CAREER GOAL CLARITY AND CAREER MATURITY: THE MODERATING ROLE OF GENERAL SELF-EFFICACY AMONG POSTGRADUATE STUDENTS OF PUBLIC SECTOR UNIVERSITIES OF ISLAMABAD

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A thesis submitted in partial fulfillment of the requirements for the degree of

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Approval Sheet

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DECLARATION

I certify that this research work titled "Career Goal Clarity and Career Maturity: The Moderating Role of General Self-Efficacy among Postgraduate Students of Public Sector Universities of Islamabad" is my own work. The work has not been presented elsewhere for assessment. The material that has been used from other sources it has been properly acknowledged/referred.

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LANGUAGE CORRECTNESS CERTIFICATE

This thesis has been read by an English expert and is free of typing, syntax, semantic, grammatical and spelling mistakes. Thesis is also according to the format given by the university.

Signature of Student

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COPYRIGHT STATEMENT

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I have no words to say thanks to ALLAH, Who has given me the courage and capability to full fill this task. Throughout this research many people helped me in numerous ways in order to complete my research. First of all I am thankful to my teachers for providing good environment and providing enough opportunities so that I become capable of conducting the research. I am great full especially for my supervisor Dr. Aamna Saleem Khan who gave me quality time and enough knowledge to make me capable of understanding the whole topic. I am thank full to my wife she was always there to support me at every step, without help and appreciation it would not have been possible to face the challenges especially during data collection that was the toughest part of the research. I have spent many hours at the computer instead of my family, her understanding helped me in the accomplishment of this project.

DEDICATION

I dedicated this research to my wife for her constant support, encouragement and devotions. And secondly to my supervisor Dr. Aamna Saleem Khan who guided me at every stage and make me capable of conducting this research.

LIST OF ABBREVIATIONS

ACGC	Academic and Career Goal Clarity
ANOVA	Analysis of Variance
Bio-Tech	Bio Technology
CMI	Career Maturity Inventory
df	Degree of Freedom
Eco	Economics
F	Coefficient of Analysis of Variance
GSE	General Self-Efficacy
MD	Mean Difference
M	Mean
N	Number of Respondents
NS	Natural Science
Pak-Studies	Pakistan Studies
Phy	Physics
Psy	Psychology
SD	Standard Deviation
SE	Standard Error
SPSS	Statistical Package of Social Sciences
SS	Social Sciences
Uni. A	National University of Science & Technology
Uni. B	Quaid-I-Azam University Islamabad
Uni. C	International Islamic University Islam

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ABSTRACT

Career maturity is an important constituent of career growth and that leads towards career success. The objective of this study was to assess the impact of career goal clarity on career maturity among postgraduate students of public sector universities of Islamabad and it also measured the moderating role of general self-efficacy on career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad. Career maturity is the ability to master of the responsibilities of a person appropriate to his/her progressive stage; career goal clarity is a clear vision that the person is striving to achieve prior to reach one's goals; and general self-efficacy is a resilient sense of personal effectiveness, a capability to cope effectively with nerve-wracking circumstances. The sample size was consisted of 286 postgraduate students of social and natural sciences of two public sector universities of Islamabad. Academic and Career Goal Clarity Scale, Career Maturity Inventory-Revised and General Self-Efficacy were used. The hypotheses were tested through *t*-test, analysis of variance (ANOVA), product-moment coefficient of correlation, simple linear regression analysis and moderation regression analysis with the help of Statistical Package for the Social Sciences (SPSS-XVIII). The findings indicated that postgraduate students showed similarity in the mean scores of career goal clarity and career maturity. Similar trend was observed across the gender in the mean scores of career goal clarity and career maturity. A moderate level of correlation was observed between career maturity and career goal clarity. The results revealed the career goal clarity is significantly predicting the career maturity and general self-efficacy has acted as moderator.

Keywords: Career Counseling, Career Goal Clarity, Career Maturity, General Self-Efficacy

CHAPTER 1: INTRODUCTION

1.1 Introduction

Education serves multiple purposes, the main purpose of education is preparing the students to understand themselves and increase their competence to choose a career. It will increase the awareness about careers and enable them to know themselves. The career is the amalgamation of life roles as a child, student, member of a society and employee. The task of choosing a career becomes more difficult when looking at the diverse nature of education system of our country, where we have madaras to modern systems of schooling. The success of schooling can be measured by the preparedness or the performance of students in the world of work (Hood & Johnson, 1991). The educators attempt to facilitate the students by offering a variety of career development activities in the curriculum. The implementation of career education in curriculum assists the students in exploration of career interests, personality analysis, and discovery of aptitudes, information about occupations, and other related attributes (Hood & Johnson, 1997).

The successful career progression includes making deliberate, realistic goals, exploring a match between the interests and occupations and knowledge of the labor market (Campbell & Dahir, 1997). The preparedness is the charge of the educational program. The counseling and guidance professionals are solely perceived as responsible for assisting student's career development. Indeed, the counselors are hired to foster the career development which is according to the standards of the American School Counseling Association (ASCA). It has identified major three domains for academic counseling: personal and social, academic, and career development (Campbell & Dahir, 1997). Career counseling is not only identified area of interest, but the emergence of occupation of academic counseling is closely tied to career guidance movement (Gysbers & Henderson, 2000). There are a number of theories that explain the mode of career development. It started with the work of John Holland, which focused on matching of personality and job to postmodern theories which emphasize on career construction. They all focused on a common agenda how careers develop.

Career counseling becomes more important in a developing country like Pakistan, where rapid economic changes, scarce resources, stress and political instability further diminishes job opportunities. Career choice under critical conditions

is an important and difficult task of the life (Osipow, Doty & Spokane1985). The responsibility of career advisor and the educational institutes almost doubles in the current situation. They need to prepare the students for the work environment and make successful transitions.

Development is a sequence of ongoing progression of a change towards maturity (Crites, 1971). Individual career development is greatly influenced by the choices they make. It is assumed that university students have sufficient knowledge of work environment and they opted a field to pursue as a future career. Maturity can be facilitated and enhanced by career counseling and guidance. Career counseling increases the basic understanding aims and objectives of their careers. The primary aim of career counseling is facilitating in planning a successful career and making informed career choices. The career decisions involve choosing a career, selecting a course to pursue for higher studies, attend training or a workshop to increase employment skills and make a successful transition from studies to workforce.

Career maturity has remained under investigation and debate since its inception by Super (1957) in his theory of career development and defined it as mastery of the career related tasks of an individual relevant to his/her developmental stage. Super (1957) introduced it as vocational maturity which has undergone years of investigation to modern explanation. Career maturity is an important construct in Super's life-span, life-space career development theory. Career maturity associated with variations in the readiness of students to cope with vocational development tasks that students face and it highlights one's preparedness to take academic and vocational choices appropriate to their age (Phillips & Blustein, 1994).

Career maturity is a vital developmental approach to understanding the students' career behavior and it involves the measurement of students level of career growth related to their career appropriate development tasks (Crites, 1976). Broadly, Career maturity refers to the individual's preparedness to make age-specific, informed career choices and cope with vocational progress tasks (Savickas, 1984). It includes the student's skill to make suitable career decisions, including knowledge of what is essential to make a career choice.

Career maturity model of Crites (1971) puts forward that it is comprised of cognitive and affective components. The cognitive component includes the decision-making ability and the affective component composed of attitude toward the career decision-making process.

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It refers to differences in preparedness to manage with career development tasks that youths experience and outlines a person's readiness to take age-related educational and career choices (Phillips & Blustein, 1994). Thus, a student is career wise mature if she/he is ready to take well informed career judgments and if she/he has broaden knowledge about vocational and educational choices. Career maturity has ample significance in career selection. Career mature person may possess definite features: collection knowledge about self to be self-awareness, gained essential skills to take well thought career selections, incorporated the self-understanding with the knowledge of the marketplace and design a career.

Career maturity is one of the important aspects of the higher education students and it enables them in training for the labor force. It assists them to make well-versed decisions for opting right majors, effective switches and even selecting a profession (Tekke & Ghani, 2013). Career maturity is improved by gaining work-related knowledge and self-information linked to career destinations. It can be enhanced by discovering its associations and aspects that forecast the vocational maturity. Themba (2010) found that level of career maturity can be enhanced among its young members by facilitating better self-awareness, increasing the resources of information regarding career opportunities, and improving effective career decision-making.

Career maturity and career decision making self-efficacy are significantly related to each other (Bozgeyikli, Eroğlu & Amurcu, 2009). It claimed that different socioeconomic status has a different level of significance on career maturity and career decision making self-efficacy.

The study emphasis was on finding the strength of career goal clarity to predict career maturity. Beside the study, the career maturity and career goal clarity of university students was measured.

Often it is seen that students who do exceptionally well in schools, getting higher percentages/marks are unable to prove their worth in getting good jobs and they under perform in their jobs thereafter. It raises serious questions as to what are the underlying causes for such malaise. Is it an indication that the students are not ready for employment, whether they do not have the set of skills required to perform or mindsets necessary to be employed? Are our systems, methods, and processes having faults? Or are students themselves are accountable, poorly motivated or lacking self-efficacy, having poor study method or upholding poor career goal clarity? No doubt, poor career goal clarity is among one of the important cause of such conditions. Bandura (1989)

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considered career goal clarity as a major process considered for cognitive engagement, which is a vital source of students' motivation. By cognitive processing it strengthens the motivation to form career goals, map a course of action, and guide procedures through career goals.

1.2   Problem Statement and Justification of the Research

The study was aimed to investigate the impact of career goal clarity on career maturity and moderating role of general self-efficacy among postgraduate students of public sector universities of Islamabad. The notion of career maturity was pioneered by Super (1957). It was claimed that a person achieves vocational maturity through exploration to decline stages of career development. He introduced the concept of "vocational maturity quotient", it was called as share of vocation to chronological age. According Crites (1978), the construct of career maturity consists of career readiness, attitude towards developmental tasks and competency to deal with career related developmental issues.

The construct of career maturity has been investigated since its inception and many of its association has been found. The correlates of career maturity include career decision making self-efficacy, self-efficacy and academic performance (Bozgeyikli, Eroğlu & Amurcu, 2009). The only moderators of career maturity include emotional intelligence and social vocational interest (Liu, Peng, & Wong, 2014). No study has been found to discover the impact of career goal clarity and career maturity and general self-efficacy as their moderators. This study will poineer the investigation on impact of career goal clarity on career maturity and genral self-efficacy as their moderator.

The most of the studies on career maturity have been conducted in the west and a number of studies included the students aged 11-14 years (Lokan, 1984). Limited work has been done in Asia, especially in Pakistan. The study will help to establish baseline information about the career maturity of Pakistani students pertaining to career development of the students of higher studies. MS and PhD level students are at a very important phase of their careers, where students are either at initial or at mid-level of their working life. The older students have higher career maturity than younger students (Crites, 1995; Thompson, Lindeman, Super, Jordaan & Myers, 1981). Higher level of career maturity suggests the students may success in their work life. The career maturity may be a predictor of performance of students in their career success (Barnes, 2001).

The career maturity suggests the preparedness of the students for work life. The career maturity will not only increase the strength of career related decision making, but it will also increase the knowledge of work related competencies, enhances the self-image, attaining career goals and learning problem solving strategies (Crites & Savickas, 1995).

The study will explore the strength of career decision making and work-related knowledge among Pakistani post-graduate students. The people with a higher level of career maturity tend to have more successful and satisfying careers (Savickas, 1990). They often think about career alternatives, more aware of the career decision making process, can find links between their current behaviors with future goals, have higher levels of self-reliance in making career choices and committed to their choices.

