of hypothesis testing (Direct effects with Turnover Intention)

Hypothesized Path	Path coefficient	Standard Error (STERR)	T Value	P Value	Decision
CGP -> TI	0.033	0.078	0.428	0.334	Not supported
PAD -> TI	-0.063	0.077	0.815	0.208	Not supported
PS-> TI	-0.264	0.089	2.978	0.000	Supported
RG -> TI	-0.201	0.072	2.785	0.003	Supported
OC -> TI	-0.105	0.058	1.820	0.035	Supported
PA -> TI	-0.169	0.054	3.140	0.001	Supported
SA -> TI	-0.126	0.059	2.127	0.017	Supported
TD -> TI	0.097	0.062	1.566	0.059	Not supported

The Table 4.8 illustrate that all the hypothesis that were supported and accepted have p-value that is not greater than 0.05 and the hypothesis which are rejected have p-value greater than 0.05. Figure 4.3 was fully explained in Table 4.8 which shows the effect of all constructs on dependent variable turnover intention. The R square value which derived from the output of PLS shows that all the constructs put together have tendency of influencing 40% of the changes in dependent variable.

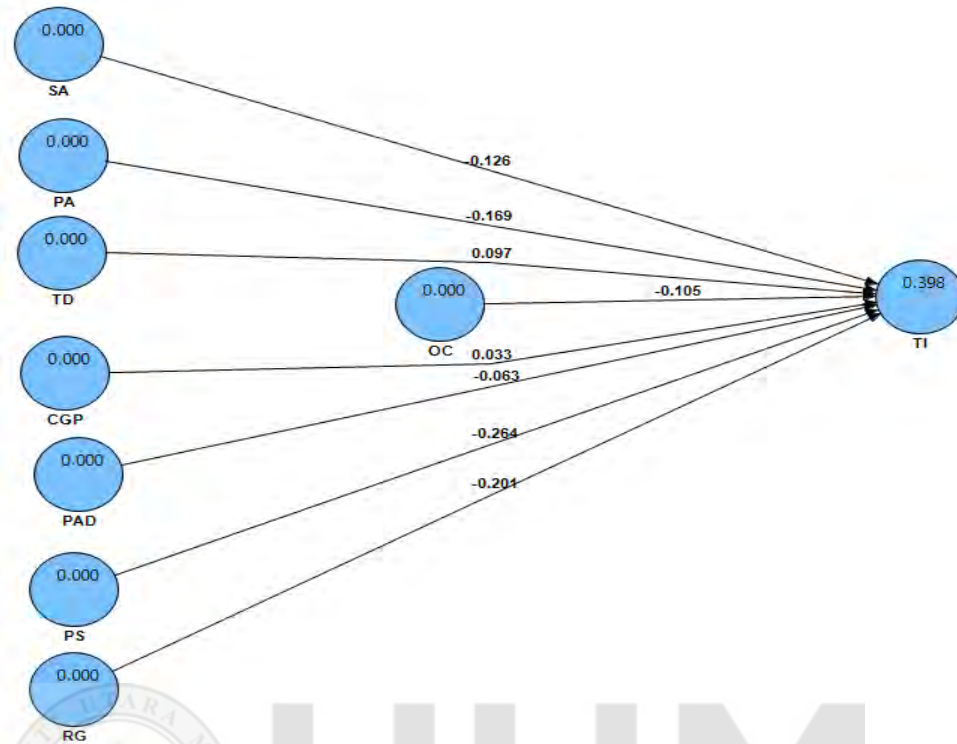


Figure 4.3
Structural Model Direct Relationships (Turnover Intention) Algorithm

4.10.2 Direct Relationships with Organizational Commitment

Direct measurement of structural model has Figure 4.4 which showing the path coefficients, standard error, t value. These values confirmed that direct hypothesis of all exogenous variables with organizational commitment as mediating variable was supported or not. In present study for calculation of t value bootstrapping method has been used in line with recommendation of Hair *et al.* (2012), be sure that model parameter has empirical sampling distribution and standard of deviation of distribution.

At the outset, Hypothesis 6 predicted that salary is positive related to organizational commitment. Results (Figure, 4.4 and Table 4.9) demonstrate a significant positive relationship between salary and organizational commitment ($\beta = 0.106$, $t = 1.66$) supporting. Hypothesis 7 predicted that training and development is positive related to organizational commitment. Results (Figure, 4.4 and Table 4.9) demonstrate an insignificant positive relationship between training and development and organizational commitment ($\beta = 0.021$, $t = 0.327$) not supporting. Hypothesis 8 predicted that performance appraisal is positive related to organizational commitment. Results (Figure, 4.4 and Table 4.9) demonstrate a significant positive relationship between performance appraisal and organizational commitment ($\beta = 0.087$, $t = 1.77$) supporting.

Regarding the career growth on organizational commitment result (Figure, 4.4 and Table 4.9) indicated that career growth has significant positive relationship with organizational commitment because under four dimensions of career growth, three dimensions are supported named as career goal progress, performance speed and remuneration growth and one is insignificant names as professional ability development (Hypothesis 9) supported.

Table 4.9

Results of hypothesis testing (Direct effects with organizational commitment)

Hypothesized Path	Path coefficient	Standard Error (STERR)	T Value	Findings
CGP -> OC	0.257	0.114	2.248	Supported
PAD -> OC	0.019	0.071	0.275	Not supported
PS -> OC	0.463	0.066	6.974	Supported
RG -> OC	0.186	0.094	1.973	Supported
PA -> OC	0.089	0.050	1.776	Supported
SA -> OC	0.106	0.064	1.663	Supported
TD -> OC	0.021	0.063	0.327	Not supported

The Table 4.9 illustrate that all the hypothesis that were supported and accepted have p-value that is not greater than 0.05 and the hypothesis which are rejected have p-value greater than 0.05. Figure 4.5 was fully explained in Table 4.8 which shows the direct effect of all constructs on organizational commitment.

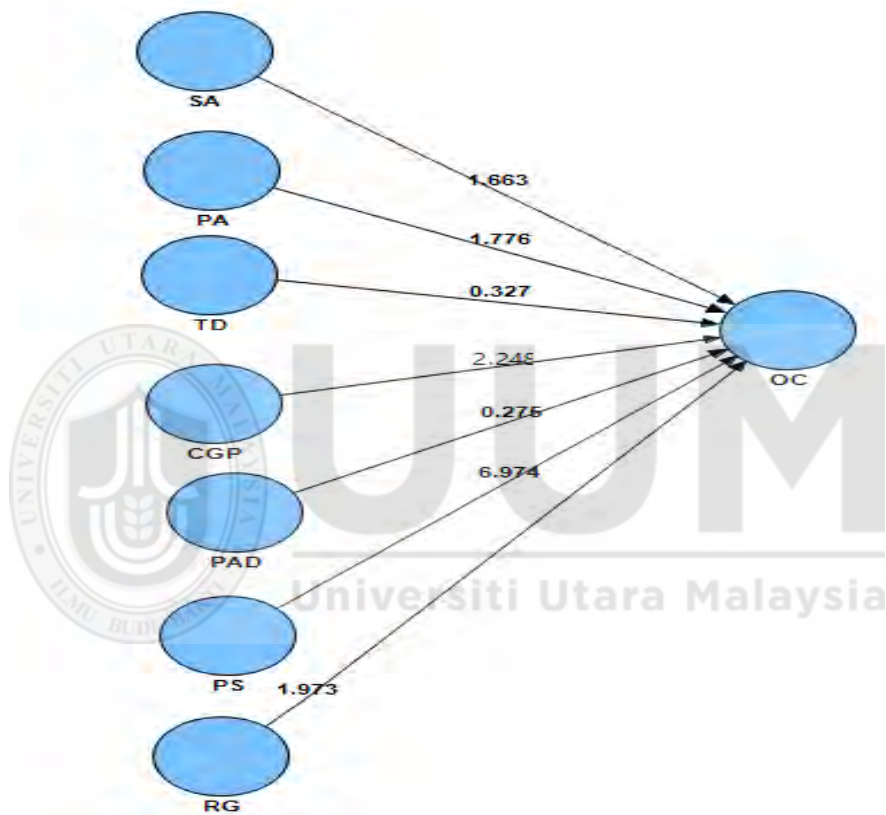


Figure 4.4
Structural Model Direct Relationship (Organizational Commitment)

4.11 Assessment of Effect Size (*f*-squared)

Effect size signifies the relative effect of a specific exogenous latent variable on endogenous latent variable(s) by indicating change in the R-squared (Chin, 1998). It is determined as the increase in R-squared of the latent variable to which the path is

associated, relative to the latent variable's proportion of unexplained variance (Chin, 1998). Therefore the effect size could be depicted using the following formula (Cohen, 1988; Selya, Rose, Dierker, Hedeker, & Mermelstein, 2012; Callaghan, Wilson, Ringle, & Henseler, 2007):

$$\text{Effect size: } f^2 = \frac{R^2_{\text{Included}} - R^2_{\text{Excluded}}}{1 - R^2_{\text{Included}}}$$

Cohen (1988) explains f^2 values of 0.02, 0.15 and 0.35 as having weak, moderate, strong effects respectively. Table 4.10 demonstrates the particular effect sizes of the latent variables of the structural model.

Table 4.10
Effect size of Latent Variables

R-squared	Included	Excluded	f-squared	Effect size
SA-> TI	0.398	0.385	0.022	Small
PA -> TI	0.398	0.373	0.042	Small
TD -> TI	0.398	0.391	0.012	None
OC -> TI	0.398	0.382	0.027	Small
CGP -> TI	0.398	0.387	0.018	None
PAD -> TI	0.398	0.388	0.017	None
PS -> TI	0.398	0.342	0.093	Small
RG -> TI	0.398	0.361	0.061	Small

As mentioned in Table 4.10, the effect sizes for salary, performance appraisal, training and development, organizational commitment on turnover intention, were 0.02, 0.04, 0.01, and

0.02 respectively. Hence, following Cohen's (1988) guideline, the effects sizes of these four exogenous latent variables on turnover intention could be viewed as small, small, none and small respectively. On the other hand, effect sizes for each dimension of career growth which are career goal progress, professional ability development, promotion speed and remuneration growth on turnover intention, were 0.018, 0.017, 0.093, and 0.061 respectively. Hence, following Cohen's (1988) guideline, the effects sizes of these four exogenous latent variables on turnover intention could be viewed as none, none, small and small respectively.

Similarly In line with the argument of Chin *et al.* (2003), who emphasized that even the minutest strength of f^2 might be considered because, they can affect the dependent variable in their own way.

4.12 Structural Model with Mediation

According Hair *et al.* (2014), mediation test was done mainly to know whatever mediating variable enhance the impact of independent variable to the dependent variable. There are several techniques that have been used for mediation test such as baron and kenny (e.g. Baron & Kenny, 1986), sobel test (e.g. Sobel, 1982) and bootstrapping (e.g. Preacher & Hayes, 2004; Hayes, 2009). So, as for current study point of view, re-sampling mediation technique (bootstrapping) was used by researcher to test the indirect effect of each potential variable. Likewise, majority of the researcher revealed that Bootstrapping a non-parametric re-sampling procedure was getting more attention for prospective researcher because this

is one of the most rigorous and powerful procedure for testing the mediation effect (Hayes, 2009; Zhao *et al.*, 2010). According to Hair *et al.* (2014), this bootstrapping for mediation analysis is said to be best suited for PLS-SEM because it can be applied to small sample size. In line with suggestion of Hair *et al.* (2014), when testing the mediation effects the researchers must follow Preacher and Hayes (2004, 2008) and bootstrap the sampling distribution of the indirect effects that work for simple and multiple models. In this study this method is done by first of all determining the path coefficients by running PLS algorithm, secondly run the bootstrapping to get the t-values to determine if the direct relationships between independent variables and dependent variable before testing the mediation effect. After this procedure two different links were established such as *a* represents the path of independent variable to mediator variable, *b* represents the second link among the mediator variable to dependent variable. After that standard error for the product *a*b* was calculated to determine the p-value among the product *a*b*. Current study tested the effect of mediating variable with SmartPLS 2.0 M3 (Ringle *et al.*, 2005) using the bootstrapping with resample of 500 and model displayed the t-values.

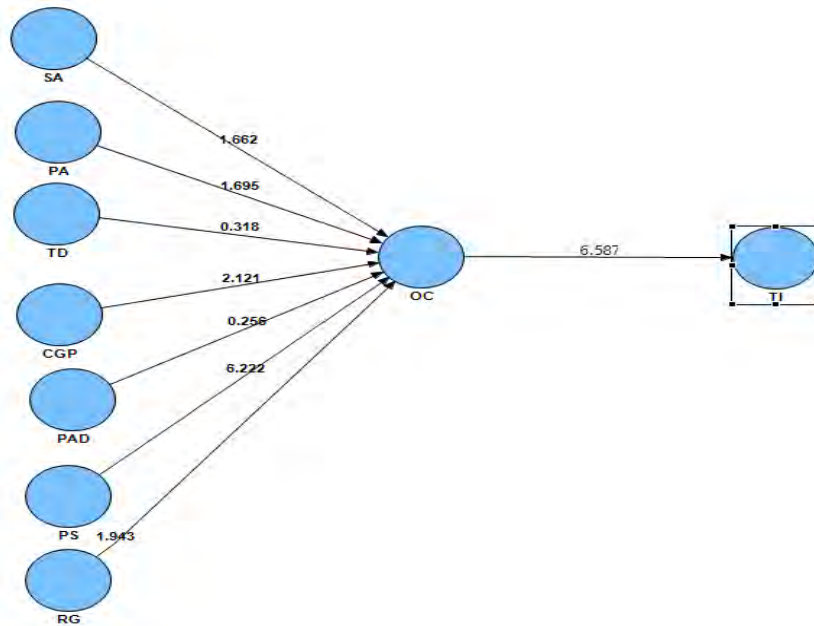


Figure 4.5
The Indirect Effect of OC

After getting the 500 bootstrap direct effects, next researcher were created bootstrap indirect effects by taking the product of each indirect effect. Such as $a1*b$, $a2*b$, $a3*b$, $a4*b$. Such as $a1*b$, $a2*b$, $a3*b$, $a4*b$, $a5*b$, $a6*b$ and $a7*b$. Next the t-values were calculated by using formula which is given below by Hayes and Preacher (2010) as cited in Ramaya (2011).

$$t = a*b/Stdev$$

From the structural model assessment of this study, it was found that out of all study variables includes in the structural model only performance appraisal and three dimension of career growth names as career goal progress, promotion speed and remuneration growth were significantly related to organizational commitment and turnover intention.

The Table 4.11 shows the result of mediation effect of organizational commitment on the relationships between independent variable and dependent variable.

Table 4.11

Test of Mediation of Organizational Commitment

NO	CGP> OC > TI	PAD> OC > TI	PS > OC > TI	RG > OC > TI	SA > OC > TI	PA> OC > TI	TD> OC > TI
a*b	0.055	-0.008	-0.064	-0.037	-0.011	-0.02	0.008
STDVA	0.020	0.008	0.029	0.015	0.007	0.01	0.008
T-Value	2.71	0.99	2.19	2.41	1.52	1.95	0.968
P-Value	0.003	0.162	0.014	0.008	0.065	0.026	0.167

Table 4.11 shows the results of mediation of organizational commitment (OC) indicating a t-value of 1.52 for salary (SA); 1.95 for performance appraisal (PA) and 0.968 for training and development (TD). Furthermore, under four dimension of career growth three dimension are shows mediation such as career goal progress with (t-value = 2.71), promotion speed with (t-value = 2.19) and remuneration growth with (t-value = 2.41) except one (1) dimension is insignificant named as professional ability development with (t-value = .099) with turnover intention

In that regard, four variables indicate partial mediation out of seven such as career goal progress with t-value of 2.71, promotion speed with t-value of 2.19, remuneration growth with t-value 2.41, performance appraisal (PA) with t-value of 1.95, which indicates partial mediation and significant except Salary (SA) and training & development (TD) which become insignificant and week after including organizational commitment as mediator with turnover intention.

Table 4.12
Mediator Hypothesis Testing

Hypothesized Path	Path coefficient	Standard Error (STERR)	T Value	Decision
CGP > OC > TI	0.055	0.020	2.71	SUPPORTED
PAD > OC > TI	-0.008	0.008	0.99	NOT SUPPORTED
PS > OC > TI	-0.064	0.029	2.19	SUPPORTED
RG > OC > TI	-0.037	0.015	2.41	SUPPORTED
SA > OC > TI	-0.011	0.007	1.52	NOT SUPPORTED
PA > OC > TI	-0.020	0.010	1.95	SUPPORTED
TD > OC > TI	0.007781	0.00804	0.96	NOT SUPPORTED

4.13 Structural Model with Moderator

A test of moderation, as pointed out by Ramaya *et al.* (2011), was done to know whatever the moderator variable that effects the direction or strength of the relationship between the independent and dependent variable. Consistent with study Ramaya *et al.* (2011), moderator variable are typically introduce when there is inconsistent relationship or weak relationship between the independent variable and dependent variable. Other than that, there are series of techniques for testing the moderation effects such as hierarchal regression procedure which based on three steps but the drawback of this technique was to calculate interaction terms manually by using functions, transforms, compute and taking the product of each pair. Another technique is to apply the moderating variable as additional construct using the cross products of the indicator of the independent variable and the moderator (Chin *et al.*, 2003).

As for as this study concerned the researcher use SmartPLS 2.0 M3 Ringle *et al.* (2005) by introducing the interaction term into the model. This model is called main effect model and

the R square will be noted before introducing the interaction term. This study use the test of moderating effect approach by applying the moderating variables as an additional construct using the cross product of the indicator of the predictor variable and the moderator (Chin *et al.*, 2003). This method of testing is called a product indicator approach. Subsequently, an interaction model was tested by creating two interaction terms, first interaction term between job stress and organizational commitment and the second interaction term was in between career concern and organizational commitment.