Researchers suggest that career maturity is linked with almost all of the constructs of career development. It has association with the realistic occupational aspirations and expectation, career decidedness, self-efficacy related to career decision making, higher levels of career salience and more internal locus of control (Crites, 1997). The career goal clarity is one of the important domains of career development (Rudmann, Tucker, Gonzalez, 2008). As the most important contributors to the career development a causal relationship between these constructs of career maturity and career goal clarity is needed to be investigated. This investigation would assist the counselors in developing interventions for career clarity that will lead to career maturity and finally achieve the highest level of career development.

According to National Educational Policy (2009, p. 37), career counseling should be provided to students at all levels. It emphasizes the introduction of career education to meet the demands of the labor market. One of the main purposes of career counseling is to assist the students to gain career maturity. Career maturity consists of assessment of career attitudes and competencies i.e.: self-awareness, occupational information, choosing a job, problem solving. The measurement of career maturity facilitates the clients to be self-aware about their interests and skills like/dislike required in career success. The measurement will enable them in career planning & exploration, making informed and effective choices related to careers and finally it will also aware them about problems they face in their career and what necessary skills required to solve such problems. Career maturity also aware the students about market demand to make a successful career transition.

Our education system is not relevant to provide earning for a living and our education programs are not aligned with job opportunities (The National Education Policy, 2009, p. 39). Career education assists students to select courses of respective programs that enable them to achieve desired jobs. Students will explore and plan career that will lead them to career maturity and career development. Career maturity will enable them to identify potential gaps in educational programs and job requirements. Through this, they can set their career goals to be successful in a career.

Consultation meetings on the National Education Policy (2016, p. 54) identified the need to incorporate life skills in education. They also stressed on the utilization of manpower, job creation and eliminate gender specific tasks/jobs. The life skills can be incorporated through implementation of career education. The career education brings clarity in career goals and more maturity in the decisions. The career wise mature, students can impart life skills, they can be entrepreneurs to create jobs and remove the tags to different jobs specific for certain genders.

The construct of career maturity is a basic requirement of the career development. Due to its limited work in Pakistan and being important through the official documents, it needed to be investigated in detail. It will polish the skills of the students; it will further contribute towards the satisfaction in the selection of careers and achievement of their career goals. The construct of the self-efficacy may contribute as the catalyst to increase the strength of career goal clarity in bringing career mature students.

The career maturity has been seen linked with career development, self-efficacy, career decision self-efficacy career satisfaction, career achievement, academic achievement (Rosdi, Talib and Wahab, 2015; Bhae, 2017; Talib, Salleh, Amat, & Ghavifekr, 2014; Singh & Shukla, 2015; Tekke, 2012). The career goal clarity is associated with career development and self-efficacy (Gibbs, McGready & Griffin, 2015; Pothukuchi, Kumar, and Dash, 2015). No student has been found to investigate the association among career goal clarity and career maturity however both are important contributors are career development. The study aimed to explore this associations.

1.3   Significance of the Study

The purpose behind conducting the current study was to discover the impact of career goal clarity on career maturity and moderating role of general self-efficacy among MS and PhD students of public sector universities of Islamabad. It was a unique study of its type that measured the career maturity and career goal clarity of Pakistani students. It facilitates the students to promote career maturity and further bring the career goal clarity in the students and assist them to take informed career decisions through career counseling and guidance. This study assessed how much students are clear in their career goals and how this clarity in career goal is leading to career maturity.

The Education Policy of Pakistan (2009, p. 37) emphasizes the introduction of career education to meet the demands of the labor market and career maturity is achieved as result to career education Super and Knasel (1979) define career maturity measures assist in career exploration, establishment, maintenance, disengagement and career change in adults. The policy further highlights the importance of skilled labor force with proper goals in the higher education sector to impart new knowledge. The target group of the study was the adult students of MS and PhD and this study has provided assistance to the adult students and working class with skills to further explore their careers, establish themselves as professionals, maintain their careers, tendencies of disengagement and suitability of career change. The Krumboltz (1994) suggests that career maturity helps the people to identify the hindrances in the attainment of career goals. It was necessary to identify the potential blockage of career goals to assess the career goal clarity of clients. The study also focused on measuring the career goal clarity and facilitate in the effectiveness of career counseling.

This study was a step towards finding the correlation and causal relationship among these main variables contributing towards career development of individuals. The literature showed correlations and predictors of career maturity, but little work has been done to measure the career goal clarity of the students. It will help the career counselors to work on improving the career maturity of the students. It will bring clarity in the decisions of the students and prepare them for the world of labor force. The career goal clarity is one of the important tasks in career planning and career planning is the essential component of the career maturity. In this regard, it was significant to explore the career goal clarity of public sector university students and its contribution towards

career maturity. Many researchers have worked on each construct with variety of combination of variables but no study found to explore the nature of association of career goal clarity and career maturity. Through search it has been found that no research has been conducted in Pakistan on career maturity and career goal clarity. This study may pioneer the work on career maturity in the country.

1.4 Conceptual Framework

By reviewing the literature and investigations of contemporary studies, a theoretical framework has been formed to assess the influence of career goal clarity on career maturity among postgraduate students of public sector universities of Islamabad. It has been exemplified in the following figure, which is presenting the impact of career goal clarity on career maturity by highlighting the role of general self-efficacy as the moderator which increases the strength of career goal clarity on increasing the career maturity.
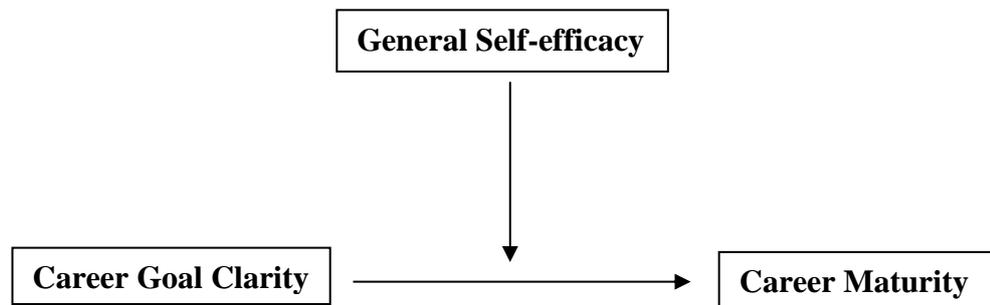
CHAPTER 2:   REVIEW OF RELATED LITERATURE

The study was aimed to investigate the impact of career goal clarity on career maturity and moderating role of general self-efficacy among postgraduate students of public sector universities of Islamabad. Choosing a career is the most challenging task, as person has to consider many factors that he/she was not familiar earlier. Individual has to go through different experiences. Future life of a person is defined by all the choices a person makes. So, he/she must be equipped with enough details concerning his area of interest, nature and scope of the work. Additionally, it is expected from the students to set healthy and settle genuine goals. As they are in teenage years and may be not have vibrant picture about their future life. It is the compulsion for the parents and career counselors to help the child to clear his/her vagueness and set an accurate goal line (Super, 1990). This chapter includes:

1. Career Counseling
2. Career Goal Clarity
3. Career Maturity
4. General Self-Efficacy
5. Latest Research Studies in the Area

2.1 Career Counseling

Career Counseling is a mutual communication between a counselor and counselee that is designed to facilitate the counselee to explore, understand him/herself and the nature of work in order to make educational career and lifelong decisions (Savickas & Bruce, 1996). Every individual belongs to a diverse background, interest, set of belief and sociocultural standards. So, the career choice must be compatible with the personality. Career decisions consists of many choices, and deciding a wrong career path, which is not according to the temperament and capabilities of a person, leads to adverse penalties. A person is clear about his goals and the ways to accomplish those goals, it will be easier for them to gain success in the future. With the advancement of technology, the career choices become more complex and challenging (Arnold, 2001).

Career choice under critical circumstances is vigorous and challenging task in the life (Osipow, Doty & Spokane, 1985). The field of career counseling is developing extensively in Pakistan, where rapid fiscal changes, limited resources, stress and political uncertainty further reduces the job opportunities. In Pakistan, career

counseling is becoming the new trend and there are very few institutions who are offering it as a subject. Now, people are aware enough about the growing need of the quality schooling that is based on the practical approach to ensure the bright career opportunities (Bilal & Malik, 2014).

Career counseling increases the basic understanding of ambitions and objectives regarding career selection. The crucial aim of career counseling is to facilitate in planning a successful career and making up-to-date career choices. The career decisions involve choosing a career, selecting a course to pursue for higher studies, attend training or a workshop to increase employment skills and make a successful transition from studies to workforce. Career counseling is an intensive work that is done by the counselor. It usually requires face to face sessions and it can be done in groups or telephone. It is helpful to provide assistance to identify own strengths and utilize them to gain career satisfaction (Patton & McMahon, 2001, p. 2).

Career counseling provides services in the field of education or personal domain. The role of career counselor is to provide self-awareness and guidance regarding future directions (market value, work opportunities), enhances skills, determine their type of personality and area of interest and guide the field best suited according to their nature of personality. (Canadian Career Development Foundation, 2002, p.139).

Career counseling can guide the students for the career development by the help of approaches and techniques found in Person Centered Approach by Rogers' (1951). According to Person-Centered Approach, students have the capabilities to grow and flourish in their field and develop self-understanding. It emphasized on the self-concept, self-esteem, and self-actualization. It is stated that focus of the Person-Centered Approach is on the emotional state and proficiencies of the student that they don't even realize. They are provided with the opportunity to explore, discuss, and understand their experiences (Crisp, 2010).

Career counselors are appointed to foster the career development which is according to the standards given by American School Counseling Association (ASCA). It has recognized three domains for academic counseling: personal and social, academic, and career development (Campbell & Dahir, 1997). Career and occupational counseling is closely tied to career guidance movement (Gysbers & Henderson, 2000). There are a number of concepts that describe the mode of career development. It started with the work of John Holland that focused on matching the personality and job to

postmodern theories which emphasize on career construction. They are all dedicated on a reciprocal agenda that how careers progress.

Career counselors must be aware of the parental and peer influences in making the career choices. The parents play a crucial role for making him/her clear regarding possible career opportunities (Bryce, Anderson, Frigo & McKenzie, 2007). People who received career counseling, perfromed much higher than those who didnot received career counseling. Students from public school scored significantly higher on career maturity as compared to students from private schools. Based on the results, it can be concluded that the kind of school a student attends and career counseling has substantial influence on their career maturity and decision making (Migunde, Othuon & Mbagaya, 2015). Career counselors are encouraged to pay attention on the social influences on the students and reinforce them with the help of moral, ethical values and ideologies (Mcllveen and Patton, 2006).

2.2 Career Goal Clarity

Goals are helpful in directing thoughtfulness and accomplishment for career success. The goals that are challenging to achieve activates physical and mental energy level; improve cognitive and intellectual functioning and increase energies that are persistent. The goals are motivating factor for the people to develop ways, techniques and strategies that will assist in better work performances (Lunenberg, 2011). Goal setting is the process of precise levels of performance chosen in order to achieve those goals (Greenberg, 2011). Goals are helpful in directing and sustaining the behavior of a person to one direction that is typically based on incentives. Individual goals are vital for healthy humans functioning (Locke & Latham, 2002). So, goal clarity is of great significance in the process of decision making.

Career goals are more abstract, concrete and based on reasons that how people acquire certain position at workplace. Secondly, goals are required to find out how satisfied a person is with the accomplishment of their goals. It will provide them reasoning behind the attainment of the goals (Fishbach & Dhar, 2005). The concept of goal process is frequently in discussion in the goal theory. The researchers are interested in exploring the role of self-directed and controlled effect of motivation in understanding the value of personal goals (Sheldon & Houser-Marko, 2001). It

highlighted that self-directed motivation plays a significant role in the goal progress of the person.

Career goals represents the summary of all the work-related experiences and the nature of skills person desire to gain and what are the outcomes that are expected. Consequently, abstract goal manifest values (Greenhaus et al., 2010). Professional fulfillment recommends the gap between what people want and why they gain. It is suggested by Carver and Scheier (1998) that there is a feedback process that is also known as meta-monitoring loop. That observes how rapidly the action loop decreases the difference and associates it to the expected set of results. That in turn results in the evaluation of the goal progress. It is hypothesized that there are two dimensions of the professional fulfillment. Firstly, content of career goals and secondly the evaluation of career progress. These are significantly linked and interfering in one another.

Adolescents who don't have clear career goals suffer more from confusion in career choices and have negative views about the society. College years are a time period when students are involved in the self-awareness and career assessment (Beauchamp & Kiewra, 2004). When students are in high grades they are imaginative and curious to explore new things that matches their area of interest. Whereas, at lower grades a person becomes more cautious and conservative. These personality dimensions and traits seem as critical considerations for goal setting. It is compulsory for the mental health satisfaction, low ratio of malingerers and greater work production. Students who are well aware of their goals and desire to achieve do much better as compared to those who are constrained to study some subject. Students who are forced by parents to study any subject suffer more from depression, stress and anxiety and have low grades (Hall & Foster, 1977; Willer & Miller, 1976).

Career goal clarity is a primary process considered for cognitive engagement that is vital source of students' inspiration (Bandura, 1989). Cognitive processing supports the eagerness to form career goals, plan a course of action and guide procedures through career goals. Career goals are considered significant like the elements of progressive tasks in the life-span model of motivation (Nurmi, 2004; Salmela-Aro, 2009). There is an important issue concerning how people manage their life in order to attain their career goals. It refers to how people identify one or more career goals and to what extent they strive in order to achieve those goals (Noe, 2013).

Career goal clarity focuses on clearness and rationality in understating, perception and free from uncertainty and ambiguity. The clarity in career goals suggests

one is able to look at career goals with open mindedness instead of preconceptions and prejudgment (Salmela-Aro, 2009).

The career goal clarity is a significant task that prepares pupils for successful academic, work and personal life according to modern life requirements. (Savickas, 1999; Porfeli, 2008; Zikic & Hall, 2009). It improves self-awareness and labor market requirements both in combination evaluate the how students make effective career choices. The clarity in career goals indicate students have purposeful and clear career goals that develop stronger desire in deciding their future field of study and informed career related decisions. The stronger decisions prepare the students to be skilled employees in their future careers (Harkins, 2001; Beal & Crockett, 2010). The potential to form crystal career goals establish to develop a criterion for career preparedness and future success (Super, 1990; Hirschi, Niles, & Akos, 2011).

2.3 Career Maturity

Super (1955) defined career maturity as the occupational progression that starts from assessment and ends till decline stages of career development. It is the point where individual get hold of intellectual aptitudes, emotional and other mental aspects. So, he/she can obtain the competence for making advanced career decisions. Career maturity is the degree to which a person is capable to master the responsibilities that are suitable for the developmental stage. It is tremendously significant to recognize the person's requirement for the career maturity so that he/she should be given supervision accurately. It includes attaining evidence about one's own self and altering that confirmation to self-understanding, gaining knowledge that are used for effective decision making, applying for effective decision making, assembling all the evidence that are interconnected to career development and changing it into understanding of occupational world.

Super (1957) contributed in the field on occupational psychology in the concept of career maturity, which later on leads to the development of self-efficacy in future life. This perception also suggests one's eagerness to choose and flourish in their desired career in addition to handling day-to-day responsibilities (Bernard-Phera., 2000). Career selection should permit youngsters to fulfill their forthcoming objectives and goals (Hairunnaja, 2007). So, it is mandatory that career preparation should be done

at the earliest phases of life usually when the child starts going to school (Rohany, 2008).

According to Super (1957), mature individual may exhibit certain characteristics; assembled knowledge about self, to be self-aware, acquired essential skills to make informed career choices and combined the self-knowledge with the market value of the desired field and design a career.

2.3.1 Levels of Career Development

Career maturity can be gained in different levels of career development that are categorized as exploratory, establishment, maintenance, and decline stages.

1. Exploratory stage is the time period for exploration that continues throughout the adolescent's phase. It is further divided into sub-stages that are defined by Super (1955) as:

Direction to employment choice – it consists of all the career choices available and self-awareness. It has a great impact on the career choices.

Facts and preparation about desired work– youth acquire all the anticipated information that is related to the work-place, requirements, compulsions, work-environments, terms and conditions, future opportunities and job security. It is helpful for mapping out what needs to be accomplished in school life.

Increasing uniformity of occupational preferences – with the passage of time individual starts developing consistency about his vocational preferences and become consistent with their efforts and behaviors. Super's (1955) suggested that maturity is acquired when the person become clear about their objectives and develop preferences that what need to be addressed first and keep the least attractive preferences aside.

The representation of personalities appropriate to occupational choices – as soon as person become mature enough he/she will start defining their goals more clearly and accept all the obligations they need to accomplish in order to attain their goals. At this stage, it becomes necessary to develop realistic attitude towards the workstation.

Increasing perception of occupational choices – This is the most complex and challenging stage, as it is all about satisfaction of one's own requirements and interests. An association among accomplishments, capabilities, wellbeing and partialities are designed at this phase. This is the phase when a person gains awareness about financial and physical accessibility of their preferred profession.

2. Establishment stage: At this stage many of the individuals have initiated their career, and extend to age 35 till 45.

3. *Maintenance stage*: This stage continues from 55-70 and ends till retirement period, and lasts till death. Achievement and mastery of responsibilities in preceding developing phases is significantly connected to attainment in future progressive periods, which specifies that who are mature become well-adjusted during the change from school to work place life.

4. *Decline:* At this stage person has accomplished all the desired goals. Now he/she goes towards termination period.

Career maturity remained under study and debate since it coined. Super (1957) explained the vocational maturity as mastery of the career related tasks that are appropriate to that developmental phase. Career maturity is the combination of dimensions that consists of gaining information for self-knowledge, acquiring skills for decision making in order to apply them for occupational world, assimilation of self-knowledge, understanding of the professional world and application of that awareness in career planning (Coertse & Schepers, 2004; Langley, Toit & Herbst, 1996).

Career maturity is associated with the willingness of students to cope up with the vocational developmental tasks. These tasks are faced by the students and it highlights one's vigilance to take academic and vocational choices appropriate to their stage of development (Phillips & Blustein, 1994).

There are two dimensions in the career maturity that are explained by Crites (1976) affective and cognition dimensions. The cognitive component includes the decision-making ability and the affective component is composed of attitude toward the career decision-making process. It refers to differences in willingness to cope with vocational development tasks that young people face and describes an individual's eagerness to make age-appropriate educational and vocational decisions.

Career maturity is the mastery of the career related tasks of a person appropriate to her/his developmental phase (Crites & Savickas, 1995). Career maturity suggests the willingness of the person to make a decision related to their career (Themba, 2012). Higher level of career maturity suggests the readiness of an individual to make choices related to life stage (Schreuder & Coetzee, 2014).

Adolescent is a phase of life when person go through innumerable emotional, societal pressure and has to make perfect choice for his/her coming life. Empowering the youth with sufficient knowledge to make some best selections conferring to own

concentration, susceptibility and competences is the indispensable. Career maturity is the vital for the senior students and it assists them in training for the employment. It supports them in making updated decision to select right field of study, successful evolutions and choosing a job (Tekke & Ghani, 2013). Career maturity is boosted by acquiring vocational knowledge and self-information related to career goals. It may be improved by discovering its correlates and features that forecast the career maturity. It was found that the level of career maturity can be improved in young members by facilitating better self-awareness, increasing career prospects, and improving effective career decision-making (Themba et al., 2012).

Career Maturity is willingness of an individual to make a career decision (Themba et al., 2012). The concept of Career maturity develops across the developmental periods. Career maturity is originated from the developmental theory of career behavior by Super's (Dhillon & Kaur, 2005). It focuses that an individual is capable of making career choices on the basis of own capabilities and traits that are essential for career expansion (Zunker, 2012). It energizes the students to make career choice that suitable for their developmental stage (Schreuder & Coetzee, 2014).

Career maturity has played a major role in the career development of people of all ages. With respect to consistency with career, it should be decided that particularly South & Southeast Asia was more consistent with their career than Eastern Asia that reveals an individualistic and independent value appeared in two different regions (Tekke, 2012). Implementing the acquired information in career forecasting, career maturity is perceived as a person's inclination to make well-versed, age appropriate career resolutions and to outline one's career vigilantly in the aspect of prevailing societal prospects and restrictions (Salami, 2008).

The concept of maturity was studied because of its great significance in the development and improvement in the youth-oriented educational and counseling programs (Obi & Mohd, 2013). It refers to the accuracy of behaviors that are relevant to the particular career and compulsory for career developmental process (Betz, 2008). Career maturity has its roots in Super's developmental theory of career comportment (Dhillon & Kaur, 2005) and receives a substantial prominence in the life expansion of youngsters (Kaur & Amritsa, 2012). The career maturity is essential for making sensible and representative professional implementations, which depicts that more mature the person, higher the chances that he/she will be capable to make more realistic and optimistic choices that combines his or her self-concept (Busacca &Taber, 2002).

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It is necessary to select a profession that has reputable market worth and it is obligatory for personal gratification. It offers lot in monetary benefits to provide career opportunities as well opportunities to personal and professional growth of the person. There are hundreds of occupational choices that are provided to the individual's and it appears difficult for the person to opt for the best one. Career maturity demonstrates the eagerness of the person to deal with the progressive responsibilities for the person that he/she face when going through biological and social needs and prospects from the society. At the university level, it is indispensable that a person has adequate intellectual capabilities. So that, he/she can face all the challenges smoothly throughout developmental stages of career. Career maturity is determined by the choices somebody make to attain the goals, i.e. either person have goals that are accurate and genuine and proper planning to achieve these goals. More skilled and mature the person is he/she will go for more sensible preference for their career (Busacca & Taber, 2002).

2.4 General Self-Efficacy

The concept of self-efficacy was coined by Bandura (1977) in his social cognitive theory and characterized it as an individual competency. The cognitive theory consisted of four processes which includes self-evaluation, self-reaction, self-observation and self-efficacy. Self-efficacy can be defined broadly as individuals' confidence on their abilities to achieve specific goals (Hsieh, Sullivan & Guerra, 2007). Self-efficacy is the belief about one's own competences in the performance of particular tasks (Siegle, 2000). It is considered as a representative and truthful way to deal with difficulties. It is a skill to efficiently handle undesired changes (Achmed, Qazi & Jabeen, 2011). Self-efficacy refers to the particular responsibilities and persistence efforts that are applied in order to accomplish the tasks. Additionally, eagerness to acquire proficiency achievement, transmission and presentation is also associated with self-efficacy (Colquitt, LePine & Noe, 2000; Quinones, 1995).

The concept of career self-efficacy is beneficial to study, it is the predictor of career interests, career ambitions and supposed career option choices (Rotberg et al., 1987). At the same time, career self-efficacy is found to be related with many psychosocial variables including self-esteem, anxiety and identity integration (Miranda & Umhoefer, 1998). Career self-efficacy plays a significant role in the choices and career-ambitions of the youngsters (Turner & Lapan, 2002). Enhancing the career self-

efficacy is beneficial for the students who are at the risk for educational or job-related issues (O'Brien et al., 2000).