This model included the moderating effect of career concern and job stress on the relationship between organizational commitment and turnover intention. This model tests both hypotheses simultaneously. This product indicator approach is done by first of determining the path coefficients and t-values. In moderation analysis R square change become an important issue. With regard to this study introducing the level of job stress and career concern perceived by the survey respondents in SmartPLS 2.0 M3 needs to establish a direct relationship between moderating variable (career concern and job stress) and the outcome variable (turnover intention). Due to this reason both the moderating effect as well as the direct effect will be calculated in order to improve the research. To calculate the moderating effect the researcher run PLS algorithm to obtain the beta coefficients values which are -0.477 for the career concern (CS) related to organizational commitment and turnover intention, while 0.057 for the job stress related to organizational commitment and turnover intention respectively. However, to obtain the t-values the researcher run bootstrapping, after bootstrapping the results in Table 4.13 deals with the moderating effect of career concern and job stress in predicting the employee turnover intention. The results shown in Table 4.13 did not support hypothesis 14, which demonstrate that job stress

moderates the relationship between organizational commitment and turnover intention ($\beta = 0.057$, $T = 1.49$, $p\text{-value} > 0.05$). Moreover, hypothesis 15, which suggested that career concern moderates the relationship between organizational commitment and turnover intention ($\beta = -0.477$, $T = 2.43$, $p\text{-value} < 0.05$). Therefore, hypothesis 15 was supported.

Table 4.13
Moderator Hypothesis Testing

NO	Hypothesized Path	Path coefficient	Standard Error (STERR)	T Value	Decision
1	OC * CS \rightarrow TI	-0.477	0.230	2.432	Supported
2	OC * JS \rightarrow TI	0.057	0.188979	1.494719	Not Supported

Information from the path coefficients was utilized to plot the moderating effect of career concern on the relationship between organizational commitment and turnover intention, by following the techniques suggested by Aiken and West (1991), Sharma *et al.* (1981), Dawson, (2014). Figure 4.6 indicates that the relationship between organizational commitment and turnover intention is weak for individuals with high career concern than it is for individuals with low career concern. In line with previous argument high career concern high turnover intention then employees with lower career concern, no matter if they are highly committed with organization or not.

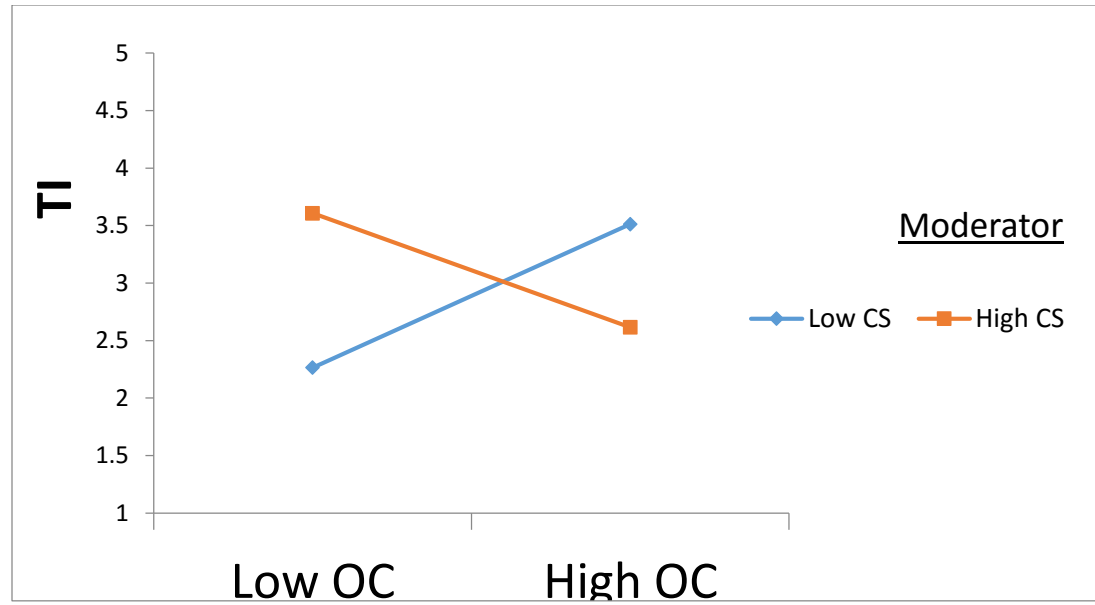


Figure 4.6
Plot the interaction between organizational commitment and career concern on turnover intention

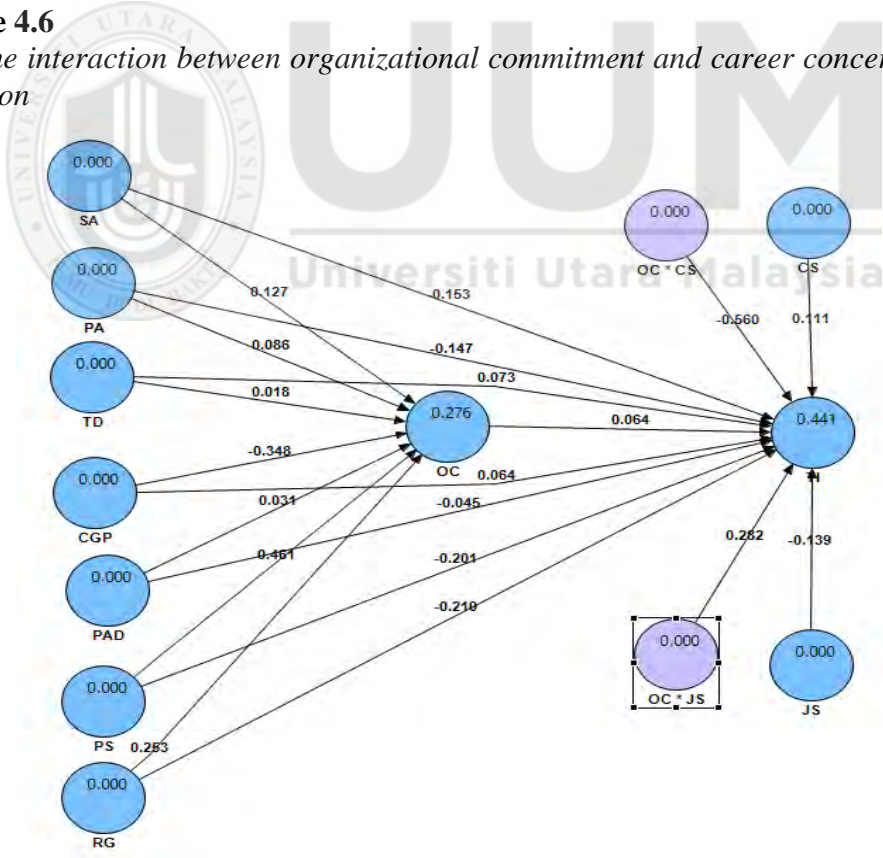


Figure 4.7
Structural Model with moderating variables

4.14 Assessment of Variance Explained in the Endogenous Latent Variables

In PLS- SEM structural model compulsory required RSQURE and also important in PLS- SEM (RSQURE) value for measure the structural model which is considers the coefficient of determination (Henseler *et al.*, 2009; Hair *et al.*, 2012; Hair *et al.*, 2011). In PLS-SEM structural R-square value denotes the dependent variable (s) proportion of variation that can be explained by one or more predictors (Hair *et al.*, 2006; Hair *et al.*, 2010). Likewise, acceptable values of R-square depends on nature of research, in line with (Hair *et al.* 2010), Falk and Miller (1992) who suggested that minimum level of R-square value acceptable is 0.10. According to the Chin (1998) that R-square value divided into three categories 0.19 weak, 0.33 moderate and 0.67 substantial

Table 4.14
R-squared Value of the Endogenous Latent Variable

Latent Variable	Variance Explained
Turnover Intention	0.398
Turnover Intention with moderator (JS and CS)	0.441

As for as this study concern the researcher determine the strength of moderating effects, the current study used Cohen's (1988) guidelines. Furthermore, strength of moderating effects could be examined by comparing the R-square value main effects model with R-square value of full model which includes both moderating variables and exogenous latent variables (Henseler & Fassott, 2010).

As discussed earlier in this study, the R square value of the turnover intention construct is increased from 0.398 to 0.441 by introducing the career concern and job stress as a moderating between the relationship organizational commitment and turnover intention. The R square change is 0.043 which is indicating that with the addition of the 2 interaction terms the R square changed about 4.3 % additional variance.

In line with rule of thumb given by Cohen (1988), f^2 for both interaction terms (OC x CS and OC x JS) indicates 0.043, therefore, the researcher conclude that the effect size is small as per Cohen (1988). On the other hand, low effects size does not basically mean that moderating effects is insignificant (Even a small interaction effect can be meaningful under extreme moderating conditions, if the resulting beta changes are meaningful, then it is important to take these conditions into account” (Chin *et al.*, 2003).

4.15 Assessment of Predictive Relevance of the Model

This study further uses the blindfolding procedure to test the predictive relevance of the model. Blindfolding procedure was undertaken to assess the predictive capacity of the model (Geisser, 1974; Stone, 1974). The Stone-Geisser test of predictive relevance is generally used as supplementary measurement of GOF in the PLS modeling (Duarte & Raposo, 2010). Predictive relevance is denoted by Q². According to Hair *et al.* (2014), Q value is obtained by using the blindfolding to assess the parameter estimates and also assess how values are built around the model. The results were retrieved from the blindfolding output of PLS through the variable score out of which cross validated redundancy

extracted. These cross validated redundancy analyze the capacity of the model to predict the endogenous variables and also explain the quality of the model. The Table 4.15 shows the construct cross validated redundancy.

Table 4.15
Construct Cross Validated Redundancy

Total	SSO	SSE	1-SSE/SSO
OC	1510	1225.024	0.1887
TI	1510	1160.662	0.2313

Table 4.15 shows that in column four (4), Q2 shows the predictive relevance of 0.23 for the TI (Turnover intention) and 0.188 for OC (organizational commitment) which shows that this model have predictive relevance. In line with recommendation of Hair *et al.* (2014) if Q2 value is greater than zero (0) the model has predictive relevance for reflective endogenous latent variable.

Summary

In chapter 4, the justified reason for using PLS path modeling to test the theoretical model in this study was provided. Subsequent the assessment of significance of the path coefficients, the major findings of this study were displayed. Commonly, self-report techniques has presented significant support for organizational commitment as mediating variable between the relationship of performance appraisal, career goal progress., promotion speed and remuneration growth and turnover intention. In that regard four variables indicate mediation out of seven such as career goal progress, promotion speed, remuneration growth and performance appraisal (PA) except salary (SA) and training &

development which become insignificant and week after including organizational commitment as mediator with turnover intention.

Importantly, concerning the moderating effect of career concern and job stress on the relationship between organizational commitment and turnover intention, PLS path coefficient demonstrate that the career concern have moderate the relationship between organizational commitment and turnover intention because their path coefficient (-0.477) indicating p-value is less than 0.05 while the job stress is insignificant with path coefficient (0.057) indicating p-value greater than 0.05. The following next chapter (Chapter 5) will talk about further the findings, followed by implications, limitations, suggestions for future research directions and conclusion. The results obtained indicate that some of the hypothesis tested in this study was supported while some others were not. Table 4.16 is summarizing the results of the hypothesis tested in this study.

Table 4.16
Summary of Hypothesis

Hypothesis	Statement	Decision
H1	Salary negatively influences the employee turnover intention.	Supported
H2	Training and development negatively influence the employee turnover intention.	Not Supported
H3	Performance appraisal negatively influences the employee turnover intention.	Supported
H4	Salary positively influences organizational commitment.	Supported
H5	Training and development positively influences organizational commitment.	Not Supported
H6	Performance appraisal positively influences organizational commitment.	Supported

H7	Career Growth (promotion speed, remuneration growth, professional ability development and career goal progress) is negatively associated with employee turnover intention.	Partially Supported
H7a	Remuneration growth is negatively related with turnover intention	Supported
H7b	Promotion speed is negatively related with turnover intention	Supported
H7c	Professional ability development is negatively related with turnover intention	Not Supported
H7d	Career goal progress is negatively related with turnover intention	Not Supported
H8	Career Growth (promotion speed, remuneration growth, professional ability development and career goal progress) is positively associated with organizational commitment	Partially Supported
H8a	Remuneration growth is positively associated with organizational commitment	Supported
H8b	Promotion speed development is positively associated with organizational commitment	Supported
H8c	Professional ability development is positively associated with organizational commitment	Not Supported
H8d	Career goal progress is positively associated with organizational commitment	Supported
H9	There is a negative relationship between organizational commitment and turnover intention.	Supported
H10	Organizational commitment mediates the relationship between salary and turnover intention.	Not Supported
H11	Organizational commitment mediates the Relationship between performance appraisal and turnover intention.	Supported
H12	Organizational commitment mediates the Relationship between Training and development and turnover intention.	Not Supported
H13	Organizational commitment mediates the relationship between career growth (promotion speed, remuneration growth, professional ability development and career goal progress) and turnover intention.	Partially Supported
H14	Job stress moderates the relationship between organizational commitment and turnover intention.	Not Supported

H15

Career concern moderates the relationship between
organizational commitment and turnover intention.

Supported



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CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.0 Introduction

This chapter discusses the results of the study outlined in Chapter 4. First, it elaborates the analytical results. Then, it summarizes the discussions into a conclusion by highlighting the contributions of the study (theoretical, methodological and practical). It ends up with a discussion on the limitation of the study and proposes some recommendations for future research.

5.1 Recapitulation of this Study

This section will provide the highlights of the overall study aligned with the research objectives; furthermore, this research has examined the mediating role of organizational commitment among variables which are; salary (SA), performance appraisal (PA) and also the each four dimensions of a career growth with the turnover intention from a faculty point of view, specifically in the context of private universities. The study also determined if a significant moderating effect exists with career concern and job stress on the relationship between the organizational commitment and the turnover intention. In order to achieve the objectives of this research, a total of fifteen (15) hypothesis has stated and has been tested accordingly, as a result of this testing, the research findings have empirically supported ten (10) including direct, mediating and moderating hypothesis.

The purpose of this study to investigate the relationship between HRM practices, career growth practices and turnover intention at the private universities of Pakistan. This study also intended to examine whether organizational commitment mediate the relationship between HRM practices (training & development, salary, and performance appraisal), career growth practices (promotion speed, remuneration growth, career goal progress and professional ability development) and turnover intention. Furthermore, this study also attempted to examine whether job stress and career concern moderates the relationship between organizational commitment and employee turnover-intention behavior. Notably, all the above objectives are based on the existing literature and two underpinning theories such as social exchange theory and career stage theory.

In this study, quantitative data have collected from faculty of private universities in Pakistan, using area cluster sampling technique and the respondents were faculty members working in private universities. A structured questionnaire was distributed directly to faculty in various locations across Punjab, Pakistan. The response rate of the survey was approximately 49 percent that has been considered satisfactory for research survey.

The next section is the discussion, which gives all the results that whether they are significant or insignificant. Further, this section helps to investigate, that all objectives of the study have been fairly achieved or not, which were established at the start of this study.

5.2 Discussion

To summarize the findings of the study, this section elaborate findings and contribution of the study and will outline the relationship between HRM practices (salary, performance appraisal and training and development) and career growth practices (promotion speed (PS), remuneration growth (RG), career goal progress (CGP), professional ability development (PAD), which will also help to predict employee turnover up to some extent. However, relationships has been empirically analyzed both directly and indirectly through intervening variables, which include mediating and moderating variables by using social exchange and career stage theory.

This study adds career growth and career concern as new construct to examine its influence on turnover intention. Investigation and examination of these study variables are anticipated to provide better understanding of the antecedent's factors that influence turnover intention. The discussion will specifically focus on the research objective and hypothesis posited in this study. Each hypothesis discussed separately with regard to how the findings impact faculty members and implication in the private universities.

5.2.1 Direct Relationship between Salary and Turnover-Intention

Salary of an employee is the major factor in human resource management and defined as “the forms of payment or rewards going to employees arise from their employment” (Dessler, 2007). To test the relationship among salary and employee turnover-intention, the findings of the current study has clearly indicated that, the salary has a significant but negative effect on faculty turnover intention working in private universities. The findings of this research suggest that when faculty receive higher salaries from the universities, then they are less likely to leave.

This finding is consistent with the research conducted by Kroon and Freese (2013) and Gieter and Hofmans (2015), in which it was mentioned that, salary is negatively associated with turnover intention, mean that, higher the salary, lesser the employee turnover in the organization. This result is also concurs with other studies conducted by different researchers in which it has clearly found that, salary is negatively linked with turnover intention (Whitener, 2001; Chew & Chan, 2008; Bergiel, Nguyen, Clenny, & Taylor 2009; Liu, 2012; Kroon & Freese, 2013). Indeed, it is also true for salary, whereby the study confirms that people will have less intention to leave organizations that provides a lot of salary increment. In short, people will leave the organizations if they perceive that opportunities for better salary are higher in other organizations as compared to their current organizations. It is human nature to want and need better standards of living, and higher salary enables this.

In the context of Pakistan, Shahzad *et al.* (2008), argued that the salary is a good tool in retaining experienced and skilled faculty. Hence, it has been proved on the basis of current study findings and also with the help of previous literatures that salary is one of the strongest and the imperative predictor of turnover intention behavior of faculty working in the private universities.

The salary was highly considerable HRM practices found in the present study. The justified reason for such finding was generally the outcome of unfavorable socio-economic condition of Pakistan. This might anticipated to be especially important in the regions where poverty levels are normally high. Pakistan is one of least developed countries in the world, where about percent 23 percent of its population below the poverty line (Pakistan Education Statistic 2013-14).

Thus, employees' salary must be given a main concern in the context of a poor nation such as Pakistan as an example. Whereby, for developed nations salary was not highly considered issue for employees, rather employees considered other issues such as career growth, job autonomy in those nations. In addition, due to have high family bondage in the Asian collectivistic culture, most of the members of the family in Pakistan usually depend on one income holder. Indeed, all the expenses for children education as well as family members' medical expenses need to bear by the income holder, whereby in most cases all these expenses are funded by the government in the developed nations. Apart from all those expenses, faculty members need to bear own educational expenses in case of higher studies for example PhD or other professional qualifications. In many occasions the developed nations provide all these cash benefits to their employees. Therefore, it is common

phenomenon for the employees of poor or developing countries to give more emphasis on the cash benefits so that they can meet up all the necessary expenses.