Self-efficacy, encourages all the activities students opt for and the amount of effort they express for their goals what activities students select, how much effort they express, how determined they are when they encounter the problematic and challenging situations and the exertion of the goals they have settled for themselves. Students with low levels of self-efficacy are not expected to do healthy activities and they often do not attain satisfaction and success that is comparable with their capabilities. Usually they underestimate their skills and believe that they can't do well and never strive for the attainment of satisfactory consequences (Siegle, 2000). It is the human tendency to engage in the activities on which he/she was reinforced and encouraged. The extent of self-efficacy is determined by the life time experiences and their performances in their past life (DeWitz & Walsh, 2002). Failures in student life contribute to low self-confidence and limits their efforts for the accomplishment of goals. Studies conducted in the field have confirmed that for strengthening the self-efficacy of the person they need to engage in meaningful cognitive processes in order to succeed the tasks. Higher level of self-efficacy produces optimistic effects that permit to participate in adaptive performance in order to struggle for prosperous consequences (Phan, 2011). The higher level of self-efficacy shows enthusiasm and determination among students. People having low self-efficacy over-estimate the concerns and the responsibilities as burden and problematic that results in stress and anxiety and it is the real cause of failure.

Academic self-efficacy is defined as judgments of one's own competencies to establish and implement sequences of action in order to conquer selected informative presentations (Zimmerman, 1995). It is the belief of the student and self-assurance in their expertise to attain hypothetical activities efficaciously. Students with higher level of self-efficacy recognize academic complications as worthy challenges that are exhilarating because and of the gratification they feel after the accomplishment of the goals (Pajares & Schunk, 2001). Youngsters with higher self-efficacy will view the emotional conditions as motivating and students with low self-efficacy may regard it as being disturbing (Bandura, 1994; Pajares, 2009). Psychological and physical conditions such as anxiety, depression and mood swings effect the level of self-efficacy, usually, optimistic behaviors increase the level of self-efficacy.

Self-efficacy is not only desirable at university, for academic purposes and social survival but also essential for the wellness and personal adjustment for students

throughout their life span in their personal and organizational setup (Villareal, 1998). Individuals' self-efficacy allows them to encourage the conclusions they make in their lives (Pajares & Schunk, 2001). Self-efficacy increases the assistance of goal setting (Bandura, 1994; Locke & Latham, 2006). It has been validated that in the framework of self-established goals, individual who have high levels of self-efficacy have more need of goal accomplishment (Martinez-Pons, 1992). They are strong enough to be not affected by the objectionable opinion by others and probability to develop attainment approaches is higher (Bandura & Locke, 2003). Self-efficacy is connected to academic performance and determination (Multon, Brown & Lent, 1991).

2.5   Latest Research Studies in the Area

2.5.1   Latest Research Studies at International Level

Bhae (2017) conducted a study on the analysis of career maturity among Korean youths using latent growth modeling. The study explored that career counselling expxeriences, acadmeic achivement, income, parental involvement and gender differences the career maturity of students. The findings show that the female students scored higher on career maturity than that of the male students. It was recommended to implement counseling programs and should expand career education in the curriculum.

Chan (2017) investigated the importance of career clarity and proactive career behaviours in predicting positive student outcomes. The study examined the association of career goal clarity, positive student outcomes and proactive career engagement. The study found that there was a postive association between career goal clarity on proactive career engagement and positive student outcomes.

Bahrinsyah (2017) investigated career maturity of guidance and counseling students at the Yogyakarta State University. It was found that students who received counseling and guidance had higher career maturity than their deprived counterpart. Further it explored there was non-significant difference in career maturity among students of different batches.

Jawarneh (2016) examined career maturity among university students in Jordan. It was pointed out that participants had higher career maturity on self-knowledge, career decision making and career implementation but only few participants show moderate career maturity on knowledege about professions, world of work and how to plan career. Further the results showed insignificant differences on career maturity based on

gender and education. There are two factors; motivation and hope, considered vital for the students to prepare for the most approperiate career paths. The study claimed that career maturity is a strong predictor of career indecisiveness.

Gibbs, McGready and Griffin (2015) conducted a study on career development among American Biomedical postdocs. The study suggested that postdocs have increased knowledge about career options and higher clarity about their career goals relative to PhD entry. It focused that career development and programs are necessary for the student's guidance.

Singh and Shukla (2015) conducted a study on relationship between career maturity and self-efficacy among male and female senior secondary student. The study found a significant positive correlation between career maturity and self-efficacy among male and female students.

Pothukuchi, Kumar, and Dash (2015) examined the impact of academic self-efficacy on academic and career goal clarity among female postgraduate students in Bangalore. It indicated that career goal clarity and career decision making are the important part of career development that leads towards self-efficacy. The results showed that choice of career is influenced by students' interests and self-knowledge about career plans. This study emphasized that the entire process of career goal clarity is mainly influenced by motivation, self-efficacy, preparation and specialization with the help of their interest, occupation, place of work etc.

Rosdi, Talib and Wahab (2015) studied career self-efficacy and the career maturity of teenagers at the exploration stage. The results found that there is significant difference between the experiment and controlled groups on career maturity and career self–efficacy. It was revealed that career maturity and self–efficacy can be improved if the students provided with interventions on career development. Career skills can be enhanced and proved to be effective for community college students by the use of career exploration module.

Ottu and Idowu (2014) conducted a study on openness to experience, conscientiousness and gender as personality indicators of career maturity of in-school adolescents in Ibadan, Nigeria. It revealed that willingness to experience has an independent influence on the career maturity of the younger students. The student found that when adolescents become open and receptive to life experiences the probabbility to adjust in career maturity increases. It was claimed that male students significantly reported greater career maturity than female students.

Talib, Salleh, Amat, Ghavifekr & Arif (2014) studied the effect of career education module on career development of community college students. The research found that the use of career education in a career development program significantly enhances career planning ability and career maturity among college students. The study found a non-significant difference exist between male and female students in career developmental tasks, career planning ability and career maturity.

Starica (2014) examined the predictors for career maturity in adolescence. It highlighted that vocational choice is a key step towards career development. The results of the study presented that personality traits, academic self-esteem, locus of control and goal setting are the predictors of career maturity. It highlighted the contribution of career decision self-efficacy as moderator in predicting the career maturity among girls and boys.

Allen (2014) worked on career counseling implications for juvenile offenders. The research discovered that career counseling increases the career maturity and results in more prosperous and appropriate future career choices. It was found that female undergraduate students scored greater in career maturity than male undergraduate students. The data showed non-significant difference in career maturity between junior and senior pupils. This information seems to indicate that both groups have similar maturity in career choice.

Sirohi (2013) investigated vocational guidance and career maturity among secondary school students. The results showed that the students who are exposed to the guidance and counseling programs have much higher career maturity than their deprived counterpart. More variation in the degree of career maturity in terms of assurance, involvement, liberty, orientation and compromise in decision making is witnessed among female students. It was found that increase in career exploration and goal clarity was a predictor of decrease in career indecisiveness and increase in career maturity.

2.5.2 Latest Research Studies at National Level

Raziq, Borini, and Shabaz (2018) studied leadership styles, career decisions, goal clarity, self-efficacy and project success in project-based organizations of Pakistan. The study explored that self-efficacy partly moderates relationship between goal clarity and career decisions. The career decision making is an important component of career maturity. It was found the impact of goal clarity on perceived

benefits of performance measurement. It was reported that goal clarity improves the career decisions among employees.

Pasha, Hamid, and Shahzad (2017) investigated the moderating effect of self-efficacy and the impact of career development practices on career success under the mediating role of career commitment in the insurance sector of Pakistan. It predicted that career commitment and career success are positively correlated with each other. Career commitment played the role of mediating variable in career development practices and self-efficacy the moderates the career success in the employees.

Shafeeq and Loona (2017) examined gender difference in cognitive style and career decision making difficulties of college students. The career decision making as the important domain of career maturity. The study found that the female students scored higher on career readiness, while male students scored higher on inconsistent career information. The study revealed that male students have higher career decision making difficulties as compared to female students who face less difficulties in career decision making.

Kanwal and Naqvi (2016) investigated the goal clarity and career decision making among undergraduate students. A positive association found in career decision making and career goals, while a negative relationship exists between age and career decision making. The career decision making is one of the important domain of career maturity.

Literature of career goal clarity, career maturity and general self-efficacy has been reviewed. After reviewing the literature, it has been observed that different dimensions of career maturity (career decision making, career choices) are linked to career goal clarity and general self-efficacy. It is needed to conduct a study to find out the relationship of career goal clarity and career maturity and the moderating effect of general self-efficacy.

CHAPTER 3: METHODOLOGY

3.1 Research Strategy

The study was quantitative and correlational in nature and focused on the measurement of career maturity, career goal clarity, influence, association of career maturity and career goal clarity and moderating role of general self-efficacy through a survey technique.

3.2 Objectives

The objectives of the study were:

i. To measure the career goal clarity and career maturity of postgraduate students of public sector universities of Islamabad.

ii. To compare the male and female postgraduate students in career goal clarity and career maturity of public sector universities of Islamabad.

iii. To find out the relationship between career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

iv. To assess the impact of career goal clarity on career maturity among postgraduate students of public sector universities of Islamabad.

v. To study the moderating role of general self-efficacy in relationship of career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

3.3 Hypotheses

The objectives of the study were:

i. There is a significant difference in career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

ii. There is a significant difference between career goal clarity and career maturity among postgraduate male and female students of public sector universities of Islamabad.

iii. There is a significant difference in career maturity across disciplines among postgraduate students of public sector universities of Islamabad.

iv.   There may be a significant relationship between career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

v.   There may be a significant impact of career goal clarity on career maturity among postgraduate students of public sector universities of Islamabad.

vi.   There may be a moderating role of general self-efficacy in relationship of career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

vii.   There may be a moderating role of general self-efficacy in relationship of career goal clarity and career maturity among postgraduate male and female public-sector universities of Islamabad.

3.4   Population

The population of the study was consisted of 286 postgraduate students who were enrolled in 2016 of social sciences and natural sciences departments of Quaid-e-Azam University Islamabad and International Islamic University Islamabad. The social science consisted of departments of economics, political science, human geography, demography, management, psychology, sociology, anthropology, archaeology, jurisprudence, history and linguistics, however natural science consists of life science (botany, zoology, biochemistry, and biotechnology), physical sciences (physics, space science, math's, chemistry) and earth science (Caraecle, 2015). The population was consisting of Pak-Study, Economics, Psychology, Physics, Biotechnology, and Math's. The purpose behind selecting these universities (Uni. B and Uni. C) is that, these are the only public-sector universities located at Islamabad having the same departments.

3.5 Sample

The sample was consisted of 286 (MS=203, PhD= 83) postgraduate students enrolled in 2016 of social sciences (Pak-Study, Economics, and Psychology) and natural sciences (Physics, Biotechnology, and Math's) of Quaid-I-Azam University Islamabad and International Islamic University Islamabad. The detailed sample distribution is given below:

Sample distribution

		Social Sciences				Natural Sciences				Total
		Pak Study	Eco	Psy.	Total	Phy.	Biotech	Math	Total	
Uni. B	MS	20	19	20	59	17	16	20	53	112
	PhD	07	08	09	24	06	09	08	23	47
Uni. C	MS	16	13	17	46	16	15	14	45	91
	PhD	07	06	08	21	05	06	04	15	36
Total		**50**	**46**	**54**	**147**	**44**	**46**	**57**	**136**	**286**

Source: Admission Departments of Uni. B & C

3.6 Operational Definitions of variables

3.6.1 Career Goal Clarity

The career goal clarity is a clear vision that the person is trying to achieve before he/she take action to reach one's goals. It is the key factor in accomplishing any goals that we set (Tucker & Rudmann, 2006).

3.6.2 Career Maturity

Career maturity is the mastery of the responsibilities of an individual appropriate to his/her progressive stage (Crites & Savickas, 1995). Career maturity suggest the willingness of the person to make a decision related to their career (Themba et al., 2012).