Another reason such as higher inflation rate, high tax imposed and due to these factors, the living expenses are relatively higher in the developing countries. Practically speaking, faculty members in the context of Pakistan do not have many choices for generating extra money to support additional expenses. This may possibly motivate faculty members to emphasize and value on faculty salary.

5.2.2 Direct Relationship between Performance Appraisal and Turnover Intention

Performance appraisal has observed as an important mechanism that directly effects on the attitude and behavior of employees' such as organizational commitment and turnover intention (Morrow, 2011). The current study has examined the effect of performance appraisal on turnover intentions and findings indicated that, performance appraisal has a significant, negative effect on turnover intention of faculty working in private universities. This implies that when faculty perceives their performance appraisal procedure along with other HR practices to be fair and just, their intention to leave the organization is minimized. The study finding indicated that faculty member of the private universities of Pakistan prefer fair and standardize performance evaluation system. Thus it can be argued that employees who prefer fair and standardize performance evaluation system are less likely to leave the organization.

The current findings in line with previous studies have found that, the performance appraisal procedure has a negative relationship with employee turnover intention (Lee & Bruvold, 2003; Levy & Williams, 2004; Kuvaas, 2006; Poon, 2004; Abdulkareem *et al.*, 2015; Kadiresan, Selamat, Selladurai, & Spr, 2015; Rubel & Kee, 2015; Yean & Yahya, 2013). In the academic setting, researcher argued that standardize performance appraisal system is another top most priority in decision process of staying or leaving the organization especially in Pakistan.

In general, faculty members perceived performance appraisal system as one of the important HRM practices of the private universities. Unlike, faculty members of the public universities have high job security because government universities follows government rules, regulation and procedure for performance evaluation, merit-based recruitment and promotions. Whereby, private universities in Pakistan are managed by influential businessman of the country; and they think about this investment like any other investments in different areas of business. Thus, the profit maximization motives make them (i.e. sponsors/investors) considerably indifferent about the matter of fair performance appraisal of the faculty. For example a study conducted by Jhatial *et al.* (2012), in the context of Pakistan revealed that 80 percent respondents in private organizations agreed that Sifarish and favoritism play a significant role regarding recruitment and selection, promotion, and performance appraisal whereas only 20% witnessed merit based decisions. While, in public organization 65 percent of respondents agreed that they follow merit based HRM decision making regarding recruitment and selection promotion and salary. Thus, this attitude of private organizations may affect faculty members' feelings which eventually affect the behavior of faculty which leads to leave the organization. Thus, the current study concluded

that performance appraisal is one of the strongest and the imperative predictor of turnover intention behavior of faculty working in the private universities.

5.2.3 Direct Relationship between Training & Development and Turnover Intention

The current study predicts that when university provides a lot of training and development programs the faculty will have less intention to leave. Unfortunately, the finding of current study indicated that, training and development does not influence faculty intention to leave the organization. The results of the study is consistent with prior studies, which illuminate that, training and development has no significant effect on employee turnover intention (Mincer, 1988; Egan *et al.*, 2004; Levine, (1993), Yap, Holmes, Hannan, & Cukier, 2010; Verhees, 2012).

There are a number of possible reasons for this insignificant result. Firstly, the majority of the respondents were young in terms of age, which was about 53% of the total population and in this 34 percent were those who had length of service between 1 to 3 years. These employees who are in the initial stage of their career has more energy and enthusiasm level because this is the time when they focus on their career growth and want to establish themselves in a right direction. Being more dynamic in career growth, employees tend to be a keener in building a career path and searching for better opportunities. However, there is no doubt that employees training and development programs may enhance their satisfaction level and contribute in boosting up their morale, but still such activities will not affect employees' turnover decision.

Secondly, as for this study concerned, it was also observed that over 77% of the responses come from the respondents who had master degree, which are high educated people. Meanwhile, majority of the institutions provide training and development to employees to obtain much better and improved results. But training can also leads to more turnover-intentions for instance; highly educated and skilled employees are more employable in any other institutes or organizations. In other word, highly educated employees have employability, specifically, when they received knowledge and skills by participating in training and development programs. This argument is also validated by Becker (1962) human capital theory, which relies on the assumption like, people get more employable in any other institutes when they receives good training and development.

5.2.4 Direct Relationship between Career Growth and Turnover Intention

Career growth is defined as “the degree of professional upward mobility within the organization” (Weng & Hu, 2009). The current study has examined the influence of the four dimensions of career growth (promotion speed, remuneration growth, career goal progress and professional ability development) on the employee turnover-intention. In general, previous studies conducted by (e.g. Hu, Weng, & Yang, 2008; Wang *et al.*, 2014; Weng & Xi, 2010) indicated that, career growth has a significant and negative impact on the turnover intention, which means that, more opportunities for career growth the lesser is the intention to leave the institution. Moreover, in this current study, each dimension of career growth has been examined separately.

In relation to career growth dimensions, it was found that only promotion speed and remuneration growth has a significant impact on turnover intention and hypothesized the relationship is negative. Nonetheless, it is quite surprising that, career goal progress and the professional ability development do not have a significant impact on the turnover intention. For example, career goal progress, reflects the association between faculty career goals and its current job. If this association is strong, one becomes more socio-emotionally linked to their university which decreases their intention to look elsewhere for job. It would be expected that if the university has provided an employee with a good or high position within that organization (i.e. an indicator of career progression), one would be loyal to that organization and have less intention to leave. The finding of this current study does not confirm this premise. It seemed that even though one has already been given a career goal progress, it is not known whether they will stay or leave the organization. Providing employees with the opportunity to develop their abilities also cannot guarantee that they will have less intention to leave the institution.

Looking at a few aspects of leaving the job will highlight certain probabilities like most of the respondents of this study are younger employees and at an early stage of their career. So at this initial stage of career there is a curiosity and big expectations of employees in switching the job for better opportunity and loyalty will not matter to them at this stage. Apart from this, employees at an early stage are more concern about their probability of promotion and growth in remuneration, whether in current organization or in another organization and to become more financially strong in order to start their family life and to increase their living standards as desired. Hence, promotion speed and remuneration growth plays very important role in minimizing their turnover intention as compared to the

career goal progress and professional ability development that is not likely to stop them for job switching.

The findings of this study indicates that, two main dimensions of the career growth named as remuneration growth and promotion speed has considered as most important factor in determining of turnover behavior of the employees. However, the findings of the current study concurs with findings of other studies, which revealed that remuneration growth and promotion speed have strong influence on turnover intention (Hess *et al.*, 2012; Karavardar, 2014). This implies that employees who seek to get proper remuneration and promotion, growth in their organizations will ultimately make their employees less likely to think about leaving the jobs.

This finding explained that that, the opportunities of promotion are a very important aspect for faculty while making a decision to stay or leave the university. The main reason is that majority of the faculty members are young and at initial stage of career. At this stage career, they much concerned about promotion speed either in present university is fast as compared to other private universities, probability of being promoted is high as compared to colleagues. Indeed, these promotion opportunities satisfies employees' achievement needs which accounts for lower voluntary turnover rates of faculty.

Same in the case of remuneration growth, whereby the result reflect that, faculty getting sophisticated growth in remuneration in present university as compared to other universities will not intend to leave. In short, faculty will leave the present university if they perceive that opportunities for better salary, incentives and benefits are higher in other

universities as compared to present. It is human nature to want and need better standards of living, and higher salary and position enables this. Indeed, the study findings support the work of Shahzad et al. (2008), who demonstrated among Pakistani employees, that remuneration growth constitutes one reason employees remain with their employing organizations.

5.3.1 Relationship between Salary and Organizational Commitment

Another important objective of this current study was to investigate the relationship between salary and organizational commitment. The major finding of this current research concludes that, the salary had a significant and a positive effect on the organizational commitment of faculty working in private universities. This implies that when faculty receives higher salaries within the organization, this perception brings or influence individual commitment to the organization. However, positive perception of competitive and equitable salaries may bring more satisfaction among employees.

The findings of the current study concurrent with previous studies where researcher argued that salary is significantly and positively related to organizational commitment. The finding indicated that employee organizational commitment will be high when there is high compensation for employees (Arthur, 1994; Whitener, 2001; Qiao, Luan & Wang 2007; Vandenberghe & Tremblay, 2008; Biron & Boon, 2013; A'yunnisa & Saptato, 2015).

The possible explanation of this relationship is that, faculty commitment with organization directly related with financial gain of the employees. Researcher argued that organizational

commitment refers to the psychological attachment felt by the employee for the organization or psychological state of mind which binds the individual to the organization. With regards to the economical perspective, salary is one factor which is regarded as a benefit and advantage from working exchange between the employer and employees. When the employees feel satisfied with it, they tend to more committed and loyal with organization. Whereby, based on psychological perspective, pay is one thing which is expected by the employees. If their expectations are not met, they will feel dissatisfied and less committed with organization.

In the context of private universities of Pakistan, looking for better salary somewhere else was indicated as the significant reason for faculty members for leaving and this may be attributed to lack of commitment and motivation towards organization. They might experience that they are under rewarded regardless of the substantial amount of commitment given to the organization. Provided the higher demand for their skills and abilities elsewhere, their tendency to quit is likely. This kind of perception may reduce their commitment to the organizations.

Thus, employees' salary must be given a main concern in the context of a poor nation such as Pakistan as an example. Whereby, for developed nations salary was not highly considered issue for employees, rather employees considered other issues such as career growth, job autonomy in those nations. In addition, due to have high family bondage in the Asian collectivistic culture, most of the members of the family in Pakistan usually depend on one income holder. Therefore, salary was essential in the context of third world countries, for instance Pakistan for another reason such as higher inflation rate, high tax

imposed and due to these factors, the living expenses are relatively higher in the developing countries. Practically speaking, faculty members in the context of Pakistan do not have many choices for generating extra money to support additional expenses. Therefore, this may possibly motivate faculty members to emphasize and value on faculty salary which binds them to be more committed with organization.

5.3.2 Relationship between Performance Appraisal and Organizational Commitment

The current study has examined the effect of performance appraisal on organizational commitment of faculty and findings indicated that performance appraisal has a significant and a positive effect on the organizational commitment of faculty who are working in private universities. This further implies that, the commitment of faculty members will increase, when faculty perceives their performance appraisal procedure along with other HR practices to be fair and just and well designed.

The study findings concurrent with previous studies have found that, the performance appraisal has significant but positive impact on organizational commitment of employees (Lau & Moser, 2008; Armstrong-Stassen & Schlosser, 2010; Salleh, Amin, Muda, & Halim, 2008; Ikramullah *et al.* 2012; Yang *et al.*, 2013; Rubel & Kee, 2015). In the academic setting, researcher argued that standardize performance appraisal system is another top most priority which influence the attitude (e.g. commitment) of faculty especially in Pakistan. A possible explanation for this result is that, in developing Asian countries, specifically in the context of private universities of Pakistan, faculty concentrates

more on merit-based and fair performance appraisal system rather than training and development, professional ability development and working environment. A major finding in this study is to develop faculty of the private universities by providing them established platform to make them more committed in order to achieve short term and long term objectives of the organization.

5.3.3 Relationship between Training & Development and Organizational Commitment

The current study aimed to determine the employee perception about training & development and its impact on turnover intention. Unfortunately, the result of current study indicated that, training and development do not have impact on organizational commitment. Hence, there are some studies which support the finding of current study, which highlight that, training and development is insignificantly related to organizational commitment, while the direction of relationship between them is positive (Verhees, 2012; Raihan, 2012; Qiao *et al.*, 2007).

There are a number of possible explanations for this insignificant finding. Firstly, the influence of training and development is insignificant in relation to faculty organizational commitment because it was not considered highly important for the teaching profession especially in Pakistan. Other than that, the majority of the respondents were young in terms of age and less experiences, in another word which are at the early stage of their teaching profession. So at this initial stage of career mostly faculty members are concerned about their salary, performance appraisal, future prospects like career growth and other support

from organization. Therefore, as for as faculty organizational commitment is concerned, the influence of training and development practice in this early age of implement was not engaged them with current organization.

5.3.4 Relationship between Career Growth and Organizational Commitment

The current study had undertaken to examine the effect of career growth on the employee organizational commitment in the context of private universities. The four sub dimensions of career growth which are career goal progress (CGP), promotion speed (PS), remuneration growth (RG), and professional ability development (PAD), were based on the theory of social exchange and adapted from the previous studies. The significant relationship between each dimension of career growth and organizational commitment was empirically examined and tested in order to evaluate the impact of career growth on organizational commitment from the employee's perspective.

In relation to career growth dimensions, it was found that, only three out of four dimensions of career growth named as career goal progress, remuneration growth and promotion speed have a significant and positive impact on employee organizational commitment, but unfortunately professional ability development has an insignificant impact on organizational commitment. This findings mentioned that, in academic context faculty will more committed with organizations if they perceive that their goals are met and opportunities for better salary or/and better positions are higher in current organization as compared to other organizations. It is human nature to want and need better standards of

living, and higher salary and position enables this. Hence, the findings of the current study concurrent with findings of other studies (e.g. Weng & McElroy, 2012; Karavardar, 2014). In general, previous studies conducted by (e.g. Weng & McElroy, 2012; Karavardar, 2014; Weng & Xi, 2010) indicated that, career growth has a significant, but positive impact on organizational commitment of employees, which means that, employees with better career growth opportunities to exhibit higher levels of commitment to their organizations and engage themselves in more proactive work behavior. Meanwhile, social exchange theory further illustrates that, employees when get promoted on a good designation will feel valued and then they will start struggling more in order to reimburse the organization by their commitment and involvement (Blau, 1964).

A possible explanation for this result is that, in developing Asian countries, specifically in the context of private universities of Pakistan, faculty concentrates more on their promotion, increments and career goal progress or career choices rather than professional ability development. A major finding in this study is to develop faculty of the organization by providing them established platform to increase their career goal progress to achieve better job promotions and increase in salaries to make them more committed in order to achieve short term and long term objectives of the organization.

Another plausible reason that could possibly explain the findings is, given the majority of the respondents were young in terms of age, which was about 53% of the total population and more than half of the respondents were highly educated (Master degree), the need for them to achieve their career goals as well as opportunities for better salary or/and better positions are high at this stage employment. They look forward to career prospects program

that are able to develop their personal growth. In the context of private universities lack of attention in responding to their career growth needs might affect their commitment to the organization.

5.4 Organizational Commitment and Turnover Intention

The current study aimed to examine whether faculty attitude such as organizational commitment influence their behavioral intention such as turnover intention. Consistent with the findings of Karavardar (2014) and Reihan (2012), the results of current study showed that organizational commitment was negatively and significantly related to faculty turnover intention. In other word, when faculty are effectively and emotionally attached with the organization then their intention to leave the organization will be less. This not surprising as organizational commitment has consistently been shown to be most beneficial in enhancing positive organizational behavior such as less intention to leave the organization. Hence, based on the findings of the current study, it can be said that faculty members who feel strong emotional attachment towards the organization, also have less tendency to leave the organization.

The results was consistent with previous findings such as (e.g. Raihan, 2012; Lee & Huang, 2014; Boon & Kalshoven, 2014; Weng & McElroy, 2012; Rubel & Kee, 2015; Karavardar, 2014), whereby employees with higher levels or organizational commitment tended to report lower levels of turnover intention. The findings of the study shows that those faculty members who are strongly committed to respective private universities would be less intention to leave. Perhaps, one reason for the relationship between organizational

commitment and faculty turnover intention was that the HRM practices and career growth practices within the organization may indicate that the employer's positive concern for the faculty. These signals generate employees' attitudinal and most probably, behavioral tendencies such as increased organizational commitment, carried on service to the organization, and a lower intent to quit which results lower intention to leave the organization.

Practically speaking, faculty members in the context of Pakistan do not have many choices for generating extra money to support additional expenses. Therefore, this may possibly binds them to be more committed with organization. In other words, when faculty members recognize that availability of comparable alternatives is limited elsewhere, they will be more predisposed to stay in the current organization to avoid losing their relative advantage. Thus, employees whose primary bond to an organization is based on organizational commitment remain with the organization because they need to maintain the benefits they derive from the organization.

5.5 The Mediation Effect of Organizational Commitment

After analyzing and interpreting the reasons of direct relationships, now the three and fourth main objectives of this study is to investigate the mediating effect of organizational commitment on the relationship among HRM practices (e.g. salary, training & development, performance appraisal and four dimensions of career growth (career goal progress, promotion speed, remuneration growth and professional ability development) on turnover intention. The findings of this research indicates that organizational commitment

was found mediate the relationship between promotion speed, remuneration growth, performance appraisal, career goal progress and turnover intention. Unfortunately, this study was unable to find enough evidence to support the claim that organizational commitment mediates the relationship between salary and turnover intention. In other words, salary only can impact on organizational commitment and faculty turnover intention directly and there is no significant indirect impact (by organizational commitment) on turnover intention. This finding concurs with previous findings by Reihan (2012) and A'yunnisa (2015).

Moreover, the findings of this research indicated that the relationship between performance appraisal and faculty turnover-intention, is mediated by organizational commitment. This implies that, the direct as well as indirect effect of performance appraisal with the mediating effect of organizational commitment facilitate faculty retention through reducing their intention to leave the private institutes/ universities of Pakistan. Likewise, the finding of this research concurs with previous studies which clearly highlight that, the organizational commitment as mediator between aforesaid relationship (e.g. Ikramullah *et al.*, 2012; Lau and Moser, 2008). Practically speaking, the standardize and fair criteria for performance appraisal were essential for faculty to enhance their loyalty with job and commitment to organization, dissatisfaction with performance appraisal lowers the psychological attachment of faculty with organization which ultimately leads to job search behavior.

Meanwhile, in testing and studying the mediation effects of the organizational commitment on the relationship between dimensions of the career growth and faculty turnover-intention,

the result of this current study has revealed that, the relationship between career growth (career goal progress, remuneration growth and promotion speed) and faculty turnover has been mediated by organizational commitment. This practically indicates that if faculty perceived their career goals are met, promotion speed in the prevailing institutes is fast, probability of being promoted is high as compared to colleague and also perceived growth in salaries, they positively committed and attached with organization ultimately they less likely to leave the organization. In addition, the finding of this research concurs with previous studies which indicate the mediating effect of organization between the relationship of career growth and turnover-intention (e.g. Weng & McElroy, 2012; Karavardar, 2014; Weng & Xi, 2010).

A possible explanation for this findings is that, prior literature clearly present and argues that organizational commitment is an immediate outcome of HRM Practices as compared to turnover intention, which is a distal outcome (Kehoe and Wright, 2010; Jiang *et al.*, 2012). In addition, according to Buck and Watson (2002), HRM practices initially affect individuals' attitudes and then affect their behavior, e.g. turnover. The study findings supports this idea that attitudes affect behaviors more than behaviors affect attitudes. Practically speaking, in the academic context organization should pay much more attention on faculty attitudes, e.g. organizational commitment, by which HRM and career growth practices particularly promotion speed, remuneration growth, performance appraisal, career goal progress practices usually impact on turnover intention.

Another plausible reason for study findings is that, the majority of the respondents were young in terms of age, which was about 53% of the total population and in this 34 percent

were those who had length of service between 1 to 3 years. Furthermore, the employees who are in the initial stage of their career has more energy and enthusiasm level. In this early age of employment particularly in the developing context, performance appraisal, promotion speed remuneration growth and progression in career goals may play major role in deciding the employment status. Because this is the time when they more focus on their financial support, career need and growth and want to establish themselves in a right direction. Lack of attention in responding to these significant HRM and career growth practices might affect their commitment to the organization and thus increase the likeliness to leave. Therefore, at this stage of employment training and development, professional ability development does not create any psychological attachment among faculty members which bound them to remain in the same organization.

5.6 Moderating Effect of Career Concern with the Relationship between Organizational Commitment and Turnover Intention

Another, main objective of this current study was to investigate the moderating role of career concern on the relationship between organizational commitment and turnover-intention. The study findings found that career concern play a role as moderator in the relationship between organizational commitment and turnover intention. In other words, moderating effect of career concern weaken the relationship between organizational commitment and turnover intention. Practically speaking, when faculty member in private universities are having high career concern or need for career progression, and at the same time, they consider organizational commitment is low, then desire to quit the organization will increase. This findings strengthen the faculty opinion because of the high career

concern usually will produce a variety of negative outcomes like dissatisfaction and decreased organizational commitment. Not surprisingly, employees who have high career concern will have a desire to quit the organization (Conway, 2004; Lin, 2005;; Griffin *et al.*, 2013). The finding of this study support the previous studies (e.g Cohen, 1991; Conway, 2004; Lin, 2005; Bassham, 2009; Griffin *et al.*, 2013) in which, it has found that, the relationship between organizational commitment and turnover intention get weaken after inclusion of career concern as a moderator.

Logically, high career concern will reduce the effect organizational commitment to turnover intention. In other words, even if the private universities provides equitable salaries, standardize performance appraisal systems, training and development, remuneration growth and promotion to increase organizational commitment, this will not necessarily affect the faculty desire to quit the organization if faculty career need, expectation and concern are high. Therefore, private universities need to find ways to fulfill the career need and expectation of faculty. This is the critical issue to be addressed especially when it involves a labor market issue where demand is less than supply, such as in education sector of Pakistan particularly in Private universities.

5.7 Moderating Effect of Job Stress on the Relationship between Organizational Commitment and Turnover Intention

Last objective of this study was to investigate the moderating role of job stress on the relationship between organizational commitment and turnover-intention. The study found that job stress does not have any moderating effect on the relationship between

organizational commitment and turnover-intention in the context of private universities. In other words, even though faculty members having job stress, they don't tend to leave the organization if they are committed with organization. The study findings are in line with study by Imam and Shafique (2014), who found that job stress does not play a role as moderator on the relationship between organizational commitment and turnover intention.

As Pakistan is a developing country, the number of job openings particularly in education sector is not that much as compared with the developed countries. Since, employees are committed to the organization, but this commitment is due to the unavailability of jobs in the market place. Because, moving from one job to another will result to other problems even a higher salary and promotion is rewarded for the new job. The plausible reason for this study findings is that in the context of private universities of Pakistan, mostly faculty member are married and totally settled with the own residence, schooling of the children and highly familiar with the area. However, there are so many problems the faculty members have to face when it comes to search for a new residence, school for the children and some other factors. Other than that, there are strict rules for having bank loans to purchase houses and admissions for the schools. Due to those types of reasons the faculty members are still committed with organization and do not tend to leave the organization even though they are facing high job stress.

5.8 Implication of the Study

The finding of this research provide several practical implication for human resource practitioner and managers (e.g. Head of department or director) about some of the HRM practices (e.g. salary and performance appraisal) and career growth practices (career goal progress, remuneration growth and promotion speed) which are vital to increase the organizational commitment of employees which eventually leads to reduce the employee's intention to leave the organization. As such these help the management of private universities in managing their human resource development programs as well as career development programs for accommodating the employee's career needs and also provide career growth opportunities to satisfy their expectations towards high performing employees to reduce the turnover intention.

It is evident from the findings of this research that private universities concerned with employee turnover issue need to provide supportive human resource practices and career management practices pertaining to salary, performance appraisal, career goal progress, remuneration growth and promotion speed were found to have impact on employee organizational commitment and turnover intention. Therefore, private universities should also give more attention to the way salary is distributed and evaluated by making sure that salary level is appropriate with job and fairly distributed. A good salary system will not only reduce employee turnover intention, but also encourage the organizational commitment of employees. With regard to performance appraisal, the findings of current study suggest that management of private universities need to focus on effective and fair

performance evaluation system to evaluate the job performance of their employees. This effective performance management will be able to encourage employee commitment with organization and reduce their intention to leave the organization. Similarly, with regard to career growth, the findings of this research practically suggest that management of private universities need to focus on career development programs. Conversely, the study findings in relation to career growth opportunities may assure that private universities need to provide career options to employees and also provide equal chance for promotion, remuneration growth according to their knowledge, skill and ability. As such, employees who expect progress and growth in their career will ultimately be committed with organization and stay longer with same organization.

On the other hand the finding of this research further suggests that the relationship between dimensions of career growth and turnover intention is indirect. In other words, it was found that organizational commitment mediate the relationship between three of four dimensions of career growth (e.g. promotion speed and remuneration growth and career goal progress) and turnover intention. With regard this aforementioned relationship, practically this research suggest that private universities can increase employee expectations by motivating them through promotion speed and by increasing their remuneration with the passage of career stages, which ultimately help the employee's to progress towards their career goals. Further, these career goals motivate them to acquire new skills related to their career. Likewise, to retain the best employees, private universities must reward the efforts and give their employee's a platform for achieving their career goals and make them more committed towards the organization. But still, considering a fact, turnover cannot be

minimized even after so many efforts by organization because employees working with any organization will definitely give response to the prevailing opportunities in order to progress in the career and to earn more remuneration. Therefore, private universities must think differently for their employees rather only focusing on organizational commitment. Thus, findings related to organizational commitment as mediating variable provide additional support for the managers in their efforts to manage turnover.

Final but not least, the current study determined that career concern moderates the relationship between organizational commitment and turnover intention. The finding indicated that organizational commitment has less impact on turnover intention when career concern about progression is high. It mean that high career concern weaken the relationship between organizational commitment and turnover intention. Generally in this situation, it becomes difficult for organizations to expect same level of organizational commitment from the employees when employees becomes more concerned with their own career and detached from the current organization. Practically, the finding of this research suggests that management of private universities should give more attention to career need and career option of these employees. Hence, organizations need to develop career management strategies to identify the career need, expectation and career choice of the employees which gradually changes with the passage of time, which in return can lead to the employee's devotion to the organization.

5.9 Limitation and Future Direction

After interpretation of study findings, several limitations need to be considered in assessing the reported outcomes. The limitations of this study, at the same time, also uncover a number of potential areas for future researchers which are briefly discussed here.

Firstly, the research design used in this study was a survey questionnaire research design that employed the cross-sectional data, which was gathered at a particular point of time to test the hypotheses. Future study may look into longitudinal study in order to expand the research finding. In addition, this study has not considered any other institutions like polytechnics colleges, public/ government universities as well as college of health technology, which are also the part of higher educational institution of Pakistan.

Secondly, this study has grabbed the views of respondents in one aspect and only at that particular time from Private Universities of Pakistan, so maybe it would be more appropriate and balanced, if these views would also be taken from government universities of Pakistan. Furthermore, study sample was not selected randomly and consists of small sample size. Additionally, it focuses only at one region of Pakistan i.e. Punjab province. Even though, the study populations, which are permanent employees of the university is same in all over the Pakistan. Likewise, level of regional educational development and demographic variables may also delay the generalization of the results. In addition to this, this study has been conducted only in the context of Pakistan; therefore, the results may

not be applicable in any other Asian countries. For that reason, it is more suitable for future study it should employ a better sampling procedure and should include private universities as well.

Thirdly, this study is quantitative in nature and researcher relied on the questionnaire data only for statistical analysis. On the other hand, for future research, qualitative or mixed mode method on turnover intention can be used for further investigation in the context of Pakistan. So, future researchers can emphasis on both methods to understand employee turnover behavior.

Fourthly, this study is based on the data of self-reported questionnaire; hence, the probability of a common method variance might exist because all of the variables have been measured, by using a 'single survey instrument'. In accordance to Avolio *et al.* (1991) the common method variance is more inconvenient in analyzing the relationships between the attitudinal or psychological data obtained from the single respondent at a particular or one point of time. In this study, the data of both independent and dependent variables are perceptions based. That's why, the future research would include a method, which can decrease the common method variance for example, instead of using a perceptions based data, and the objective measures should be used.

Lastly, although this research found that career concern plays an important role in moderating the relationship between organizational commitment and turnover intention, the picture is still vague. In addition, another moderating and mediating variable between

the relationship of career growth and turnover intention For example, goal progress and ability development may be more predictive for persons high on learning goals (or intrinsic motivation), whereas promotion speed and remuneration growth may be more predictive for persons high on performance goals (or extrinsic motivation) should be recommended for future research.

5.10 Conclusion

This study has contributed empirically to a number of recognized relationships between the variables, which has been tested both directly and indirectly in order to provide answers of the research questions and to accomplish the related research objectives given in the introduction chapter of current study.

After questionnaire screening and coding of variables, current study collected the data from the permanent faculty members of the universities from Punjab province of Pakistan. After data collection, necessary multiple procedures of analyses was taken to analyze the data by using SmartPLS 2.0, whereas both the measurements and structural models were examined and tested. Moreover, according to the previous studies, the statistical results of the current study are justifiable.

This study, therefore, conclude that the findings have answered the research questions and achieve the research objectives, which were created at the time when the introduction chapter was written down.

For instance, objective one is, *to examine whether HRM practices (salary, training and development, performance appraisal) have influenced on employee turnover intention behavior of employees in private universities of Pakistan*, the result of this current study attained through SmartPLS 2.0 M3 (Ringle *et al.*, 2005) has revealed that, two (2) out of the three (3) HRM Practices (e.g. salary and performance appraisal) have influenced on turnover intention except one insignificant, which is training and development.

The second main objective, which has been accomplished in this current research, is, *to examine whether career growth practices (promotion speed, remuneration growth, career goal progress and professional ability development) has influence on employee turnover intention behavior of employees in private universities of Pakistan*. This relationship between career growth including four dimension's (promotion speed (PS), remuneration growth (RG), career goal progress (CGP) and professional ability development (PAD), with turnover intention as a composite variable is statistically partially supported and proved; the results are empirically supported only two of four dimensions (remuneration growth and promotion speed) of career growth have significant impact on turnover intention.

The third objective, which has been achieved in this current research, is, *“to examine whether organizational commitment mediates the relationship between HRM practices (salary, performance appraisal, training and development) and turnover intention*. The result of this current study has revealed that, even though, there are indirect effects on the relationships, only one (e.g. performance appraisal) out of three (3) relationships has been proven to be mediated by organizational commitment.

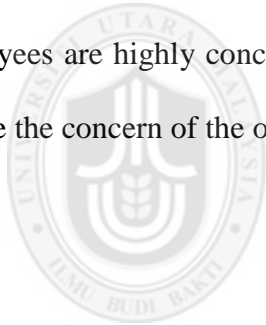
The fourth objective, which has been accomplished in this current research, is, ***to examine whether organizational commitment mediates the relationship between career growth (Promotion speed, remuneration growth, career goal progress and professional ability development) and turnover intention***. This is perhaps evident in the findings that, this study indicates three out of four dimensions (e.g. Promotion speed, remuneration growth, career goal progress) of career growth to be mediated by organizational commitment. That's mean, composite variable career growth is partially mediated by organizational commitment. This result is also empirically supported by a number of previous studies.

The fifth objective, which has been achieved in the current research, which was, ***to examine whether job stress moderates the relationship between organizational commitment and employee turnover intention behavior***. Unfortunately, the findings of the current study does not support the moderating effect of job stress on the relationship between organizational commitment and employee turnover intention behavior in private universities of Pakistan. But still, this result is empirically supported by the study conducted by (Imam & Shafique, 2014).

The last objective which has been accomplished in this current research is, ***to find out whether career concern at work moderates the relationship between organizational commitment and employee turnover intention behavior***. The statistical evidence shows a significant moderating effect in the relationship between organizational commitment and turnover intention. This implies that the negative association between organizational

commitment and turnover intention is moderated by career concern of faculty, such that it is stronger for lower than for a higher level of career concern

However, the findings of this research suggested that to manage turnover intention amongst employees, organizations must focus on improving their human resource development and career management practices especially salary, performance appraisal, career goal progress, promotion speed and remuneration growth aspect of career growth. These practices are important to enhance employee commitment to the organization which in turn will reduce turnover intention. In addition, organization must realize that the impact of organizational commitment in reducing turnover intention is weak whenever the employees are highly concerned about their own career. Hence, employee career should also be the concern of the organization.



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APPENDICES

UUM
Universiti Utara Malaysia





Dear Participant,

The purpose of the attached survey is to understand the organizational practices such as HRM practices, Leadership practices, career growth and job stress in the higher educational institutions in the private sector in Pakistan. There are some statements given in this survey which you are requested to answer. This questionnaire is designed to assess your perception of your organization's practices, and the extent to which it affects your attitude and behavior at work.

There is no right or wrong answers in this survey. All your answers will reflect your personal opinion about the current organizational practices such as HRM practices, Leadership practices, organizational learning culture, career growth and job stress regarding your institution. Individual responses to this survey will be kept **CONFIDENTIAL** and will **NOT** be disclosed. Your institution will **NOT** have access to the information you have provided herein. **No reference** will be made in written or oral materials that could link you to this study. **Only grouped data will be reported in the results.**

Please read carefully the instruction at the beginning of each section, and answer all the statements as accurately as possible. Your time and cooperation will be greatly appreciated. Please take a few minutes to fill out this survey questionnaire.

Thank you in advance for taking time to complete this survey.

Yours faithfully,

Muhammad Shahid Nawaz

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INSTRUCTIONS: Please read the following statements and indicate the extent of your agreement with the statements on a 7-point scale. **Please circle your answer.**

1 = Strongly Disagree (SD) | 2 = Moderately Disagree (MD) | 3 = Disagree (D) | 4 = Neutral (N) | 5 = Agree (A) | 6 = Moderately Agree (MA) | 7 = Strongly Agree (SA)

HRM Practices		1	2	3	4	5	6	7
1	There is attractive compensation at my institution.							
2	There is equitable internal salary system at my institution.							
3	The salary at my institution that reflects individual faculty performance.							
4	The salary at my institution that encourages better performance.							
5	The salary at my institution that reflects the standard of living.							
6	My institution provides extensive training for faculty development.							
7	My institution provides developmental training programs for faculty every few years.							
8	In my institution, there is formal developmental training to teach new faculty members the skills they need to perform their jobs.							
9	My institution provides formal developmental training to faculty members in order to increase their promotability in this institution.							
10	The university adopts standardized procedures for appraising my teaching performance.							
11	My institution has provided enough information regarding specific methods of the performance evaluation systems.							
12	I am allowed to formally communicate with supervisors (Head of department) regarding the appraisal results.							

Career Growth		1	2	3	4	5	6	7
1	My present job moves me closer to my career goals.							
2	my present job is relevant to my career goals and vocational growth							
3	My present job sets the foundation for the realization of my career goals							
4	My present job provides me with good opportunities to realize my career goals							
5	My present job encourages me to continuously gain new and job-related skills							
6	My present job encourages me to continuously gain new job-related knowledge							
7	My present job encourages me to accumulate richer work experiences							
8	My present job enables me to continuously improve my professional capabilities							
9	My promotion speed in the present institution is fast							
10	The probability of being promoted in my present organization is high.							
11	Compared with previous organizations, my position in my present one is ideal							
12	Compared with my colleagues, I am being promoted faster							
13	My salary is growing quickly in my present organization							
14	In this organization, the possibility of my current salary being increased is very large							
15	Compared with my colleagues, my salary has grown more quickly.							

Organizational Commitment		1	2	3	4	5	6	7
1	I am proud to be able to tell people who it is I work for.							
2	Even if the department was not doing too well, I would be reluctant to change to another employer.							
3	In my work I like to feel I am making some effort, not just for myself but for the organization as well.							
4	The offer of more money with another employer would make me think of changing my job.							
5	I would not recommend a close friend to join our organization							
6	To know that my own work had made a contribution to the good of the organization would please me.							

Job Stress		1	2	3	4	5	6	7
1	I receive insufficient institutional recognition for research and teaching performance.							
2	I participate in too many departmental or university committees.							
3	I spend too much time writing letters, e-mails and responding to other paperwork.							
4	I have too heavy a workload, one that I cannot possibly finish during the normal workday.							
5	I am too often unable to resolve differences with my Department Head.							
6	I have no way of influencing my Department Head's actions and decisions that affect me.							
7	I do not know how my Department Head evaluates my performance.							
8	Not knowing how to secure funding for my research activities.							
9	I feel inequitable distribution of rights and duties due to favoritism.							
10	There is no written code of conduct.							
11	I feel there is too much organizational politics.							
12	I feel insecurity in job due to lack of research publication.							
13	I feel too much pressure of research publication.							
14	I receive inadequate funding related to research publication.							

15	General lack of time for research and Work life imbalance.						
16	Supervisors have too much power to influence one's career.						
17	Impossibility to purchase high-quality research equipment.						