3.6.3 General Self-Efficacy

The general self-efficacy is a resilient sense of personal effectiveness, a capability to cope effectively with nerve-wracking circumstances. It comprises the positive evaluation of one's potential to influence the surroundings (Jerusalem & Schwarzer, 1992).

3.7 Research Instrument

3.7.1 Validity

The experts of social sciences reviewed the Career Maturity Inventory, academic and Career Goal Clarity Scale and General Self-efficacy Scale and determined the validity to check the correctness of items (App-A).

3.7.2 Pilot-Testing

The pilot testing was conducted on MS and PhD students of Uni. A Islamabad. The 16 students were designated from social sciences and 16 were from natural sciences. So 32 students took part in pilot study who were not involved in actual sample. Michael and Isaac (1995) suggested to take 10 to 30 participants for the pilot study.

3.7.3 Reliability of the Instrument

To know the reliability of the instruments, Cronbach's alpha was used by applying SPSS XXIII. The reliability of Academic & Career Goal Clarity Scale was .845 (App-B), the reliability of Career Maturity Inventory was 0.847 (App-C), and the reliability for General Self-efficacy was 0.841 (App-D).

3.7.4 Academic and Career Goal Clarity Scale

The Academic and Career Goal Clarity Scale by Tucker and Rudmann (2006) consist of 21 items related to educational and career goals was used in the study. Currently it has been used in the research titled "A study of the impact of self-regulated learning on academic and career goal clarity among postgraduate women students of Bangalore" (Pothukuchi et al. 2015). It is intended to measure the academic and career goals of the students. The respondents are asked to give their responses on a seven-point rating scale to what extent they believe each statement is true of themselves. The responses vary from Extremely untrue about me to Extremely true about me. It is scored

1 to 7, 1 for Extremely untrue about me and 7 for Extremely true about me. The Cronbach's alpha reliability is ranged between .85 and .88. This instrument has been reliable and valid across the populations that will ultimately reduce the biasness in the students of psychology (App-E).

3.7.5 Career Maturity Inventory-Revised

Career Maturity Inventory-Revised by Crites & Savickas (1995) was used to measure the career maturity of students. Presently it has been used in the research titled "A study on career maturity of XI standard students" (Sivakumar & Sridhar, 2016). The key purpose to choose the Career Maturity Inventory-Revised is the content of Career Maturity Inventory-Revised has more applicability in the senior students (Crites & Savickas, 1995; & Savickas, 1990). The first version of Career Maturity Inventory was published by Crites in 1978 and Crites and Savickas (1995) developed current version.

The revised version was published with the purpose to decrease the testing and administration time and it also made applicable senior students and adults. The inventory consists of 50 items to measure the career maturity. The score ranged from 0-50. The reliability score measured through Cronbach`s alpha was .82 (Porter, 1999). This instrument is reliable and valid across populations that will ultimately reduce the bias in the students of psychology (App-F).

3.7.6 General Self-Efficacy Scale

The General Self-Efficacy Scale developed by Schwarzer & Jerusalem (1995) was used in the study. Currently it has been used in the research titled "Perceived stress in the student nurses: a study on its psychological impact and role of protective factors" (Mushtaq, 2016). It consists of 10 items based on 4-point Likert scale ranging from 1 to 4. Its score ranges from 10 to 40. It is a short instrument with higher reliability and validity to measure the general self-efficacy of individuals aged 12 and above. Its internal reliability for Cronbach's alphas is between .76 and .90. This instrument has been reliable and valid across the population that will ultimately reduce the bias in the students of psychology (App-G).

3.8 Procedure

According to ethical principles of American Psychological Association (2010), the researcher obtained permission from the authorities in order to conduct the study. The researcher approached to the admission offices of both of the universities to obtain the list of the students enrolled in the selected departments. The researcher contacted all departments and verified the list of students. The data was assembled by the selected universities and department's office to gather the list of students who are enrolled in various departments of different schools for postgraduate programs. The researcher obtained informed consent from the participants to be part of the study (App-I). They were ensured about the confidentiality and demonstrated the nature and purpose of the study. The respondents were provided instruments for their responses. Each respondent was instructed to complete the test items in 25 minutes.

3.9 Data Analysis

The data was analyzed by *t*-test, analysis of variance (ANOVA), product moment coefficient of correlation, linear regression analysis and moderation regression analysis with the help of Statistical Package for the Social Sciences (SPSS-XXIII). The *t*-test is a statistical analysis used to measure the difference between the mean scores of two variables. Product-moment coefficient of correlation is used to measure the correlation between two or more variables. The Simple linear regression is a statistical analysis used to measure impact of an independent variable on dependent variable. The moderation regression analysis is a form of regression in which the relationship among two variable depends on a third variable (Field, 2013).

3.10 Delimitation

The study was delimited to:

i.   Two Public sector universities of Islamabad

ii. Third semester (MS and PhD students) of Social sciences (Pak Studies, Economics, Psychology) and Natural Sciences (Physics, Biotechnology, Maths) enrolled in 2016

iii.   Academic career goal clarity scales (ACGCS) (Tucker & Rudmann, 2006),
General self-efficacy scale (Schwarzer & Jerusalem, 1995) and Career maturity
inventory-revised (CMI-R) (Crites and Savickas, 1995)

CHAPTER 4: RESULTS AND INTERPRETATION

This part of the thesis contains the data analysis of results and interpretation of the tables through data analysis to measure the impact of career goal clarity on career maturity and moderating role of general self-efficacy. It has four parts.

Part I: It includes the descriptive statistics of variables. The descriptive statistics include mean, standard deviation, skewness and kurtosis. The table 1 shows the descriptive statistics of variables.

Part II: It includes the analysis drawn through independent sample *t*-test to find out mean difference on career goal clarity and career maturity among postgraduate students. The tables 2 to 9 contain independent sample *t*-test analysis.

Part III: It includes the analysis drawn through analysis of variance (ANOVA) to find out mean difference on career goal clarity and career maturity across disciplines among postgraduate students. The tables 10 to 17 contain ANOVA.

Part IV: It includes the product-moment coefficient of correlation (r). It is used to measure the correlation between career goal clarity and career maturity among post graduate students. The tables from 18 to 29 contain the product-moment coefficient of correlation analysis.

Part V: It includes the simple linear regression and moderation regression analysis to measure the impact of career goal clarity on career maturity and moderating role of general self-efficacy respectively. The tables from 30 to 32 contain the linear regression and tables from 33 to 40 are moderation regression analysis.

Part I: It includes the descriptive statistics of variables. The descriptive statistics include mean, standard deviation, skewness and kurtosis. The table 1 shows the descriptive statistics of variables.

Table 1 *The descriptive statistics of variables*

Variable	N	Min	Max	M	SD	Skewness		Kurtosis	
						Statistic	SE	Statistic	S.E
Career Goal Clarity	286	3.04	7.00	5.15	1.12	-1.9	.14	1.85	.29
Career Maturity	286	1.55	6.44	4.11	.89	-.45	.14	-1.8	.29

Table 1 shows the descriptive statistics of career goal clarity and career maturity. The skewness is -1.9 for career goal clarity and -.45 for career maturity. The kurtosis is 1.85 for career goal clarity and -1.8 for career maturity. It shows that data is normally distributed.

Part II: It includes the analysis drawn through independent sample *t*-test to find out mean difference on career goal clarity and career maturity among postgraduate students. The tables 2 to 9 contain independent sample *t*-test analysis.

H1: There is a significant difference in career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad

Table 2 *Independent Samples Test of MS students on career goal clarity*

	Descriptive Statistics			*t*-test for equality of means			
	University	*M*	*SD.*	*t*	df	MD	*p*
Career Goal	B	6.17	.48	1.45	226.79	.10	.135
Clarity	C	6.07	.64				

To compare the differences of MS students on career clarity, *t*-test was applied. The result of the Levene's test (.016) indicate that equal variance was not assumed. Students of Uni. B (*M* = 6.17, *SD* = .48) have higher means than students of Uni. C (*M* = 6.07, *SD* = .68). There is no significant mean difference in mean scores of MS students of Uni. B and C (t_{226} = 1.45, *p* > .05) on career goal clarity. So, hypothesis is rejected.

Table 3 *Independent Samples Test of PhD students on career goal clarity*

	Descriptive Statistics			*t*-test for equality of means			
	University	*M*	*SD.*	*t*	df	MD	*P*
Career Goal	B	6.14	.54	1.09	80	.160	.276
Clarity	C	5.98	.77				

To compare the differences of the PhD students on career clarity. The result of the Levene's test (.036) indicates that equal variance was assumed. Students of Uni. C (*M* = 5.98, *SD* = .77) have higher means than students of Uni. B (*M* = 6.14, *SD* = .54). There is no significant difference in mean scores of PhD students of Uni. B and C (t_{80}= 1.09, *p* > .05). So, hypothesis is rejected.

Table 4 *Independent Samples Test of MS students on career maturity*

	Descriptive Statistics			*t*-test for equality of means			
	University	*M*	*SD.*	*t*	df	MD	*P*
Career Maturity	B	.54	.16	.06	202	.001	.94
	C	.53	.16				

To assess the differences on career maturity of MS students, *t*-test was applied. The results of Leven's test (.54) indicate that equal variance was assumed. Students of Uni. B (*M* = .54, *SD* = .16) have higher means than students of Uni. C (*M* = .53, *SD* = .16). There is no significant difference in mean scores of MS students of Uni. B and C (t_{202} = .06, *p* > .05). So, hypothesis is rejected.

Table 5 *Independent Samples Test of PhD students on career maturity*

	Descriptive Statistics				*t*-test for equality of means			
	University	Faculty	*M*	*SD.*	*t*	df	MD	*P*
Career Maturity	B	-	.52	.16	.97	80	.037	.34
	C	-	.49	.18				

To assess the differences on career maturity of PhD students, *t*-test was applied. The results of Leven's test (.153) indicate that equal variance was assumed. Students of Uni. B (M = .52, SD = .16) have higher means than students of Uni. C (*M* = .49, *SD* = .18). There is no significant difference in mean scores of PhD students of Uni. B and C (*t*80 = .97, p> .05). So, hypothesis is rejected.

H2: There is a significant difference between career goal clarity and career maturity among postgraduate male and female students of public sector universities of Islamabad

Table 6 *Independent Samples Test of MS male & female students on career goal clarity*

University	Faculty	Gender	M	SD.	t	df	MD	P
			Descriptive Statistics		**t-test for equality of means**			
B	-	Male	6.16	.44	-.39	111	-.03	.69
	-	Female	6.20	.47				
B	SS	Male	6.14	.47	-.29	57	-.03	.77
	SS	Female	6.18	.50				
B	NS	Male	6.18	.43	-.34	52	-.04	.73
	NS	Female	6.22	.43				
C	-	Male	6.19	.47	1.41	89	.17	.15
	-	Female	6.02	.67				
C	SS	Male	6.19	.51	.99	44	.18	.32
	SS	Female	6.01	.69				
C	NS	Male	6.20	.44	.96	43	.15	.34
	NS	Female	6.04	.65				

(Career Goal Clarity)

To measure the gender differences on career goal clarity of MS male and female students *t*-test was applies. The result of Levene's test of equality indicate that for MS students of Uni. B (.07), social sciences of Uni. B (.81); natural sciences of Uni. B (.97), MS Uni. C (.06), social sciences of Uni. C (.25) and natural sciences of Uni. C (.19) equal variance was assumed. The mean of students of Uni. B were (Male $M = 6.16$, $SD = .44$; Female $M = 6.20$, $SD = .47$; Male social sciences $M = 6.14$, $SD = .47$; Female social sciences $M = 6.18$, $SD = .50$; Male natural sciences $M = 6.18$, $SD = .43$, Female natural sciences $M = 6.22$, $SD = .43$) and students of Uni. C (Male $M = 6.19$, $SD = .47$; Female $M = 6.02$, $SD = .67$; Male social sciences $M = 6.19$, $SD = .51$; Female social sciences $M = 6.01$, $SD = .69$; Male natural sciences $M = 6.20$, $SD = .65$, Female natural sciences $M = 6.04$, $SD = .65$). There is no significant difference in mean scores of MS male & female students of Uni. B on career goal clarity ($t_{111} = -.39$, $p > .05$); social

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sciences of Uni. B (t_{57} = -.29, p > .05); social and natural sciences of Uni. B (t_{52} = -.34, p > .05); Uni. C on career goal clarity (t_{89} = 1.41, p > .05); social sciences of Uni. C (t_{44} = .99, p > .05) and natural and social sciences of Uni. C (t_{43} = .96, p > .05). So, hypothesis is rejected.