Currently my concern about.....

Career Concern		1	2	3	4	5	6	7
1	Finding the line of work that I am best suited for.							
2	Finding a line of work that interests me.							
3	Getting started in my chosen career field							
4	Setting down in a job I can stay with.							
5	Becoming especially knowledgeable or skillful at work.							
6	Planning how to get ahead in my established field of work.							
7	Keeping the respect of people in my field.							
8	Attending meetings and seminars on new methods.							
9	Identifying new problems to work on.							
10	Developing easier ways of doing my work.							
11	Planning well for retirement.							
12	Having a good place to live in retirement.							

Turnover Intention		1	2	3	4	5	6	7
1	I am actively looking for a job outside this institution.							
2	As soon as I can find a better job, I will leave this institution.							
3	I am seriously thinking about quitting my job.							
4	In the last few months I have thought seriously about looking for a job in the other sector/s.							
5	Taking everything into consideration, there is likelihood that I will make a serious effort to find a new job within the next year.							

Demographic Information

Respondent Profile:

Instructions: Please **TICK** (✓) in the appropriate box that is suitable to you. All information received on this form will only be used for the purpose of academic research and **will be strictly held in confidentiality.**

1. Gender:

	Male		Female
--	------	--	--------

2. Marital Status:

	Married		Not Married		Divorced
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3. Age

	Less than 30 year		30 - 40 year
	41 to 50 year		More than 50 year

4. Your Present Position in this university

	Lecturer		Senior Lecturer
	Assistant Professor		Associate Professor
	Professor		Head of Department

5. How long have you been working for this university:

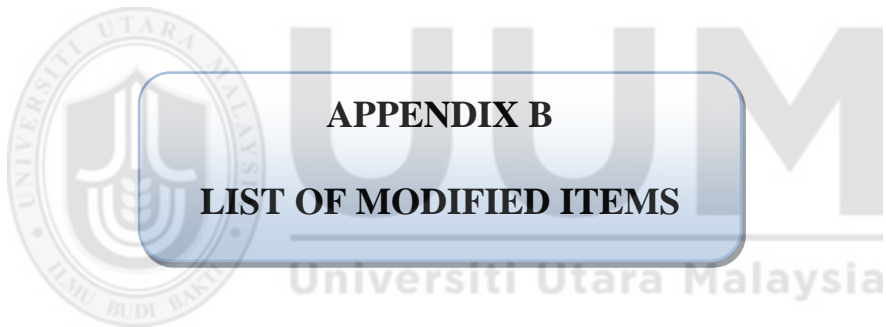
	Less than 1 year		1-3 years
	4-6 years		7-10 years
	More than 10 years		

6. Your highest qualification attained:

	Master or equivalent		PhD or equivalent
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If other (Please specify):.....

Thank you for your time and effort!



List of Modified Item

Variable	Original Item	Modified Item
Salary	1. Presence of attractive salary system	1. There is an attractive salary at my institution
	2. Presence of equitable internal salary	2. There is an equitable internal salary system at my institution
	3. Presence of salary that reflects performance	3. The salary at my institution that reflects individual faculty performance.
Training and Development	1. Extensive training programs are provided for individual in this job	1. My institution provides, extensive training for faculty development
	2. Employees in this job will normally go through training programs every few year	2. My institution provides, developmental training programs for faculty every few years
	3. Formal training programs are offered to employees in order to increase their promotability in this organization.	3. My institution provides, formal developmental training to faculty members in order to increase their promotion ability in this institution.
Performance Appraisal	1. Performance appraisals are based on objective and quantifiable results	1. The university has adopted standardized procedures for appraising my teaching performance



APPENDIX C
LIST OF SELECTED
UNIVERSITIES

List of Universities

Serial No.	University Name	Serial No.	University Name
1	Ali Institute of Education	10	Qarshi University Lahore
2	Beacon house National University, Lahore	11	The Superior College Lahore
3	Global Institute Lahore	12	University of Central Punjab Lahore
4	Hijvery University, Lahore	13	University of Lahore, Lahore
5	Imperial College of Business Studies, Lahore	14	University of Management and Technology, Lahore
6	University of Management Sciences, Lahore	15	Forman Christian College, Lahore (university status)
7	Leads University Lahore, Lahore	16	Lahore Garrison University, Lahore
8	Lahore School of Economics Lahore	17	University of South Asia Lahore
9	Minhaj University Lahore	18	National College of Business Administration and Economics Lahore

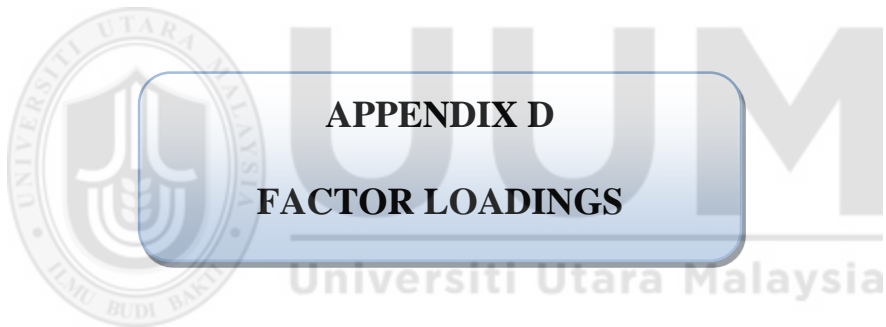
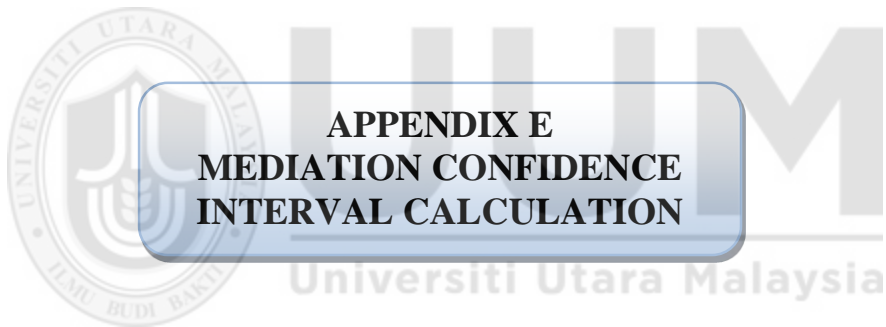


Table 4.7 *Factor Loading and Cross Loading*

	CGP	PAD	PS	RG	CS	JS	OC	PA	SA	TD	TI
CGP1	0.725	0.240711	0.26567	0.552188	0.210442	0.074391	0.031491	0.163258	0.316888	-0.32319	-0.30169
CGP3	0.754	0.385457	0.425422	0.383862	0.220646	-0.04776	0.116886	0.15402	0.208183	-0.17627	-0.22027
CGP4	0.801	0.561948	0.4498	0.503449	0.33436	-0.06516	0.101742	0.075044	0.17345	-0.15902	-0.30864
PAD3	0.47607	0.928	0.584988	0.298541	0.361067	-0.1153	0.249632	0.192128	0.123659	-0.24586	-0.37172
PAD4	0.495582	0.913	0.602076	0.31429	0.404309	-0.07502	0.225716	0.224227	0.092735	-0.16846	-0.34093
PS1	0.449937	0.701721	0.69346	0.286052	0.355034	-0.11893	0.201184	0.146425	0.147546	-0.22809	-0.25053
PS2	0.500646	0.588774	0.70296	0.280382	0.362489	-0.11455	0.213361	0.087038	0.114942	-0.1813	-0.30946
PS3	0.283302	0.342175	0.83258	0.244499	0.214868	-0.11474	0.469621	0.132703	0.330831	-0.26385	-0.49574
RG1	0.521478	0.293823	0.314348	0.87423	0.191504	-0.0321	0.22187	0.083739	0.245111	-0.29674	-0.32668
RG2	0.61101	0.298692	0.301725	0.90661	0.244736	-0.01888	0.210624	0.175901	0.253417	-0.30436	-0.40215
CS1	0.369504	0.458503	0.394327	0.207618	0.74653	-0.02682	0.043846	0.100108	-0.00126	-0.14604	-0.24032
CS10	0.122938	0.023729	0.071164	0.124486	0.58595	-0.03894	-0.161163	0.150176	0.006829	-0.08668	-0.19963
CS12	0.296569	0.30172	0.263999	0.176813	0.70659	-0.07033	-0.058482	0.239398	0.018817	-0.1247	-0.23178
CS3	0.292924	0.400879	0.340708	0.264522	0.82002	0.020786	0.176812	0.172813	0.146158	-0.2071	-0.37168
CS4	0.190263	0.269577	0.239259	0.102215	0.69981	-0.12937	0.046953	0.075428	0.093963	-0.18292	-0.25108
CS6	0.096659	0.073015	0.141887	0.120425	0.69957	-0.05987	-0.036681	0.111318	0.103782	-0.19761	-0.22282
CS7	0.21618	0.20799	0.254046	0.1569	0.71865	0.029969	-0.022081	0.129738	0.011381	-0.08903	-0.23253
CS8	0.328173	0.487648	0.375841	0.221901	0.80472	0.033979	0.12385	0.226018	0.105095	-0.19779	-0.37549
JS10	-0.02258	-0.09259	-0.10688	0.011889	-0.07265	0.76156	-0.119589	-0.03867	-0.0531	0.068417	0.059383
JS11	0.021914	-0.04111	-0.05759	0.008775	0.026351	0.71105	-0.103653	-0.00672	0.012299	-0.0411	0.047414
JS12	0.011255	-0.11881	-0.13685	-0.05832	-0.00538	0.79038	-0.122241	-0.01245	-0.03356	0.035675	0.102011
JS14	0.019064	0.009081	-0.04998	0.070234	0.005216	0.75076	-0.036863	-0.00397	0.051285	0.027231	0.045005

JS15	-0.02351	-0.04982	-0.04739	0.016692	-0.07421	0.70634	-0.071257	-0.07803	0.039494	0.010317	0.042855
JS17	0.022485	-0.05357	-0.06582	0.055589	0.030436	0.63331	-0.049231	-0.03893	0.017368	0.037817	0.025733
JS2	-0.02281	-0.08617	-0.11881	-0.02979	0.013026	0.69187	-0.06834	0.031753	0.029168	0.013085	0.038922
JS4	-0.05372	-0.09098	-0.18677	-0.10424	-0.05793	0.7454	-0.141661	0.023389	-0.03911	0.071268	0.080368
JS7	-0.08956	-0.11119	-0.14011	-0.02446	-0.03629	0.62373	-0.103454	-0.03358	0.034382	0.009705	0.0166
OC1	0.095536	0.151404	0.323938	0.211559	0.009243	-0.03524	0.75961	0.097288	0.215705	-0.14269	-0.2843
OC3	0.088582	0.284046	0.435802	0.188678	0.053752	-0.18523	0.8383	0.176092	0.16071	-0.17866	-0.30886
OC4	0.073121	0.214676	0.33919	0.206357	0.022954	-0.1684	0.88311	0.170256	0.246268	-0.18962	-0.28245
OC5	0.067332	0.208581	0.351889	0.181391	0.060262	-0.10586	0.87085	0.138214	0.192228	-0.16791	-0.32213
OC6	0.123388	0.20384	0.371398	0.220551	0.050261	-0.06009	0.79361	0.091486	0.178965	-0.13796	-0.2955
PA1	0.127406	0.212262	0.131903	0.140326	0.176419	-0.01203	0.166706	0.94567	0.109318	-0.18001	-0.26797
PA2	0.159419	0.146166	0.149268	0.095348	0.192545	-0.00242	0.087705	0.71464	0.245936	-0.10533	-0.25239
PA3	0.156064	0.226096	0.145023	0.151144	0.190996	-0.02903	0.168233	0.94464	0.094412	-0.17188	-0.26975
SA2	0.269334	0.090441	0.249934	0.252194	0.042978	-0.02631	0.217859	0.135484	0.871	-0.4481	-0.30971
SA3	0.222113	0.060898	0.195576	0.217363	0.127575	-0.01369	0.159543	0.169416	0.77708	-0.40481	-0.25465
SA4	0.266202	0.135401	0.292827	0.228751	0.077282	0.015348	0.210598	0.114828	0.84533	-0.48376	-0.33794
TD1	-0.24433	-0.1823	-0.21748	-0.28169	-0.13875	-0.07099	-0.122572	-0.1332	-0.4249	0.77139	0.293111
TD2	-0.18471	-0.1879	-0.20157	-0.19179	-0.20042	0.093084	-0.146062	-0.18345	-0.37721	0.71738	0.245873
TD4	-0.22698	-0.1512	-0.26989	-0.28735	-0.1645	0.079489	-0.179219	-0.09533	-0.42093	0.78667	0.296269
TI1	-0.31745	-0.31888	-0.46636	-0.36361	-0.39472	0.017315	-0.397545	-0.1883	-0.36587	0.340588	0.84249
TI2	-0.31107	-0.27589	-0.42551	-0.30545	-0.34012	0.06254	-0.257373	-0.25433	-0.24351	0.266319	0.64491
TI3	-0.31598	-0.32146	-0.32563	-0.33378	-0.23991	0.124846	-0.22335	-0.30837	-0.27173	0.293541	0.79197
TI4	-0.17005	-0.2038	-0.32819	-0.22015	-0.23295	-0.0464	-0.211226	-0.05391	-0.19701	0.167508	0.67324
TI5	-0.22552	-0.30964	-0.30991	-0.28246	-0.16251	0.160221	-0.206072	-0.29792	-0.24596	0.268696	0.76686



APPENDIX E
MEDIATION CONFIDENCE
INTERVAL CALCULATION

	a1	a2	a3	a4	a5	a6	a7	b
	CGA -> OC	CGB -> OC	CGC -> OC	CGD -> OC	PA -> OC	SA -> OC	TD -> OC	OC -> TI
Sample 0	-0.3903	0.0563	0.4567	0.2611	0.0759	0.1445	-0.0553	-0.1407
Sample 1	-0.3118	0.0334	0.6258	0.1252	0.0047	0.1126	0.0057	-0.2066
Sample 2	-0.3441	-0.0186	0.4827	0.2635	0.0585	0.1245	-0.0714	-0.0578
Sample 3	-0.1687	-0.0448	0.3018	0.3531	0.0217	0.0252	-0.0146	-0.0688
Sample 4	-0.4371	-0.0115	0.519	0.2621	0.0274	0.172	-0.001	-0.1266
Sample 5	-0.3132	0.0971	0.4689	0.2279	0.1152	0.2011	-0.0134	-0.1804
Sample 6	-0.4159	0.0022	0.3983	0.2363	0.0926	0.0352	-0.1617	-0.1434
Sample 7	-0.3188	-0.0391	0.4184	0.2289	0.0416	0.1269	-0.0019	-0.0255
Sample 8	-0.2472	-0.0141	0.3412	0.2697	0.096	0.1105	-0.0574	-0.0996
Sample 9	-0.3537	0.0468	0.3921	0.2769	0.1201	0.0127	0.0479	-0.0283
Sample 10	-0.4975	0.146	0.3685	0.3448	0.1198	0.0946	0.001	-0.014
Sample 11	-0.5154	0.0755	0.4116	0.2755	0.204	0.1862	0.0556	-0.0002
Sample 12	-0.3012	0.0587	0.4689	0.0777	0.1713	0.1357	-0.0042	-0.0352
Sample 13	-0.2262	-0.0914	0.4466	0.3068	0.0268	0.2016	0.1005	-0.1508
Sample 14	-0.2465	0.1229	0.4374	0.1772	0.0452	0.1253	0.0077	-0.1768
Sample 15	-0.2997	0.0251	0.3594	0.3033	0.1464	0.1875	0.0157	-0.1283
Sample 16	-0.3737	-0.0155	0.5707	0.1472	0.0246	0.1676	-0.1677	-0.1765
Sample 17	-0.3268	0.0122	0.5637	0.1844	0.1237	0.1753	-0.0242	-0.2248
Sample 18	-0.348	-0.0173	0.5245	0.2278	0.0654	0.188	0.0529	-0.0838
Sample 19	-0.3991	0.0617	0.4714	0.2869	0.1327	0.0639	-0.0032	-0.1263
Sample 20	-0.4539	0.1243	0.37	0.2296	0.1139	0.1545	0.0439	-0.0151
Sample 21	-0.3064	-0.0897	0.577	0.2267	0.0109	0.0525	-0.0062	-0.0534
Sample 22	-0.2896	0.0099	0.4233	0.2435	0.0907	0.2734	0.0892	-0.0814
Sample 23	-0.3459	0.0695	0.4396	0.1364	0.1046	0.2493	0.0475	-0.1022
Sample 24	-0.2653	0.0546	0.4683	0.2135	0.0903	0.0855	0.1038	-0.1614
Sample 25	-0.4121	0.0164	0.396	0.3984	0.0684	0.191	-0.008	-0.053
Sample 26	-0.4413	0.0673	0.5183	0.2174	0.1036	0.1667	0.0488	-0.1479
Sample 27	-0.1287	-0.1108	0.4599	0.1789	0.1573	0.0606	-0.0878	-0.124
Sample 28	-0.5055	0.0808	0.2113	0.3764	0.1205	0.2564	-0.0209	-0.0097

Sample 29	-0.2765	0.1267	0.4771	0.0722	0.0566	0.1092	-0.0382	-0.1549
Sample 30	-0.2576	0.0713	0.4368	0.1278	0.0566	0.0412	-0.0948	-0.1299
Sample 31	-0.4932	0.1013	0.4387	0.4253	0.0758	0.1477	0.0709	-0.0847
Sample 32	-0.1597	-0.0771	0.5009	0.1106	0.1207	0.1065	-0.0132	-0.1427
Sample 33	-0.406	0.0523	0.6068	0.2244	0.0772	0.209	0.2043	-0.0779
Sample 34	-0.3347	-0.0264	0.4527	0.3069	0.0257	0.1529	0.0151	-0.121
Sample 35	-0.416	-0.0779	0.5628	0.2824	0.0717	0.0462	-0.078	-0.0887
Sample 36	-0.3125	-0.0123	0.4976	0.1849	0.0902	0.1263	0.0075	-0.0905
Sample 37	-0.4229	-0.0514	0.5186	0.3448	0.083	0.0416	-0.0552	-0.0826
Sample 38	-0.4163	0.0399	0.4617	0.2668	0.1101	0.203	-0.0109	-0.0494
Sample 39	-0.3658	-0.058	0.4594	0.2087	0.1427	0.1788	0.0357	-0.0524
Sample 40	-0.3416	-0.039	0.5212	0.2153	0.0716	0.1603	0.1002	-0.0951
Sample 41	-0.4149	0.0486	0.4718	0.3704	0.0975	0.1527	0.0923	-0.0552
Sample 42	-0.3514	0.0914	0.4075	0.3302	0.0808	0.1281	0.1121	-0.0693
Sample 43	-0.3956	0.0962	0.4561	0.1969	0.04	0.1335	-0.0327	-0.1015
Sample 44	-0.3641	0.0099	0.4433	0.2301	0.09	0.1386	-0.0001	-0.1294
Sample 45	-0.2705	-0.0058	0.516	0.2651	0.002	0.1002	-0.0286	-0.0931
Sample 46	-0.4598	0.1457	0.4672	0.1696	0.0753	0.1654	0.0223	-0.1331
Sample 47	-0.284	0.1891	0.4189	0.156	-0.0124	0.261	0.0079	-0.1454
Sample 48	-0.5054	0.096	0.3998	0.3314	0.1234	0.1248	-0.0197	-0.0617
Sample 49	-0.329	-0.0163	0.4835	0.1948	0.1052	0.1176	-0.0828	-0.2223
Sample 50	-0.234	-0.0048	0.5518	0.1563	0.0338	-0.0099	-0.0138	-0.0419
Sample 51	-0.4238	0.0185	0.5292	0.3182	0.0636	0.1171	0.0448	-0.0432
Sample 52	-0.348	-0.1063	0.5002	0.3979	0.0708	0.1734	0.0541	-0.0114
Sample 53	-0.4637	0.0108	0.4909	0.3147	0.1425	0.1166	0.052	-0.0433
Sample 54	-0.3577	0.0482	0.4663	0.2484	0.0942	0.0486	0.0462	-0.0664
Sample 55	-0.2642	-0.1209	0.5996	0.2844	0.0309	-0.0247	-0.0608	-0.163
Sample 56	-0.3933	0.0259	0.5384	0.2987	0.052	0.1962	0.1588	-0.24
Sample 57	-0.3906	0.0971	0.5706	0.2356	0.0177	0.1302	0.0498	-0.1775
Sample 58	-0.3522	-0.0585	0.5674	0.2625	0.0792	0.0309	-0.1216	-0.2553
Sample 59	-0.4178	0.104	0.5032	0.2016	0.0742	0.2059	0.0101	-0.1728

Sample 60	-0.5211	0.0655	0.4932	0.3156	-0.0358	0.1569	-0.0804	-0.0866
Sample 61	-0.414	0.093	0.4684	0.2475	0.0702	0.1163	0.0324	-0.1066
Sample 62	-0.3645	0.1288	0.48	0.2648	0.0914	0.1014	-0.0077	-0.143
Sample 63	-0.2879	0.0978	0.4224	0.1747	0.0838	0.1352	-0.0514	-0.1386
Sample 64	-0.2955	-0.0176	0.3679	0.2408	0.1691	0.1764	-0.0011	0.002
Sample 65	-0.205	0.1339	0.4111	0.1468	0.0304	0.1892	0.0635	-0.1122
Sample 66	-0.3916	-0.0076	0.4205	0.3348	0.0694	0.0768	0.0001	-0.0519
Sample 67	-0.3234	0.0336	0.5159	0.173	0.0355	0.1807	0	-0.1272
Sample 68	-0.4687	0.231	0.3992	0.2656	0.1234	0.2631	0.0879	-0.1086
Sample 69	-0.4151	0.1155	0.4798	0.2876	-0.015	0.1741	0.0102	-0.1354
Sample 70	-0.3064	-0.0977	0.5135	0.2363	0.1219	0.1295	0.1171	-0.0806
Sample 71	-0.4141	0.0084	0.4842	0.298	0.1325	0.0848	-0.011	-0.1815
Sample 72	-0.197	-0.0265	0.479	0.115	0.0792	0.0983	-0.0553	-0.0962
Sample 73	-0.2153	-0.0497	0.5326	0.0998	0.0668	0.0434	-0.1294	-0.1718
Sample 74	-0.458	0.062	0.562	0.3053	0.0697	0.1609	-0.0117	-0.1096
Sample 75	-0.3897	0.146	0.4342	0.271	0.0528	0.1472	0.02	-0.1605
Sample 76	-0.3139	-0.0412	0.3989	0.2889	0.1042	0.1827	0.0502	-0.0304
Sample 77	-0.2716	0.0108	0.3658	0.2818	0.0363	0.1339	0.0186	-0.0308
Sample 78	-0.1335	-0.007	0.4179	0.0769	0.075	0.0822	-0.0523	-0.0526
Sample 79	-0.2813	-0.0363	0.492	0.2429	0.0782	0.0371	-0.148	-0.1491
Sample 80	-0.224	0.0081	0.382	0.3108	0.0724	0.0941	0.0337	-0.0999
Sample 81	-0.2889	0.0803	0.5505	0.101	0.0467	0.1466	0.0665	-0.0582
Sample 82	-0.3407	-0.0165	0.4817	0.2325	0.0153	0.1356	0.0364	-0.0546
Sample 83	-0.2536	-0.0306	0.3268	0.3593	0.0243	0.0596	0.0708	0.0238
Sample 84	-0.3597	0.0537	0.3674	0.3605	0.2013	0.2834	0.1305	-0.142
Sample 85	-0.3522	0.0271	0.4299	0.239	0.0781	0.1362	-0.0171	-0.1176
Sample 86	-0.1462	0.0232	0.3909	0.0931	0.0878	0.0872	0.0725	-0.1259
Sample 87	-0.3706	0.0103	0.4825	0.314	0.0234	0.1681	0.0266	-0.1507
Sample 88	-0.4564	0.1068	0.333	0.253	0.1142	0.063	-0.0903	0.0302
Sample 89	-0.2405	0.0171	0.5345	0.1821	0.0677	0.0382	-0.0645	-0.1569
Sample 90	-0.3094	0.039	0.3934	0.1401	0.1711	0.0513	-0.0489	-0.0279

Sample 91	-0.4567	0.0439	0.3024	0.3934	0.0518	0.0563	-0.1658	-0.0471
Sample 92	-0.3599	0.0311	0.4086	0.2146	0.1423	0.0954	-0.0081	-0.0572
Sample 93	-0.3379	0.1868	0.3342	0.2515	0.0447	0.0807	-0.1593	-0.062
Sample 94	-0.3273	-0.014	0.4621	0.1961	0.1933	0.0257	-0.1067	-0.1086
Sample 95	-0.2104	-0.1224	0.6338	0.1695	0.164	-0.0146	0.0597	-0.1116
Sample 96	-0.1147	-0.0616	0.5509	0.0956	0.0721	0.0372	-0.0388	-0.1236
Sample 97	-0.223	-0.0295	0.3717	0.0864	0.0862	0.1772	-0.0607	-0.0612
Sample 98	-0.4422	0.1468	0.4796	0.2812	0.1244	0.1577	0.1493	-0.1955
Sample 99	-0.3704	0.001	0.5233	0.274	0.0929	0.16	-0.0055	-0.1959
Sample 100	-0.4023	-0.0088	0.5376	0.2968	0.147	0.0709	-0.0151	-0.0838
Sample 101	-0.3289	0.1291	0.4884	0.2002	0.0396	0.1205	0.021	-0.1423
Sample 102	-0.3236	0.0337	0.3549	0.2556	0.0926	0.1857	0.1405	-0.0685
Sample 103	-0.3548	-0.006	0.5504	0.2038	0.11	0.0628	0.0435	-0.1314
Sample 104	-0.3446	0.0559	0.5574	0.2126	0.0492	0.1806	0.0733	-0.194
Sample 105	-0.5523	0.0778	0.5548	0.3307	0.0707	0.0764	-0.019	-0.0324
Sample 106	-0.1812	-0.135	0.4511	0.2498	0.0369	0.1764	0.051	-0.1422
Sample 107	-0.3423	-0.0291	0.5854	0.2262	0.0741	0.0765	0.0867	-0.0256
Sample 108	-0.4385	0.0514	0.3397	0.3064	0.168	0.1151	-0.0067	-0.0577
Sample 109	-0.3299	0.1419	0.4237	0.2299	-0.0362	0.0719	0.0694	-0.0154
Sample 110	-0.1888	0.0042	0.476	0.1311	0.1418	0.1042	-0.0603	-0.2163
Sample 111	-0.1674	-0.0057	0.5432	0.1791	0.0551	0.1041	0.0425	-0.1282
Sample 112	-0.3655	-0.0514	0.4659	0.2716	-0.0173	0.1673	-0.0329	-0.0632
Sample 113	-0.3327	-0.1031	0.4844	0.3262	0.0897	0.0543	0.0353	-0.0773
Sample 114	-0.2965	-0.0807	0.4671	0.2885	0.0639	0.152	0.0135	-0.1315
Sample 115	-0.2982	-0.0149	0.4314	0.2953	0.0987	0.101	0.0743	-0.1177
Sample 116	-0.437	0.0748	0.4631	0.3477	0.1331	0.1694	0.0049	-0.0966
Sample 117	-0.2406	-0.0558	0.51	0.2862	0.0818	0.063	0.0478	-0.0709
Sample 118	-0.3231	0.0002	0.439	0.2824	0.146	0.1593	-0.0631	-0.0736
Sample 119	-0.2223	-0.0566	0.4663	0.0739	0.1068	0.1762	0.078	-0.0347
Sample 120	-0.2009	0.0465	0.2549	0.1812	0.1337	0.0868	-0.0476	-0.0724
Sample 121	-0.3999	0.0243	0.4748	0.4128	0.1269	0.1282	0.0156	-0.146

Sample 122	-0.4595	0.0729	0.4488	0.2509	0.046	0.1835	0.0056	0.0111
Sample 123	-0.3816	0.0604	0.5876	0.2895	-0.0772	0.1551	0.1537	-0.2269
Sample 124	-0.3991	0.0561	0.3878	0.3619	0.0884	0.1843	-0.0409	-0.1162
Sample 125	-0.2688	0.1075	0.4122	0.2403	0.0517	0.1069	0.0258	-0.1496
Sample 126	-0.4207	0.016	0.3707	0.3522	0.1251	0.1893	0.1203	-0.0128
Sample 127	-0.316	0.0203	0.4944	0.2645	0.1074	0.1755	0.0138	-0.1826
Sample 128	-0.3636	-0.0557	0.4971	0.2765	0.0792	0.0752	0.0489	-0.0506
Sample 129	-0.2767	-0.0634	0.399	0.2685	0.0963	0.1273	-0.0654	-0.1138
Sample 130	-0.33	0.116	0.4508	0.0856	0.091	0.2733	0.1797	-0.1331
Sample 131	-0.165	-0.0486	0.4341	0.1117	0.1244	0.0838	-0.0012	-0.158
Sample 132	-0.3988	0.0058	0.4239	0.2612	0.1957	0.0391	-0.1199	-0.1069
Sample 133	-0.3442	0.0464	0.4734	0.2255	0.0388	0.1745	0.0597	-0.0823
Sample 134	-0.3211	0.0334	0.4623	0.1727	0.1364	0.2341	0.1304	-0.0113
Sample 135	-0.2311	0.0484	0.3277	0.3363	0.1792	0.1477	0.1038	-0.0552
Sample 136	-0.2828	-0.0026	0.6538	0.1341	-0.002	0.0938	0.0356	-0.2679
Sample 137	-0.2694	0.0818	0.443	0.218	0.1311	0.1626	0.0268	-0.1052
Sample 138	-0.2259	-0.0229	0.4789	0.247	0.0481	0.124	0.0738	-0.1101
Sample 139	-0.3459	0.0118	0.5145	0.278	0.0596	0.0938	0.0659	-0.0756
Sample 140	-0.4043	0.1231	0.4834	0.2845	0.0515	0.1788	0.0961	-0.0281
Sample 141	-0.4222	0.0162	0.4687	0.3163	0.0451	0.1507	0.0111	-0.1166
Sample 142	-0.3148	0.0886	0.4868	0.2002	0.0398	0.0541	-0.0154	-0.1304
Sample 143	-0.1661	-0.0558	0.542	0.2351	0.0365	-0.0031	0.1823	-0.0661
Sample 144	-0.3098	0.0468	0.3977	0.3008	0.0909	0.1531	-0.0451	-0.1149
Sample 145	-0.2266	-0.0799	0.5149	0.1841	0.1068	0.195	0.0084	-0.1588
Sample 146	-0.4642	0.1424	0.5297	0.2591	0.0668	0.2097	0.1146	-0.1321
Sample 147	-0.3112	0.0508	0.4446	0.2265	0.0329	0.1104	-0.0257	-0.1134
Sample 148	-0.5224	0.0691	0.5936	0.2389	0.1615	0.1234	-0.0078	-0.0588
Sample 149	-0.3615	0.0335	0.4208	0.2251	0.0967	0.137	0.0667	-0.0397
Sample 150	-0.3663	-0.0116	0.512	0.1981	0.0701	-0.0139	-0.0588	-0.0414
Sample 151	-0.2517	0.0149	0.4766	0.0855	0.1293	0.2284	0.0395	-0.2023
Sample 152	-0.3888	0.2011	0.4993	0.2104	0.0162	0.2622	0.0743	-0.2283

Sample 153	-0.3612	0.0614	0.4256	0.2207	0.1556	0.0884	-0.0425	-0.1101
Sample 154	-0.3673	0.1478	0.4121	0.2464	0.1207	0.2093	0.1143	-0.1115
Sample 155	-0.3821	0.1103	0.4346	0.3458	0.0286	0.0263	0.0185	-0.0528
Sample 156	-0.3622	0.0757	0.4722	0.3244	0.0897	0.0944	0.0744	-0.1299
Sample 157	-0.4253	0.0884	0.485	0.3072	0.1463	0.1552	-0.0138	-0.0711
Sample 158	-0.2458	-0.0051	0.4687	0.3334	0.0689	0.0653	0.1162	-0.065
Sample 159	-0.3924	0.0444	0.415	0.1895	0.1565	0.1541	-0.017	-0.0881
Sample 160	-0.3159	-0.0433	0.4054	0.2756	0.0603	0.1565	-0.0946	-0.152
Sample 161	-0.4405	0.1138	0.3712	0.307	0.0062	0.1715	-0.0351	-0.2239
Sample 162	-0.3648	0.1481	0.4659	0.2416	0.1046	0.113	0.0435	-0.1068
Sample 163	-0.4146	-0.0155	0.4766	0.4246	0.1219	0.197	0.0944	-0.1152
Sample 164	-0.4617	0.0722	0.576	0.2608	0.1125	0.1403	-0.0265	-0.0358
Sample 165	-0.447	0.1413	0.4007	0.349	0.0467	0.1792	0.1046	-0.0308
Sample 166	-0.4152	0.2416	0.4406	0.1858	0.1429	0.0957	-0.0399	-0.1169
Sample 167	-0.3339	0.1158	0.4612	0.1176	0.1115	0.1203	0.0415	-0.0968
Sample 168	-0.3563	-0.0306	0.4936	0.2809	0.0315	0.1591	0.0945	-0.0476
Sample 169	-0.2304	0.0094	0.3367	0.2317	0.1603	0.1357	-0.0094	-0.113
Sample 170	-0.4371	0.0185	0.4608	0.3498	0.0914	0.1299	0.0709	-0.0509
Sample 171	-0.373	0.0358	0.4505	0.2251	0.165	0.2685	0.0676	-0.2062
Sample 172	-0.4695	0.0687	0.4454	0.3066	0.0956	0.1411	0.0256	-0.1033
Sample 173	-0.3138	0.0526	0.4466	0.1775	0.0249	0.0802	-0.0299	-0.1207
Sample 174	-0.2023	0.0191	0.3967	0.2629	0.0777	0.1072	0.064	-0.0626
Sample 175	-0.3119	0.0151	0.4123	0.1799	0.1062	0.1333	0.0244	-0.0301
Sample 176	-0.308	-0.0524	0.4035	0.3575	-0.0317	0.1312	-0.0684	-0.2014
Sample 177	-0.3426	-0.0174	0.4008	0.287	0.1601	0.1586	0.0167	-0.1543
Sample 178	-0.4749	0.0935	0.5072	0.3188	0.1268	0.0412	-0.0173	-0.0607
Sample 179	-0.5222	0.093	0.5298	0.3311	-0.019	0.0907	-0.0302	-0.1355
Sample 180	-0.2612	0.048	0.4269	0.3011	-0.0445	0.1235	-0.0363	-0.105
Sample 181	-0.2619	0.0654	0.33	0.1997	0.0786	0.2034	0.2006	-0.0563
Sample 182	-0.2382	0.1529	0.4619	0.0924	0.0847	0.039	-0.0939	-0.1411
Sample 183	-0.3225	0.0986	0.4467	0.1879	0.1094	0.1573	-0.0112	-0.1847