Table 7 *Independent Samples Test of PhD male & female students on career goal clarity*

			Descriptive Statistics			*t*-test for equality of means			
	University Faculty	Gender	*M*	*SD.*		*t*	df	MD	*P*
	B	-	Male	6.20	.44	2.21	45	.339	.697
		-	Female	6.04	.65				
	B	SS	Male	6.29	.13	1.01	22	.18	.32
		SS	Female	6.10	.65				
Career Goal Clarity	B	NS	Male	6.32	.16	1.97	21	.49	.06
		NS	Female	5.83	.84				
	C	-	Male	6.09	.62	.26	80	.03	.79
		-	Female	6.05	.70				
	C	SS	Male	6.10	.58	.06	43	.01	.94
		SS	Female	6.08	.69				
	C	NS	Male	6.09	.68	.28	35	.06	.78
		NS	Female	6.02	.73				

To measure the gender differences on career goal clarity of PhD male and female students, *t*-test was applies. The result of Levene's test of equality indicate that for PhD students of Uni. B (.07); social sciences of Uni. B (.81); natural sciences of Uni. B (.97);PhD of Uni. C (.06); social sciences of Uni. C (.25); and natural sciences of Uni. C (.19) equal variance was assumed. The mean of students of Uni. B were (Male *M* = 6.20, *SD* = .44; Female *M* = 6.04, *SD* = .65; Male social sciences *M* = 6.29, *SD* = .13; Female social sciences *M* = 6.10, *SD* = .65; Male natural sciences *M* = 6.32, *SD* = .16, Female natural sciences *M* = 5.83, *SD* = .84) and students of Uni. C (Male *M* = 6.09, *SD* = .62; Female *M* = 6.05, *SD* = .70; Male social sciences *M* = 6.10, *SD* = .58; Female social sciences *M* = 6.08, *SD* = .69; Male natural sciences *M* = 6.09, *SD* = .68,

Female natural sciences $M = 6.02$, $SD = .73$). There is no significant difference in mean scores of PhD male & female students of Uni. B on career goal clarity ($t_{45} = 2.21$, $p > .05$); social sciences of Uni. B ($t_{22} = 1.01$, $p > .05$); social and natural sciences of Uni. B ($t_{21} = 1.97$, $p > .05$); Uni. C on career goal clarity ($t_{80} = .26$, $p > .05$); social sciences of Uni. C ($t_{43} = .06$, $p > .05$) and natural and social sciences of Uni. C ($t_{35} = .28$, $p > .05$). So, hypothesis is rejected.

Table 8 *Independent Samples Test of MS male & female students on career maturity*

	University Faculty	Gender	Descriptive Statistics		t-test for equality of means			
			M	SD.	t	df	MD	P
	B	-	Male	6.16	.44	-.39	111	-.03	.68
	B	-	Female	6.20	.47				
	B	SS	Male	6.14	.47	-.281	57	-.030	.774
	B	SS	Female	6.18	.50				
	B	NS	Male	6.18	.43	-.33	52	-.04	.74
	B	NS	Female	6.22	.43				
Career Maturity	C	-	Male	6.19	.47	1.41	89	.17	.15
	C	-	Female	6.02	.67				
	C	SS	Male	6.19	.51	.99	44	.18	.32
	C	SS	Female	6.01	.69				
	C	NS	Male	6.20	.44	.96	43	.15	.34
	C	NS	Female	6.04	.65				

To measure the gender differences on career maturity of MS male and female students, *t*-test was applies. The result of Levene's test of equality indicate that for MS students of Uni. B (.06); social sciences of Uni. B (.62); natural sciences of Uni. B (.87); MS Uni. C (.07); social sciences of Uni. C (.21); and natural sciences of Uni. C (.29) equal variance was assumed. The mean of students of Uni. B were (Male $M = 6.16$, $SD = .44$; Female $M = 6.20$, $SD = .47$; Male social sciences $M = 6.14$, $SD = .47$; Female social sciences $M = 6.18$, $SD = .50$; Male natural sciences $M = 6.18$, $SD = .43$, Female natural sciences $M = 6.22$, $SD = .43$) and students of Uni. C (Male $M = 6.19$, $SD = .47$; Female $M = 6.02$, $SD = .67$; Male social sciences $M = 6.19$, $SD = .51$; Female social

sciences $M = 6.01$, $SD = .69$; Male natural sciences $M = 6.20$, $SD = .44$, Female natural sciences $M = 6.04$, $SD = .65$). There is no significant difference in mean scores of MS male & female students of Uni. B on career maturity ($t_{111} = -.39$, $p > .05$); social sciences of Uni. B ($t_{57} = -28$, $p > .05$); natural sciences of Uni. B ($t_{57} = -.33$, $p > .05$); Uni. C ($t_{89} = 1.41$, $p > .05$); social sciences of Uni. C ($t_{44} = .99$, $p > .05$) and natural sciences of Uni. C ($t_{43} = .96$, $p > .05$). So, hypothesis is rejected.

Table 9 *Independent Samples Test of PhD male & female students on career maturity*

	University Faculty	Gender	Descriptive Statistics		t-test for equality of means			
			M	*SD.*	*t*	df	MD	*P*
	B	- Male	6.20	.44	2.23	45	.34	.69
		- Female	6.05	.65				
	B	SS Male	6.28	.13	1.12	22	.19	.32
		SS Female	6.10	.65				
	B	NS Male	6.32	.16	1.87	21	.49	.07
Career		NS Female	5.83	.84				
Maturity	C	- Male	6.09	.62	.27	80	.034	.79
		- Female	6.05	.70				
	C	SS Male	6.10	.58	.06	43	.02	.95
		SS Female	6.08	.69				
	C	NS Male	6.09	.68	.28	35	.06	.78
		NS Female	6.02	.73				

To measure the gender differences on career maturity of PhD male and female students, *t*-test was applies. The result of Levene's test of equality indicate that for PhD students of Uni. B (.07); social sciences of Uni .B (.64); natural sciences of Uni. B (.77); PhD Uni. C (.08); social sciences of Uni. C (.31); and natural sciences of Uni. C (.29) equal variance was assumed. The mean of students of Uni. B were (Male $M = 6.20$, $SD = .44$; Female $M = 6.05$, $SD = .65$; Male social sciences $M = 6.28$, $SD = .13$; Female social sciences $M = 6.10$, $SD = .65$; Male natural sciences $M = 6. 32$, $SD = .16$, Female natural sciences $M = 6.83$, $SD = .84$) and students of Uni. C (Male $M = 6.09$, $SD = .62$; Female $M = 6.05$, $SD = .70$; Male social sciences $M = 6.10$, $SD = .58$; Female social

sciences $M = 6.08$, $SD = .69$; Male natural sciences $M = 6.09$, $SD = .68$, Female natural sciences $M = 6.02$, $SD = .73$). There is no significant difference in mean scores of PhD male & female students of Uni. B on career maturity ($t_{45} = 2.23$, $p > .05$); social sciences of Uni. B ($t_{22} = 1.12$, $p > .05$); natural sciences of Uni. B ($t_{21} = 1.87$, $p > .05$); Uni. C ($t_{80} = .27$, $p > .05$); social sciences of Uni. C ($t_{43} = .06$, $p > .05$) and natural sciences of Uni. C ($t_{35} = .28$, $p > .05$). So, hypothesis is rejected.

Part III: It includes the analysis drawn through analysis of variance (ANOVA) to find out mean difference on career goal clarity and career maturity across disciplines among postgraduate students. The tables contain 10 to 17 ANOVA.

H3: There is a significant difference in career maturity across disciplines among postgraduate students of public sector universities of Islamabad

Table 10 *Mean difference of MS students of social sciences on career goal clarity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	B	.011	2	.006	.022	.97
Within Groups		14.07	56	.251		
Total		14.09	58			
Between Groups		.214	2	.107	.26	.76
Within Groups	C	17.25	43	.401		
Total		17.47	45			
Between Groups		.064	2	.03	.103	.90
Within Groups	B C	31.67	102	.311		
Total		31.73	104			

To compare the differences of the MS social sciences students of (Pak-study, ECO & Psy) on career clarity, analysis of variance (ANONA) was applied. There is no significant difference in the mean scores of MS students of social sciences of Uni. B ($F_{2,58} = .022$, $p > .05$); Uni. C ($F_{2,45} = .26$, $p > .05$); and Uni. B and C ($F_{2,102} = .103$, $p > .05$) on career goal clarity. So, hypothesis is rejected.

Table 11 *Mean difference of MS students of natural sciences on career goal clarity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups		.27	2	.13		
Within Groups	B	9.55	51	.18	.73	.48
Total		9.83	53			
Between Groups		.054	2			
Within Groups	C	13.46	42	.02 .32	.08	.92
Total		13.51	44			
Between Groups		.29	2	.14		
Within Groups	B C	23.19	96	.24	.61	.54
Total		23.48	98			

To compare the differences of the MS natural sciences students of (phy, Bio-Tech & Maths) on career clarity, analysis of variance (ANONA) was applied. There is no significant difference in the mean scores of MS natural sciences students of Uni. B ($F_{2,53}$= .73, p > .05); Uni. C ($F_{2,44}$= .08, p > .05); and Uni. B and C ($F_{2,98}$= .61, p > .05) on career goal clarity. So, hypothesis is rejected.

Table 12 *Mean difference of PhD students of social sciences on career goal clarity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups		.254	2	.12		
Within Groups	B	4.492	21	.21	.59	.56
Total		4.747	23			
Between Groups		.05	2	.02		
Within Groups	C	11.92	18	.66	.03	.96
Total		11.97	20			
Between Groups	B C	.055	2	.03		
Within Groups		17.29	42	.41	.07	.94
Total		17.35	44			

To compare the differences of the PhD social sciences students (Pak-study, ECO & Psy) on career clarity analysis of variance (ANONA) was applied. There is no significant difference in the mean scores of PhD students of social sciences of Uni. B ($F_{2,23}=.59$, $p > .05$); Uni. C ($F_{2,44}= .03$, $p > .05$); and Uni. B and C ($F_{2,44}= .07$, $p > .05$) on career goal clarity. So, hypothesis is rejected.

Table 13 *Mean difference of PhD students of natural sciences of on career goal clarity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups		.436	2	.218		
Within Groups	B	8.39	20	.420	.51	.60
Total		8.82	22			
Between Groups		.48	2	.24		
Within Groups	B C	16.88	34	.49	.48	.61
Total		17.37	36			
Between Groups		5.16	2	2.58	8.52	.006
Within Groups	C	3.33	11	.30		
Total		8.50	13			

To compare the differences of the MS natural sciences students of (Phy, Bio-Tech & Maths) on career clarity analysis of variance (ANONA) was applied. There is no significant difference in the mean scores of PhD students of natural sciences of Uni. B ($F_{2,22}$=.51, $p > .05$); Uni. C and Uni. B and C ($F_{2,36}$= .48 $p > .05$);on career goal clarity. So hypothesis is rejected. While there is a significant difference in the mean scores of PhD students of natural sciences of Uni. C ($F_{2,13}$= 8.52, $p < .05$) on career goal clarity. So, hypothesis is accepted.