Sample 184	-0.1908	-0.0056	0.4292	0.1823	0.031	0.1698	0.0719	-0.1426
Sample 185	-0.2852	-0.0265	0.429	0.1294	0.129	0.1421	0.0025	-0.2021
Sample 186	-0.3717	0.0941	0.4703	0.1895	0.0724	0.07	0.0616	-0.0035
Sample 187	-0.3703	0.129	0.4941	0.1917	0.0877	0.1273	-0.0099	-0.07
Sample 188	-0.2261	0.0021	0.4054	0.1618	0.0529	0.1677	-0.0611	-0.1035
Sample 189	-0.3018	0.0885	0.414	0.143	0.0287	0.0937	-0.1918	-0.1454
Sample 190	-0.2549	-0.1247	0.4659	0.3063	0.0598	0.0304	-0.135	-0.121
Sample 191	-0.203	-0.0863	0.4755	0.2004	0.1238	0.1039	0.0476	-0.0577
Sample 192	-0.3082	-0.0371	0.4495	0.3061	0.0257	0.1201	0.0568	-0.0897
Sample 193	-0.4122	0.0499	0.5206	0.2686	0.0715	0.0773	0.0505	-0.0979
Sample 194	-0.4074	0.0705	0.4556	0.2566	0.1643	0.0908	0.0504	0.0265
Sample 195	-0.4257	0.1072	0.4067	0.3009	0.0426	0.2071	0.1184	-0.0388
Sample 196	-0.4485	0.0354	0.3874	0.3845	0.1129	0.1796	0.0505	-0.0411
Sample 197	-0.3826	0.0492	0.502	0.2005	0.1148	0.2046	0.0611	-0.0916
Sample 198	-0.3653	0.006	0.3529	0.3206	0.0391	0.1139	-0.0648	-0.0199
Sample 199	-0.3789	-0.0147	0.4339	0.2823	0.052	0.2288	-0.0274	-0.026
Sample 200	-0.3214	0.0623	0.3432	0.1733	0.1299	0.1629	0.0369	-0.0208
Sample 201	-0.3303	-0.0212	0.5272	0.1894	0.1224	0.1361	0.0365	-0.1539
Sample 202	-0.1517	-0.0048	0.4388	0.0825	0.1617	0.0801	-0.0165	-0.1304
Sample 203	-0.4349	0.0649	0.4023	0.3294	0.0624	0.2383	0.0598	-0.07
Sample 204	-0.4779	0.1337	0.5164	0.2238	0.0982	0.1613	0.0618	-0.1004
Sample 205	-0.2402	0.0546	0.3717	0.2147	0.1304	0.055	0.1316	-0.0482
Sample 206	-0.3296	0.0421	0.4884	0.261	0.0664	0.1317	-0.0244	-0.1334
Sample 207	-0.315	0.0565	0.4982	0.2516	0.0624	0.1637	0.1	-0.1105
Sample 208	-0.3906	0.0664	0.3978	0.3278	0.1565	0.1445	-0.0446	-0.1092
Sample 209	-0.2273	-0.1678	0.6472	0.1876	0.0198	0.074	0.0716	-0.1294
Sample 210	-0.3454	0.0108	0.436	0.2862	0.1079	0.2193	0.1235	-0.1339
Sample 211	-0.2975	0.0404	0.4313	0.2315	0.0762	0.1857	0.0339	-0.1537
Sample 212	-0.1868	0.0149	0.4826	0.159	0.0902	0.1415	-0.0152	-0.1987
Sample 213	-0.4969	0.0956	0.5549	0.2538	0.061	0.1054	-0.0339	-0.1363
Sample 214	-0.3596	0.1102	0.4658	0.2403	0.0158	0.2294	0.0782	-0.0485

Sample 215	-0.3405	0.0802	0.4328	0.1786	0.0974	0.1811	0.1095	-0.0811
Sample 216	-0.2697	0.0171	0.4994	0.2893	0.1097	0.03	-0.0327	-0.1095
Sample 217	-0.429	-0.0427	0.4315	0.2797	0.1052	0.1296	-0.0849	-0.1485
Sample 218	-0.3724	0.0328	0.4406	0.2712	0.0706	0.2079	0.0379	-0.1446
Sample 219	-0.357	0.0558	0.4963	0.1979	0.0814	0.0843	-0.0594	-0.0655
Sample 220	-0.262	-0.0292	0.4834	0.2399	0.1096	-0.0381	-0.1597	-0.1258
Sample 221	-0.341	0.0813	0.4619	0.2747	0.0988	0.092	0.0302	-0.1066
Sample 222	-0.3147	0.0214	0.4465	0.2582	0.0485	0.0846	-0.0118	-0.0977
Sample 223	-0.4524	0.0543	0.4806	0.3092	0.1455	0.1183	0.0555	-0.0886
Sample 224	-0.4128	-0.0214	0.4895	0.22	0.1301	0.1226	-0.0385	-0.1483
Sample 225	-0.3386	-0.0145	0.3862	0.264	0.0713	0.1733	-0.0023	-0.07
Sample 226	-0.2686	0.0644	0.4631	0.15	0.0865	0.0157	-0.1443	-0.158
Sample 227	-0.2133	-0.136	0.4099	0.1933	0.0315	-0.0102	-0.0812	-0.0692
Sample 228	-0.4053	0.0885	0.3806	0.2572	0.124	0.1061	-0.0478	-0.128
Sample 229	-0.3893	0.0762	0.4425	0.2905	0.1058	0.1332	-0.0619	-0.0913
Sample 230	-0.5354	0.0914	0.4588	0.3784	0.0693	0.1622	-0.0322	-0.056
Sample 231	-0.3955	0.0674	0.4692	0.2534	0.0888	0.2114	0.0587	-0.0696
Sample 232	-0.2018	-0.0735	0.5037	0.2042	0.0798	0.2012	0.074	-0.1369
Sample 233	-0.214	-0.0632	0.4277	0.2164	0.0621	0.1663	-0.0533	-0.0822
Sample 234	-0.3199	-0.0142	0.471	0.2383	0.1131	0.172	0.1085	-0.037
Sample 235	-0.3681	0.0237	0.4584	0.3219	0.0373	0.1668	0.1223	-0.1162
Sample 236	-0.2391	-0.0083	0.5049	0.0642	0.1005	0.1802	-0.0205	-0.0715
Sample 237	-0.1981	-0.0291	0.4286	0.2334	0.0404	0.1782	0.0223	-0.2204
Sample 238	-0.2722	-0.0113	0.4645	0.2028	0.0902	0.1712	0.0816	-0.1016
Sample 239	-0.3606	-0.0064	0.3502	0.2692	0.1747	0.1722	-0.0169	-0.078
Sample 240	-0.4181	0.024	0.5336	0.2976	0.1343	0.1255	-0.0006	-0.0641
Sample 241	-0.3439	0.0097	0.5805	0.245	0.1146	0.0569	0.0589	-0.1528
Sample 242	-0.3228	-0.0108	0.425	0.3751	0.0274	0.1043	0.0392	-0.0532
Sample 243	-0.4114	0.1299	0.2949	0.2556	0.1961	0.1607	0.1247	-0.0565
Sample 244	-0.3786	0.0367	0.4439	0.2211	0.1088	0.1564	-0.0167	-0.0494
Sample 245	-0.3127	0.0191	0.4683	0.2956	0.0851	0.0627	0.0096	-0.1046

Sample 246	-0.2375	-0.0573	0.4303	0.2355	0.128	0.1387	-0.0068	-0.1335
Sample 247	-0.2212	0.0425	0.4032	0.1363	0.1124	0.0542	-0.0322	-0.1429
Sample 248	-0.2582	-0.107	0.516	0.2968	0.1404	0.1007	0.0402	-0.1419
Sample 249	-0.3894	-0.0238	0.4776	0.2397	0.0753	0.1009	-0.047	-0.0724
Sample 250	-0.3575	0.1204	0.3397	0.2458	0.0514	0.1176	0.0406	-0.0716
Sample 251	-0.3886	0.1045	0.4634	0.2544	0.074	0.1904	-0.0216	-0.081
Sample 252	-0.407	0.0478	0.3686	0.2807	0.115	0.2515	0.0655	-0.0527
Sample 253	-0.4161	0.1349	0.5368	0.2605	-0.0001	0.0956	0.0291	-0.2284
Sample 254	-0.327	0.0218	0.3909	0.1956	0.144	0.1106	0.0173	-0.2137
Sample 255	-0.4179	0.1121	0.5238	0.3692	0.0504	0.0891	-0.0009	-0.222
Sample 256	-0.2558	0.097	0.3235	0.1438	0.0361	0.1741	-0.0752	-0.0273
Sample 257	-0.2752	-0.0504	0.3974	0.2705	0.0995	0.2053	-0.0667	-0.059
Sample 258	-0.5614	0.0994	0.3801	0.3917	0.1135	0.1635	0.0385	0.0041
Sample 259	-0.316	0.0231	0.4765	0.2793	0.0524	0.1824	0.0058	-0.1528
Sample 260	-0.4166	0.0783	0.41	0.3207	0.0432	0.111	0.0273	0.0091
Sample 261	-0.3322	-0.0661	0.5012	0.2342	0.1164	0.0324	-0.0834	-0.1329
Sample 262	-0.3048	0.0263	0.4019	0.25	0.0656	0.0378	0.0555	-0.116
Sample 263	-0.509	0.0278	0.3827	0.272	0.1547	0.1665	-0.0309	-0.0849
Sample 264	-0.3659	-0.0485	0.55	0.3583	-0.0164	0.162	0.1227	-0.1506
Sample 265	-0.2368	0.0466	0.5204	0.1058	0.0737	0.0768	-0.0409	-0.2166
Sample 266	-0.3899	0.0286	0.4145	0.2892	0.0756	0.1279	0.0086	-0.0285
Sample 267	-0.354	-0.0113	0.4478	0.2044	0.1049	0.1547	0.024	-0.1143
Sample 268	-0.2718	0.0489	0.4334	0.2624	0.1061	0.104	0.0078	-0.1379
Sample 269	-0.3631	0.0199	0.4568	0.2076	0.0065	0.2336	0.0712	-0.039
Sample 270	-0.395	0.0633	0.4125	0.3011	0.0681	0.1111	0.0332	-0.081
Sample 271	-0.3217	0.0483	0.4353	0.2276	0.1029	0.1937	0.0247	-0.123
Sample 272	-0.2039	-0.0306	0.4661	0.2172	0.0982	0.0607	-0.0201	-0.1451
Sample 273	-0.3666	0.0387	0.4208	0.3412	0.1009	0.0428	-0.0589	-0.1036
Sample 274	-0.3292	0.0707	0.4521	0.2256	0.07	0.1674	-0.0043	-0.0302
Sample 275	-0.3523	0.0761	0.4716	0.3083	0.0444	0.0696	-0.1131	-0.1627
Sample 276	-0.395	0.0694	0.5274	0.2208	-0.0069	0.2425	0.0525	-0.081

Sample 277	-0.2371	-0.0317	0.5305	0.147	0.0481	0.0815	0.0147	-0.0468
Sample 278	-0.2998	0.0654	0.4681	0.2673	-0.0682	0.1188	0.0549	-0.218
Sample 279	-0.2523	0.0053	0.4785	0.2518	0.0348	0.0877	-0.0682	-0.0607
Sample 280	-0.2427	0.0782	0.4771	0.1056	0.0834	0.1694	0.1008	-0.0997
Sample 281	-0.2436	0.0259	0.4518	0.1795	0.0321	0.0567	0.0563	-0.0985
Sample 282	-0.2236	0.0245	0.4307	0.2499	0.0522	0.0888	0.035	-0.1097
Sample 283	-0.3751	-0.0329	0.5375	0.3074	0.1095	0.0958	0.0307	-0.0847
Sample 284	-0.2376	0.014	0.4766	0.2001	0.0829	0.1735	0.0607	-0.1297
Sample 285	-0.2932	-0.0593	0.5342	0.2763	0.0056	0.13	0.0225	-0.1259
Sample 286	-0.3793	0.0515	0.592	0.2862	0.0576	0.1451	0.1167	-0.0376
Sample 287	-0.3028	-0.0272	0.4981	0.1854	0.0952	0.039	-0.0917	-0.0715
Sample 288	-0.36	0.123	0.4532	0.2026	0.0828	0.1146	0.013	-0.0549
Sample 289	-0.3541	0.0257	0.4408	0.2026	0.1393	0.0225	-0.0244	-0.1125
Sample 290	-0.4815	0.0761	0.5055	0.3734	-0.0059	0.1663	0.096	-0.2441
Sample 291	-0.3249	-0.0178	0.3921	0.3719	0.0579	0.1818	0.0275	-0.1529
Sample 292	-0.2247	0.0361	0.5184	0.1429	-0.0288	0.1306	0.1546	-0.1377
Sample 293	-0.3452	0.0134	0.5157	0.1393	0.103	0.1031	0.0358	-0.1085
Sample 294	-0.3036	0.0321	0.3745	0.1989	0.1275	0.1564	-0.0336	-0.1451
Sample 295	-0.3564	0.0456	0.4547	0.2202	0.0943	0.0713	-0.0133	-0.1136
Sample 296	-0.2128	-0.0351	0.4186	0.1299	0.0717	0.3314	0.0138	-0.1016
Sample 297	-0.2321	0.0812	0.483	0.2088	0.0368	0.142	0.1104	-0.1137
Sample 298	-0.3697	0.0521	0.4908	0.2356	0.0546	0.1776	0.0748	-0.0744
Sample 299	-0.2799	-0.0066	0.4907	0.1633	0.1045	0.1275	0.062	-0.1694
Sample 300	-0.1731	-0.0456	0.5976	0.1667	-0.0047	0.0942	0.0681	-0.0754
Sample 301	-0.316	0.1243	0.4731	0.1575	0.0965	0.032	-0.021	-0.1272
Sample 302	-0.3463	0.0066	0.5338	0.2863	0.0409	0.0815	0.05	-0.1482
Sample 303	-0.2609	0.0934	0.3814	0.3251	0.1166	0.0935	-0.0229	-0.1614
Sample 304	-0.3909	0.0653	0.6221	0.2607	0.0444	0.1653	0.1062	-0.0978
Sample 305	-0.3394	0.0432	0.5098	0.2608	0.1223	0.1205	0.0277	-0.0592
Sample 306	-0.3637	0.0352	0.4715	0.2257	0.0089	0.122	-0.0263	-0.1401
Sample 307	-0.4792	0.1087	0.3646	0.3577	0.1024	0.2107	-0.0066	-0.075

Sample 308	-0.3631	0.0455	0.4693	0.2708	0.091	0.1396	0.0948	-0.0861
Sample 309	-0.1828	-0.0132	0.5179	0.0418	0.0722	0.1189	0.0388	-0.2595
Sample 310	-0.2651	-0.0751	0.3341	0.3233	0.1986	0.0133	0.1057	0.0491
Sample 311	-0.3816	0.0736	0.5593	0.2735	0.0553	0.1259	0.0037	-0.1122
Sample 312	-0.3703	0.0591	0.5429	0.1655	0.0702	0.2091	0.0005	-0.215
Sample 313	-0.3669	0.0229	0.4645	0.2171	0.112	0.1541	0.0007	-0.0273
Sample 314	-0.3058	0.0718	0.4169	0.2874	0.0491	0.1832	0.0212	-0.094
Sample 315	-0.3252	0.0445	0.425	0.2924	0.1055	0.1737	0.0595	-0.0396
Sample 316	-0.3765	0.0454	0.4346	0.3414	0.082	0.1141	-0.0269	-0.0292
Sample 317	-0.2901	0.0456	0.4658	0.2628	0.0862	0.1186	0.0898	-0.054
Sample 318	-0.4023	-0.0505	0.3531	0.425	0.0087	0.1478	0.0329	-0.1808
Sample 319	-0.443	0.0464	0.4704	0.2569	0.1616	0.1119	-0.0349	-0.1022
Sample 320	-0.3006	-0.0114	0.5463	0.2269	0.0777	0.1707	0.0724	-0.1965
Sample 321	-0.2853	-0.0598	0.4125	0.2886	0.08	0.1357	0.0254	-0.0917
Sample 322	-0.4321	0.016	0.4983	0.1598	0.0754	0.08	-0.0023	-0.0156
Sample 323	-0.2211	-0.0333	0.4847	0.138	0.1356	0.0715	-0.0536	-0.1613
Sample 324	-0.4547	0.0182	0.6065	0.2045	0.1511	0.09	-0.0032	-0.1131
Sample 325	-0.3196	-0.082	0.5171	0.2818	0.0827	0.0889	-0.0381	-0.0362
Sample 326	-0.2397	0.0528	0.3931	0.1752	0.072	0.083	-0.016	-0.1851
Sample 327	-0.3224	0.1573	0.3288	0.2427	0.0827	0.156	0.0336	-0.1146
Sample 328	-0.2948	0.0645	0.4439	0.2121	0.0635	0.2661	0.037	-0.0915
Sample 329	-0.2519	0.0998	0.4545	0.2082	-0.0347	0.1632	0.0466	-0.1655
Sample 330	-0.2512	0.0821	0.3616	0.205	0.084	0.1673	0.043	-0.1284
Sample 331	-0.2978	-0.1304	0.5544	0.1881	0.0761	0.1268	-0.0301	-0.1377
Sample 332	-0.4029	0.1327	0.2816	0.3718	-0.0111	0.1548	-0.0042	-0.0715
Sample 333	-0.2714	0.0149	0.4927	0.2114	0.004	0.0919	-0.0264	-0.1527
Sample 334	-0.3046	-0.0202	0.3756	0.1726	0.0849	0.2105	-0.0397	-0.1679
Sample 335	-0.3953	0.0789	0.4999	0.3003	0.1084	0.0683	0.083	-0.0666
Sample 336	-0.2049	0.0162	0.3733	0.2064	0.0605	0.1589	0.0136	-0.1415
Sample 337	-0.3421	-0.0755	0.4568	0.2299	0.1237	0.22	-0.0297	-0.0966
Sample 338	-0.3843	0.0541	0.5424	0.2101	0.0918	0.1213	0.1052	-0.025

Sample 339	-0.2878	0.0609	0.5049	0.1697	0.1067	0.0336	-0.0176	-0.1148
Sample 340	-0.2151	0.1811	0.3076	0.0405	0.06	0.1615	-0.0836	-0.1826
Sample 341	-0.4802	0.0523	0.4515	0.2834	0.0183	0.1142	-0.0083	-0.0698
Sample 342	-0.3075	0.1675	0.4706	0.1311	0.0676	0.0603	-0.0218	-0.1551
Sample 343	-0.4208	0.0052	0.4633	0.3436	-0.035	0.2509	-0.0029	-0.0661
Sample 344	-0.3897	-0.0111	0.4758	0.2158	0.0483	0.1641	-0.0472	-0.167
Sample 345	-0.3841	0.0145	0.4419	0.2598	0.0763	0.1052	0.0444	-0.0619
Sample 346	-0.4515	0.021	0.5699	0.3653	0.0392	0.1467	0.0844	-0.0807
Sample 347	-0.3676	0.0846	0.4356	0.2437	0.1952	0.1395	0.1026	-0.1441
Sample 348	-0.3768	0.0374	0.4937	0.199	0.125	0.1522	0.0312	-0.0688
Sample 349	-0.2711	0.0779	0.5604	0.1555	0.0185	0.1614	0.1114	-0.1684
Sample 350	-0.2051	0.0159	0.4532	0.1662	0.1097	0.1306	0.0616	-0.2037
Sample 351	-0.4147	0.0536	0.4765	0.1349	0.1677	0.1475	0.0783	0.0157
Sample 352	-0.1867	0.123	0.3474	0.1972	0.1339	0.0556	0.0126	-0.1575
Sample 353	-0.3994	0.1477	0.4218	0.3455	0.0607	0.0756	-0.0915	-0.1029
Sample 354	-0.2722	0.0226	0.3988	0.2088	0.0892	-0.0403	-0.1018	-0.1082
Sample 355	-0.395	0.1052	0.4906	0.2054	0.0854	0.082	-0.0134	-0.0454
Sample 356	-0.2704	0.0271	0.5146	0.2264	0.0866	0.0904	0.0268	-0.0855
Sample 357	-0.3712	0.1731	0.4434	0.1533	-0.0087	0.1515	0.0174	-0.0767
Sample 358	-0.3808	0.0366	0.2573	0.2955	0.1568	0.1701	0.1508	0.0914
Sample 359	-0.3197	0.0008	0.4253	0.3193	0.0535	0.0325	-0.0296	-0.1136
Sample 360	-0.5071	0.1755	0.3725	0.3105	0.0741	0.196	0.1208	-0.0307
Sample 361	-0.2831	-0.0849	0.5143	0.3205	0.0001	0.1593	0.0183	-0.1333
Sample 362	-0.3681	-0.0652	0.4927	0.3169	0.0959	0.1834	0.0242	-0.1191
Sample 363	-0.3944	0.1624	0.3335	0.1149	0.0458	0.1292	0.0829	-0.0639
Sample 364	-0.1908	0.0446	0.2976	0.1988	0.1504	0.1685	0.0418	-0.0478
Sample 365	-0.2516	-0.0174	0.4638	0.2802	-0.0073	0.2007	0.0696	-0.1548
Sample 366	-0.3645	0.0392	0.4728	0.2108	0.0543	0.2051	0.0744	-0.0672
Sample 367	-0.2347	0.0578	0.4206	0.1541	0.1017	0.1024	-0.0187	-0.0533
Sample 368	-0.4585	0.0165	0.4276	0.3548	0.0768	0.1184	0.098	-0.0118
Sample 369	-0.2444	0.1464	0.2887	0.1645	0.0398	0.0842	-0.032	-0.0543

Sample 370	-0.2842	0.0164	0.4288	0.1511	0.1494	0.2381	0.1088	0.0067
Sample 371	-0.4824	-0.0246	0.3524	0.3763	0.1381	0.1313	-0.0593	0.0008
Sample 372	-0.1787	-0.0022	0.4782	0.1726	-0.0148	0.0709	-0.0927	-0.1476
Sample 373	-0.4203	0.0421	0.5813	0.3132	0.0314	0.0363	-0.0646	-0.2222
Sample 374	-0.3946	0.0234	0.4298	0.3169	0.0527	0.0428	-0.0077	-0.1301
Sample 375	-0.2848	-0.0398	0.5388	0.1592	0.0982	0.1871	0.0708	-0.0804
Sample 376	-0.4124	0.0811	0.4686	0.2878	0.0648	0.1569	0.0778	-0.1122
Sample 377	-0.4887	0.1193	0.5489	0.2953	0.0722	0.1384	0.0969	-0.1298
Sample 378	-0.2218	0.0075	0.3933	0.2337	0.0922	0.0939	-0.0108	-0.1209
Sample 379	-0.3634	-0.0134	0.5378	0.1439	0.0976	0.1462	0.0461	-0.2134
Sample 380	-0.4798	-0.0158	0.428	0.3315	0.0816	0.1649	-0.0913	-0.0767
Sample 381	-0.5276	0.0574	0.4303	0.3139	0.1973	0.2386	0.1065	0.0274
Sample 382	-0.4583	0.0008	0.524	0.3983	0.0708	0.1938	0.0896	-0.0457
Sample 383	-0.309	-0.0062	0.5415	0.1975	-0.0557	0.1579	0.0586	-0.0491
Sample 384	-0.3511	-0.0356	0.405	0.2914	0.1096	0.0724	-0.0639	-0.0224
Sample 385	-0.4797	0.1145	0.4411	0.3673	0.0528	0.0905	-0.0226	-0.0146
Sample 386	-0.4541	0.0612	0.4692	0.231	0.0992	0.0956	-0.0401	-0.0818
Sample 387	-0.244	0.0323	0.4958	0.1541	0.0777	0.1531	0.1486	-0.0834
Sample 388	-0.2387	0.0047	0.2995	0.3398	0.0722	0.1373	0.0932	-0.1316
Sample 389	-0.4995	-0.0048	0.4346	0.3538	0.1221	0.131	-0.0664	-0.0219
Sample 390	-0.3356	-0.009	0.4371	0.3249	0.0761	0.0902	-0.0238	-0.1829
Sample 391	-0.1506	-0.0279	0.4663	0.2044	-0.0153	0.1063	0.0825	-0.0423
Sample 392	-0.4915	0.0453	0.4931	0.3307	0.1783	0.1434	0.1009	-0.0801
Sample 393	-0.2999	0.0903	0.4232	0.1966	0.095	0.2312	0.1576	-0.0772
Sample 394	-0.2509	-0.0023	0.4907	0.116	0.0965	0.1804	-0.0273	-0.1802
Sample 395	-0.4196	0.0493	0.5405	0.2714	0.1099	0.1381	0.0005	-0.0899
Sample 396	-0.378	0.0457	0.4579	0.3149	0.1326	0.1766	0.1102	-0.0731
Sample 397	-0.3414	0.0787	0.3796	0.2802	0.1166	-0.0406	0.0011	-0.0461
Sample 398	-0.4836	-0.0998	0.4706	0.3501	0.0664	0.1111	0.0217	-0.0122
Sample 399	-0.4018	0.1151	0.3746	0.2934	0.0934	0.1503	0.0893	0.0127
Sample 400	-0.3551	0.088	0.4218	0.1957	0.0328	0.2701	0.0604	-0.1224

Sample 401	-0.1662	0.1058	0.3764	0.1215	-0.0054	0.1322	0.013	-0.035
Sample 402	-0.2612	0.0758	0.4009	0.2184	0.1522	0.1056	-0.0456	-0.1608
Sample 403	-0.248	0.005	0.3875	0.3053	0.1215	0.0482	0.0524	-0.101
Sample 404	-0.4137	0.0682	0.4733	0.2861	0.0023	0.12	-0.029	-0.1162
Sample 405	-0.3961	0.0112	0.4298	0.3307	0.1615	0.0289	-0.0285	-0.077
Sample 406	-0.3919	0.1388	0.3853	0.2483	0.1497	0.1286	-0.0065	-0.0291
Sample 407	-0.2591	0.0085	0.5164	0.0373	0.058	0.1608	0.023	-0.0137
Sample 408	-0.3448	0.0915	0.4594	0.2149	0.1277	0.1515	-0.0109	-0.2381
Sample 409	-0.4572	-0.0134	0.4676	0.3639	0.2159	0.0395	-0.0175	0.0064
Sample 410	-0.3971	-0.0067	0.4642	0.3281	0.0107	0.0882	-0.058	-0.0351
Sample 411	-0.2686	-0.0511	0.4672	0.1849	0.1659	0.176	-0.0413	-0.1189
Sample 412	-0.3652	0.0074	0.4375	0.4157	0.0081	0.1575	0.1004	-0.1329
Sample 413	-0.4088	0.0609	0.4892	0.3795	-0.0239	0.1833	0.1131	-0.0755
Sample 414	-0.429	0.0672	0.5098	0.2424	0.1042	0.0965	-0.0147	-0.1126
Sample 415	-0.2869	-0.0818	0.4299	0.2459	0.1691	0.0139	-0.1175	-0.0509
Sample 416	-0.4668	-0.0509	0.4794	0.4197	0.1167	0.0741	0.0396	-0.0846
Sample 417	-0.3442	0.0385	0.5161	0.2699	0.0938	0.1003	-0.0142	-0.175
Sample 418	-0.1398	-0.1111	0.5722	0.2334	-0.049	0.1837	0.101	-0.1843
Sample 419	-0.3425	0.0858	0.3705	0.366	0.1088	0.0285	-0.054	-0.096
Sample 420	-0.342	0.0599	0.3555	0.236	0.0142	0.1668	-0.028	-0.1724
Sample 421	-0.2822	0.0307	0.4026	0.23	0.0905	0.1288	-0.0032	-0.0986
Sample 422	-0.3515	0.1368	0.4175	0.1922	0.1168	0.1147	0.0424	-0.0607
Sample 423	-0.3161	-0.0328	0.4851	0.369	0.052	0.103	-0.0154	-0.0326
Sample 424	-0.46	0.0288	0.52	0.435	-0.0199	0.0737	-0.0264	-0.0227
Sample 425	-0.496	0.0769	0.5259	0.276	-0.013	0.1739	0.0157	-0.124
Sample 426	-0.443	0.1582	0.5376	0.2262	0.0765	0.1686	0.1137	-0.1328
Sample 427	-0.3642	0.01	0.4892	0.2637	0.1061	0.1282	0.0597	-0.0903
Sample 428	-0.3937	0.1852	0.2331	0.343	0.1363	0.1733	0.1215	-0.0482
Sample 429	-0.3164	0.0005	0.5626	0.1679	0.0557	0.1641	0.0114	-0.1837
Sample 430	-0.4946	-0.0227	0.5218	0.3545	0.083	0.0749	-0.0532	-0.0536
Sample 431	-0.3785	-0.0452	0.3555	0.346	0.1344	0.1251	-0.0168	-0.0902

Sample 432	-0.276	-0.0966	0.4532	0.1552	-0.0091	0.1038	-0.0676	-0.1369
Sample 433	-0.2089	-0.019	0.4702	0.132	0.0819	0.1456	0.0623	-0.0759
Sample 434	-0.3338	-0.0356	0.4324	0.2968	0.0493	0.156	-0.0536	-0.0913
Sample 435	-0.3418	0.0148	0.4793	0.1885	0.1328	0.2753	0.0981	-0.1392
Sample 436	-0.3892	0.0671	0.4393	0.3727	0.0177	0.2769	0.1261	-0.1381
Sample 437	-0.2801	-0.0499	0.3777	0.3105	0.0693	0.0661	-0.1165	-0.1109
Sample 438	-0.3489	0.0604	0.3424	0.1875	0.134	0.097	-0.2355	-0.1504
Sample 439	-0.3183	0.1759	0.3841	0.2163	0.0949	0.1685	-0.0282	-0.0742
Sample 440	-0.3064	0.0154	0.3501	0.2442	0.16	0.2602	0.0204	0.0017
Sample 441	-0.2917	0.0376	0.4113	0.2237	0.1269	0.2373	0.1289	-0.0671
Sample 442	-0.3808	0.0712	0.4238	0.3395	0.1062	0.0837	0.0328	-0.0857
Sample 443	-0.266	-0.0179	0.4265	0.2395	0.0543	0.147	0.0031	-0.074
Sample 444	-0.2647	-0.0362	0.4769	0.2359	0.1653	0.0446	-0.0031	0.0406
Sample 445	-0.3783	0.1104	0.3744	0.2077	0.107	0.1469	0.0262	-0.038
Sample 446	-0.3467	0.0985	0.4338	0.152	0.1932	0.1557	-0.1037	-0.157
Sample 447	-0.4037	0.084	0.5001	0.2914	0.0347	0.1244	0.0242	-0.0897
Sample 448	-0.2932	-0.0144	0.4664	0.1372	0.1155	0.1368	-0.0712	-0.1063
Sample 449	-0.1885	-0.0118	0.371	0.1874	0.1523	0.1838	0.0166	-0.1366
Sample 450	-0.3081	0.0221	0.5521	0.3106	0.03	0.0534	0.0379	-0.1394
Sample 451	-0.2704	0.0236	0.3976	0.2966	0.0839	0.1598	0.0296	-0.0958
Sample 452	-0.1822	-0.0689	0.4295	0.1516	0.0167	0.0876	-0.126	-0.1063
Sample 453	-0.2283	0.0457	0.4516	0.0351	0.0443	0.0367	-0.1031	-0.1443
Sample 454	-0.3692	0.08	0.4736	0.1929	0.0632	0.1695	0.0373	-0.1096
Sample 455	-0.2057	-0.0552	0.5314	0.1923	0.0242	0.1232	-0.0144	-0.1926
Sample 456	-0.2706	-0.0859	0.5265	0.2256	0.0747	0.0069	-0.0107	-0.1297
Sample 457	-0.3139	0.0367	0.4507	0.2799	0.0607	0.1175	0.0248	-0.0724
Sample 458	-0.3074	-0.0248	0.4678	0.0892	0.0906	0.0939	-0.1301	-0.0663
Sample 459	-0.3653	0.1205	0.4863	0.2156	0.133	0.103	-0.023	-0.103
Sample 460	-0.3734	-0.021	0.46	0.3997	0.005	0.1501	0.044	-0.0867
Sample 461	-0.3538	0.0761	0.4356	0.1756	0.0564	0.2236	0.0491	-0.1626
Sample 462	-0.2825	0.0575	0.4474	0.1325	0.0234	0.1559	-0.0639	-0.1171

Sample 463	-0.5215	0.1006	0.5135	0.3457	0.0519	0.1523	0.04	-0.0501
Sample 464	-0.2793	0.0428	0.4035	0.2191	0.0555	0.0972	-0.0198	-0.0397
Sample 465	-0.3232	-0.065	0.4415	0.2162	0.0807	0.1782	-0.0177	-0.0894
Sample 466	-0.1595	0.0113	0.2995	0.0494	0.0705	0.2264	-0.0217	-0.0555
Sample 467	-0.3518	0.0623	0.4684	0.1488	0.0805	0.1805	-0.007	-0.1595
Sample 468	-0.4139	0.0664	0.3578	0.2324	0.1997	0.1334	0.0491	-0.0288
Sample 469	-0.4075	0.0779	0.419	0.389	0.0734	0.1516	0.1089	-0.0352
Sample 470	-0.4068	0.0335	0.4423	0.331	0.0697	0.1923	0.045	-0.1354
Sample 471	-0.2161	-0.0453	0.5307	0.1173	0.024	0.1234	-0.0256	-0.0992
Sample 472	-0.2589	-0.0505	0.4034	0.2577	0.1011	0.1633	0.0294	-0.0374
Sample 473	-0.2552	0.0477	0.4898	0.2229	0.0448	0.126	0.175	-0.1544
Sample 474	-0.2366	0.0304	0.4453	0.1446	0.0684	0.1206	0.1027	-0.0815
Sample 475	-0.3937	0.09	0.4923	0.2246	0.144	0.1583	-0.0354	-0.1072
Sample 476	-0.3068	0.0337	0.4615	0.2985	0.0356	0.1172	-0.0128	-0.1026
Sample 477	-0.3321	0.0428	0.4711	0.247	0.1322	0.0751	-0.0086	-0.0166
Sample 478	-0.2927	-0.0597	0.4776	0.292	0.0615	0.1045	0.0239	-0.0617
Sample 479	-0.354	0.0077	0.4917	0.2476	0.0354	0.128	0.0469	-0.0492
Sample 480	-0.2859	0.1157	0.4202	0.2465	0.0834	0.1356	0.055	-0.1008
Sample 481	-0.1582	0.0412	0.4762	0.0419	0.0178	0.116	-0.1042	-0.0827
Sample 482	-0.4752	0.0159	0.554	0.3727	0.0437	0.0903	0.0217	-0.0891
Sample 483	-0.3484	0.0771	0.3852	0.2543	0.0742	0.1582	0.2116	-0.1467
Sample 484	-0.2617	0.0054	0.3348	0.156	0.1621	0.3117	-0.0281	-0.0874
Sample 485	-0.316	0.0534	0.4765	0.1732	0.0473	-0.0008	-0.0904	-0.0292
Sample 486	-0.3876	0.0127	0.5206	0.2932	0.0779	0.0527	0.0112	-0.1627
Sample 487	-0.4759	0.1014	0.4079	0.2981	0.0342	0.2245	-0.013	-0.2224
Sample 488	-0.4178	0.0782	0.4707	0.2635	0.1108	0.123	0.0152	-0.1072
Sample 489	-0.3303	-0.0233	0.593	0.1533	0.0763	0.0856	-0.001	-0.1361
Sample 490	-0.4142	0.0011	0.5181	0.3533	0.1017	0.086	-0.004	-0.145
Sample 491	-0.2707	0.0255	0.4421	0.2154	0.0918	0.1235	0.063	-0.1309
Sample 492	-0.3009	-0.0652	0.4701	0.1754	0.1092	0.1366	-0.0144	-0.1159
Sample 493	-0.3316	-0.1118	0.61	0.1398	0.15	0.1184	-0.019	-0.1006

Sample 494	-0.2318	-0.1028	0.5575	0.211	0.037	0.1671	0.0891	-0.1762
Sample 495	-0.1985	-0.0599	0.5673	0.22	0.0191	0.1429	0.0266	-0.1561
Sample 496	-0.2887	0.1187	0.304	0.0746	0.1646	0.1385	-0.059	-0.0461
Sample 497	-0.2113	-0.0026	0.484	0.075	0.1893	0.1109	-0.07	-0.0131
Sample 498	-0.2383	0.0225	0.4535	0.177	0.1451	0.1998	-0.032	-0.1177
Sample 499	-0.3656	-0.1232	0.6592	0.2949	0.1111	0.1259	0.0436	-0.1249

NO	CGP> OC > TI	PAD> OC > TI	PS > OC > TI	RG > OC > TI	SA > OC > TI	PA> OC > TI	TD> OC > TI
a*b	0.055	-0.008	-0.064	-0.037	-0.011	-0.02	0.008
STDVA	0.020	0.008	0.029	0.015	0.007	0.01	0.008
T-VALUE	2.71	0.99	2.19	2.41	1.52	1.95	0.968
P-VALUE	0.003	0.162	0.014	0.008	0.065	0.026	0.167