Table 14 *Mean difference of scores of MS students of social sciences on career maturity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	B	.003	2	.002	.05	.94
Within Groups		1.81	56	.03		
Total		1.81	58			
Between Groups		.020	2	.01	.33	.71
Within Groups	C	1.27	43	.03		
Total		1.29	45			
Between Groups	B C	.018	2	.009	.29	.74
Within Groups		3.09	102	.03		
Total		3.10	104			

To compare the differences of the MS social sciences students of (Pak-study, ECO & Psy) on career maturity, analysis of variance (ANONA) was applied. There is no significant difference in the mean scores of MS students of social sciences of Uni. B ($F_{2,58}= .05$, $p > .05$); Uni. C ($F_{2,45}= .33$, $p > .05$); and Uni. B and C ($F_{2,102}= .29$, $p > .05$) on career maturity. So, hypothesis is rejected.

Table 15 *Mean difference of scores of MS students of natural sciences on career maturity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups		.001	2	.00	.02	.97
Within Groups	B	1.15	51	.02		
Total		1.15	53			
Between Groups		.05	2	.030	1.04	.36
Within Groups	B	1.19	42	.02		
Total		1.24	44			
Between Groups	B	.02	2	.01	.45	.63
Within Groups	C	2.38	96	.02		
Total		2.40	98			

To compare the differences of the MS natural sciences students of (Phy, Bio-Tech & Maths) on career maturity, analysis of variance (ANONA) was applied There is no significant difference in the mean scores of MS natural sciences of Uni. B ($F_{2,53}$= .02, $p > .05$); Uni. C ($F_{2,44}$= 1.04, $p > .05$); and Uni. B and C ($F_{2,98}$= .45, $p > .05$) on career maturity. So, hypothesis is rejected.

Table 16 *Mean difference of scores of PhD students of social sciences on career maturity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	B	.06	2	.03	1.34	.28
Within Groups		.53	21	.02		
Total		.60	23			
Between Groups		.03	2	.01	.63	.54
Within Groups	C	.53	18	.03		
Total		.57	20			
Between Groups		.007	2	.003	.11	.89
Within Groups	B C	1.18	42	.02		
Total		1.18	44			

To compare the differences of the PhD social sciences students of (Pak-study, ECO & Psy) on career maturity, analysis of variance (ANONA) was applied. There is no significant difference in the mean scores of PhD students of social sciences of Uni. B ($F_{2,23}= 1.34$, p > .05); Uni. C ($F_{2,20}= .63$, p > .05); and Uni. B and C ($F_{2,44}= .11$, p > .05) on career maturity. So, hypothesis is rejected.

Table 17 *Mean difference of scores of PhD students of natural sciences on career maturity*

	University	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	B	.01	2	.006	.19	.82
Within Groups		.61	20	.03		
Total		.63	22			
Between Groups		.33	2	.16	6.42	.06
Within Groups	C	.28	11	.02		
Total		.62	13			
Between Groups	B	.071	2	.03	1.01	.37
Within Groups	C	1.20	34	.03		
Total		1.27	36			

To compare the differences of the PhD natural sciences students of (Phy, Bio-Tech & Maths) on career maturity analysis of variance (ANONA) was applied. There is no significant difference in the mean scores of PhD students of natural sciences of Uni. B ($F_{2,22}$= .19, p > .05); Uni. C ($F_{2,13}$= 6.42, p > .05); and Uni. B and Uni. C ($F_{2,36}$= 1.01, p > .05) on career maturity. So, hypothesis is rejected.

Part IV: It includes the product-moment coefficient of correlation (r). It is used to measure the correlation between career goal clarity and career maturity among post graduate students. The tables from 18 to 29 contain the product-moment coefficient of correlation analysis.

H4: There is a significant relationship between career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad

Table 18 *Correlation between career goal clarity and career maturity among MS students of Social & Natural Sciences of Uni. B*

		Career Maturity	Career Goal Clarity
Career Maturity	Pearson Correlation	1.00	.278*
	Sig. (2-tailed)		.00
Career Goal Clarity	Pearson Correlation	.278*	1.00
	Sig. (2-tailed)	.00	

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

To measure the correlation between career maturity and career goal clarity among MS students of social & natural sciences of Uni. B product-moment coefficient of correlation was applied. The results show that there is a positive correlation between career maturity and career goal clarity among MS students of social & natural sciences of Uni. B, r = 0.278, n = 113, p< 0.05. So, hypothesis is accepted.

Table 19 *Correlation between career goal clarity and career maturity among MS students of Social sciences of Uni. B*

		Career Maturity	Career Goal Clarity
Career Maturity	Pearson Correlation		.27[*]
	Sig. (2-tailed)	1.00	.03
Career Goal Clarity	Pearson Correlation	.277[*]	1.00
	Sig. (2-tailed)	.03	

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

To measure the correlation between career maturity and career goal clarity among MS students of social of Uni. B product-moment coefficient of correlation was applied. The results show there is a positive correlation between career maturity and career goal clarity among MS students of social sciences of Uni. B, r = .27, n = 59, p = .03. So, hypothesis is accepted.

Table 20 *Correlation between career maturity and career goal clarity among MS students of Natural Sciences of Uni. B*

		Career Maturity	Career Goal Clarity
Career Maturity	Pearson Correlation		.28[*]
	Sig. (2-tailed)	1.00	.04
Career Goal Clarity	Pearson Correlation	.28[*]	1.00
	Sig. (2-tailed)	.04	

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

To measure the correlation between career maturity and career goal clarity among MS students of natural of Uni. B product-moment coefficient of correlation was applied. The results show that there is a positive correlation between career maturity and career goal clarity among MS students of natural sciences of Uni. B, r = .28, n = 54, p = .04. So, hypothesis is accepted.

Table 21 *Correlation between career goal clarity and career maturity among MS students of Social & Natural Sciences of Uni. C*

		Career Maturity	Career Goal Clarity
Career Maturity	Pearson Correlation		.36[*]
	Sig. (2-tailed)	1.00	.00
Career Goal Clarity	Pearson Correlation	.36[*]	1.00
	Sig. (2-tailed)	.00	

*. Correlation is significant at the 0.001 level (2-tailed).

To measure the correlation between career maturity and career goal clarity among MS students of social and natural sciences of Uni. C product-moment coefficient of correlation was applied. The results show that there is a positive correlation between career maturity and career goal clarity among MS students of social and natural sciences of Uni. C, r = .36, n = 91, p< .001. So, hypothesis is accepted.

Table 22 *Correlation between career goal clarity and career maturity among MS students of Social sciences of Uni. C*

		Career Maturity	Career Goal Clarity
Career Maturity	Pearson Correlation		.40[*]
	Sig. (2-tailed)	1.00	.006
Career Goal Clarity	Pearson Correlation	.40[*]	1.00
	Sig. (2-tailed)	.00	

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

To measure the correlation between career maturity and career goal clarity among MS students of social sciences of Uni. C product-moment coefficient of correlation was applied. The results show that there is a positive correlation between

career maturity and career goal clarity among MS students of social sciences of Uni. C, r = .40, n = 46, p<.001. So, hypothesis is accepted.

Table 23 *Correlation between career goal clarity and career maturity among MS students of Natural Sciences of Uni. C*

		Career Maturity	Career Goal Clarity
Career Maturity	Pearson Correlation	1.00	.32[*]
	Sig. (2-tailed)		.02
Career Goal Clarity	Pearson Correlation	.32[*]	1.00
	Sig. (2-tailed)	.02	

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

To measure the correlation between career maturity and career goal clarity among MS students of natural sciences of Uni. C product-moment coefficient of correlation was applied. The results show that there is a positive correlation between career maturity and career goal clarity among MS students of national sciences of Uni. C, r = .32, n = 45, p<.05. So, hypothesis is accepted.

Table 24 *Correlation between career goal clarity and career maturity among PhD students of Social & Natural Sciences of Uni. B*

		Career goal clarity	Career maturity
Career goal clarity	Pearson Correlation	1.00	.32[*]
	Sig. (2-tailed)		.02
Career maturity	Pearson Correlation	.32[*]	1.00
	Sig. (2-tailed)	.02	

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

To measure the correlation between career maturity and career goal clarity among PhD students of social and natural sciences of Uni. B product-moment coefficient of correlation was applied. The results show that There was a positive correlation between career goal clarity and career maturity among PhD students of social & natural sciences of Uni. B, r = 0.32, n = 47, p<0.05. So, hypothesis is accepted.

Table 25 *Correlation between career goal clarity and career maturity among PhD students of Social sciences of Uni. B*

		Career goal clarity	Career maturity
Career goal clarity	Pearson Correlation	1.00	.26
	Sig. (2-tailed)		.21
Career maturity	Pearson Correlation	.26	1.00
	Sig. (2-tailed)	.21	

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

To measure the correlation between career maturity and career goal clarity among PhD students of social sciences of Uni. B product-moment coefficient of correlation was applied. The results show that there was a positive but insignificant correlation between career goal clarity and career maturity among PhD students of social sciences of Uni. B, r = 0.26, n = 24, p = 0.21. So hypothesis is rejected.

Table 26 *Correlation between career goal clarity and career maturity among PhD students of Natural Sciences of Uni. B*

		Career goal clarity	Career maturity
Care er goal clarity	Pearson Correlation		.35
		1.00	
	Sig. (2-tailed)		.09
Career maturity	Pearson Correlation	.35	
			1.00
	Sig. (2-tailed)	.09	

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

To measure the correlation between career maturity and career goal clarity among PhD students of natural sciences of Uni. B product-moment coefficient of correlation was applied. The results show that there was a positive but insignificant correlation between career goal clarity and career maturity among PhD students of natural sciences of Uni. B, $r = 0.35$, $n = 23$, $p < 0.05$. So, hypothesis is rejected.

Table 27 *Correlation between career goal clarity and career maturity among PhD students of Social & Natural Sciences of Uni. C*

		Career goal clarity	Career maturity
Career goal clarity	Pearson Correlation		.37[*]
		1.00	
	Sig. (2-tailed)		.02
Career maturity	Pearson Correlation	.37[*]	
			1.00
	Sig. (2-tailed)	.02	

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

To measure the correlation between career maturity and career goal clarity among PhD students of social and natural sciences of Uni. C product-moment coefficient of correlation was applied. The results show that there was a positive

correlation between the career goal clarity and career maturity among PhD students of social & natural sciences of Uni. C, r = 0.37, n = 35, p< 0.05. So, hypothesis is accepted.

Table 28 *Correlation between career goal clarity and career maturity among PhD students of Social sciences of Uni. C*

		Career goal clarity	Career maturity
Career goal clarity	Pearson Correlation	1.00	.43[*]
	Sig. (2-tailed)		.04
Career maturity	Pearson Correlation	.43[*]	1.00
	Sig. (2-tailed)	.04	

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

To measure the correlation between career maturity and career goal clarity among MS students of social of Uni. C product-moment coefficient of correlation was applied. The results show that there was a positive correlation between career goal clarity and career maturity among PhD students of Social sciences of Uni. C, r = 0.43, n = 21, p< 0.05. So, hypothesis is accepted.

Table 29 *Correlation between career goal clarity and career maturity among PhD students of Natural Sciences of Uni. C*

		Career goal clarity	Career maturity
Career goal clarity	Pearson Correlation	1.00	.324
	Sig. (2-tailed)		.259
Career maturity	Pearson Correlation	.324	1.00
	Sig. (2-tailed)	.259	

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

To measure the correlation between career maturity and career goal clarity among PhD students of natural sciences of Uni. C product-moment coefficient of

correlation was applied. The results show that there was a positive but insignificant correlation between the career goal clarity and career maturity among PhD students of natural sciences of Uni. C, r = 0.32, n = 14, p< 0.05. So, hypothesis is rejected.

Part V: It includes the simple linear regression and moderation regression analysis to measure the impact of career goal clarity on career maturity and moderating role of general self-efficacy respectively. The tables from 30 to 32 contain the linear regression and tables from 33 to 40 are moderation regression analysis.

H5: There is a significant impact of career goal clarity on career maturity among postgraduate students of public sector universities of Islamabad

Table 30 *Impact of career goal clarity on career maturity among MS students*

Model	University	Faculty	UC		SC	t	Sig.
			B	SE	Beta		
1 (Constant)	B & C	-	-.08	.13		-.62	.53
CGC			.10	.02	.32	4.79	.00
2 (Constant)	B	SS & NS	-.06	.19	.27	-.32	.74
CGC			.09	.03		3.04	.003
3 (Constant)	B	SS	-.07	.28	.27	-.25	.80
CGC			.09	.04		2.17	.03
4 (Constant)	B	NS	-.05	.28	.28	-.20	.84
CGC			.09	.04		2.10	.04
5 (Constant)	C	SS & SS	-.09	.17		-.56	.574
CGC			.10	.02	.36	3.68	.00
6 (Constant)	C	SS	-.11	.23		-.51	.61
CGC			.10	.03	.400	2.89	.006
7 (Constant)	C	NS	-.07	.27		-.28	.77
CGC			.09	.04	.32	2.27	.02

Dependent Variable: CM

To measure the impact of career goal clarity on career maturity among MS students simple linear regression was applied. The results indicate that there is a significant impact of career goal clarity on career maturity among MS students of Uni. B & C (β=.32, p=.000); social and natural sciences of Uni. B (β=.27, p=.003); social sciences of Uni. B (β=.27, p=.034); natural sciences of Uni. B (β=.28, p=.040; social and natural sciences of Uni. C (β=.36, p=.00); social sciences of Uni. C (β=.40, p=.006); and natural sciences of Uni. C (β=.32, p=.02). So, hypothesis is accepted.

Table 31 *Impact of career goal clarity on career maturity among PhD students*

Model		University	Faculty	UC B	UC SE	SC Beta	t	Sig.
1	(Constant)	B & C	-	-.06	.17		-.38	.70
	CGC			.09	.02	.35	3.41	.001
2	(Constant)	B	SS & NS	-.06	.26		-.22	.82
	CGC			.09	.04	.32	2.2	.02
3	(Constant)	C	SS & NS	-.05	.23		-.22	.821
	CGC			.09	.03	.37	2.32	.02
4	(Constant)	C	SS	-.06	.27		-.22	.82
	CGC			.09	.04	.43	2.10	.04

Dependent Variable: CM

To measure the impact of career goal clarity on career maturity among PhD students simple linear regression was applied. The results indicate that there is a significant impact of career goal clarity on career maturity among PhD students of Uni. B & C (β=.35, p=.001); social and natural sciences of Uni. B (β=.32, p=.02); social and natural sciences of Uni. C (β=.37, p=.02); social sciences of Uni. C (β=.43, p=.04). So, hypothesis is accepted.

Table 32 *Impact of career goal clarity on career maturity among PhD students*

Model		University	Faculty	UC B	UC SE	SC Beta	T	Sig.
1	(Constant)	B	SS	-.04	.45		-.10	.91
	CGC			.09	.07	.26	1.29	.21
2	(Constant)	B	NS	-.06	.33		-.18	.85
	CGC			.09	.05	.35	1.75	.09
3	(Constant)	C	NS	-.05	.44		-.12	.89
	CGC			.08	.07	.32	1.18	.25

Dependent Variable: CM

To measure the impact of career goal clarity on career maturity among PhD students simple linear regression was applied. The results indicate that there is no significant impact of career goal clarity on career maturity among PhD students of

social sciences of Uni. B (β=.26, p=.210); natural sciences of Uni. B (β=.35, p=.09); and natural sciences of Uni. C (β=.32, p=.25). So, hypothesis is rejected.

H6: There is a moderating role of general self-efficacy in relationship of career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad

Table 33 *Moderating role of general self-efficacy on career goal clarity and career maturity among MS students*

Model	University	Faculty	UC		SC	t	Sig.
			B	SE	Beta		
1	(Constant) B	-	22.05	8.59		2.56	.012
	CGC		-3.50	1.38	-9.95	-2.52	.013
	GSE		-5.55	2.15	-8.73	-2.57	.011
	CGCxGSE		.90	.34	12.85	2.60	.011
2	(Constant) B	SS	23.37	13.10		1.78	.080
	CGC		-3.72	2.11	-10.38	-1.76	.083
	GSE		-5.88	3.28	-8.65	-1.79	.079
	CGCxGSE		.962	.53	13.00	1.81	.075
3	(Constant) C	-	23.71	10.27		2.30	.023
	CGC		-3.78	1.66	-13.22	-2.28	.025
	GSE		-5.97	2.57	-8.28	-2.3	.023
	CGCxGSE		.97	.41	14.80	2.34	.021
4	(Constant) -	-	22.69	6.52		3.48	.001
	CGC		-3.61	1.05	-11.44	-3.43	.001
	GSE		-5.71	1.63	-8.51	-3.49	.001
	CGCxGSE		.934	.26	13.67	3.53	.001

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among MS students moderation regression analysis was applied. The results revealed that GSE is playing a moderating role on career goal clarity and career maturity among MS students of Uni. B ($\beta_{(CGCxGSE)}$ = 12.85, p < 0.05); social

sciences of Uni. B ($\beta_{(CGCxGSE)} = 13.00$, p > .05); Uni. C ($\beta_{(CGCxGSE)} = 14.80$, p < .05); Uni .B & C ($\beta_{(CGCxGSE)} = 13.67$, p < .05). So the hypothesis is accepted.

Table 34 *Moderating role of general self-efficacy on career goal clarity and career maturity among MS students*

Model		University	Faculty	UC		SC	t	Sig.
				B	SE	Beta		
1	(Constant)	B	NS	20.56	11.44		1.79	.07
	CGC			-3.25	1.84	-9.50	-1.76	.08
	GSE			-5.18	2.87	-8.90	-1.80	.07
	CGCxGSE			.84	.46	12.76	1.81	.07
2	(Constant)	C	SS	24.49	13.01		1.88	.067
	CGC			-3.91	2.10	-14.40	-1.8	.070
	GSE			-6.17	3.26	-9.43	-1.89	.065
	CGCxGSE			1.01	.52	16.26	1.91	.062
3	(Constant)	C	NS	22.90	17.52		1.30	.19
	CGC			-3.65	2.82	-12.01	-1.29	.20
	GSE			-5.76	4.39	-7.00	-1.31	.19
	CGCxGSE			.94	.70	13.25	1.32	.19

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among MS students moderation regression analysis was applied. Results revealed that GSE is not playing moderating role on career goal clarity and career maturity among MS students of natural sciences of Uni. B ($\beta_{(CGCxGSE)} = 12.76$, p > .05); social sciences of Uni. C ($\beta_{(CGCxGSE)} = 16.26$, p > .05); and natural sciences of Uni. C ($\beta_{(CGCxGSE)} = 13.25$, p > 0.05). So, the hypothesis is rejected.

Table 35 *Moderating role of general self-efficacy on career goal clarity and career maturity among PhD students*

Model		University	Faculty	UC		SC	t	Sig.
				B	SE	Beta		
1	(Constant)	B		24.64	17.64		1.397	.17
	CGC			-3.92	2.88	-13.09	-1.36	.18
	GSE			-6.19	4.42	-8.25	-1.40	.16
	CGCxGSE			1.00	.72	15.06	1.39	.17
2	(Constant)	B	SS	23.44	21.8		1.07	.29
	CGC			-3.72	3.54	-10.46	-1.05	.30
	GSE			-5.89	5.47	-8.73	-1.07	.29
	CGCxGSE			.96	.88	13.50	1.07	.29
3	(Constant)	B	NS	.87	.69		1.25	.22
	GSE			-.23	.18	-.27	-1.2	.23
	CGCxGSE			.02	.01	.36	1.65	.11
4	(Constant)	C		19.23	20.07		.95	.34
	CGC			-3.03	3.23	-12.50	-.93	.35
	GSE			-4.83	5.02	-6.02	-.96	.34
	CGCxGSE			.78	.81	13.08	.96	.34
5	(Constant)	C	SS	25.11	21.49		1.16	.25
	CGC			-3.99	3.49	-18.23	-1.1	.26
	GSE			-6.30	5.38	-9.60	-1.17	.25
	CGCxGSE			1.02	.87	19.31	1.17	.25
6	(Constant)	C	NS	.002	1.21		.001	.99
	GSE			-.02	.30	-.02	-.07	.94
	CGCxGSE			.02	.02	.34	1.20	.25
5	(Constant)	-	-	21.84	12.35		1.76	.08
	CGC			-3.46	2.00	-12.98	-1.72	.08
	GSE			-5.49	3.09	-7.04	-1.77	.08
	CGCxGSE			.89	.50	14.11	1.77	.080

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among PhD students moderation regression analysis was applied. Results revealed that GSE is not playing moderating role on career goal clarity and

career maturity among PhD students of Uni. B ($\beta_{(CGCxGSE)}$ = 15.06, p > .05); social sciences of Uni. B ($\beta_{(CGCxGSE)}$ = 13.50, p > .05); and natural sciences of Uni. B ($\beta_{(CGCxGSE)}$ = .36, p > .05); PhD students of Uni. C ($\beta_{(CGCxGSE)}$ = 13.08, p > .05); social sciences of Uni. C ($\beta_{(CGCxGSE)}$ = 19.31, p > .05); natural sciences of Uni. C ($\beta_{(CGCxGSE)}$ = .34, p > .05) and Uni. B & C ($\beta_{(CGCxGSE)}$ = 14.11, p > .05). So, the hypothesis is rejected.

H7: There is a moderating role of general self-efficacy in relationship of career goal clarity and career maturity among postgraduate male and female public-sector universities of Islamabad

Table 36 *Moderating role of general self-efficacy on career goal clarity and career maturity among male MS students of Uni. B*

Model		Faculty	Gender	UC		SC	t	Sig.
				B	SE	Beta		
1	(Constant)	-	Male	26.85	18.935		1.41	.16
	CGC			-4.28	3.07	-12.29	-1.3	.17
	GSE			-6.74	4.74	-8.34	-1.42	.163
	CGCxGSE			1.10	.77	14.44	1.42	.161
2	(Constant)	-	Female	20.30	10.15		2.00	.050
	CGC			-3.22	1.63	-9.13	-1.97	.053
	GSE			-5.13	2.55	-8.82	-2.01	.049
	CGCxGSE			.83	.41	12.35	2.03	.046
3	(Constant)	SS	Male	.23	1.07		.21	.83
	GSE			-.06	.28	-.04	-.20	.83
	CGCxGSE			.02	.02	.28	1.17	.25
4	(Constant)	NS	Male	21.07	20.10		1.04	.30
	CGC			-3.34	3.26	-9.44	-1.02	.31
	GSE			-5.30	5.04	-7.94	-1.05	.30
	CGCxGSE			.86	.82	12.13	1.05	.30
5	(Constant)	SS	Female	21.30	14.23		1.49	.144
	CGC			-3.39	2.29	-9.27	-1.47	.148
	GSE			-5.38	3.576	-8.70	-1.50	.141
	CGCxGSE			.88	.57	12.28	1.52	.136
6	(Constant)	NS	Female	19.25	14.84		1.29	.207
	CGC			-3.03	2.38	-9.36	-1.27	.216
	GSE			-4.86	3.72	-9.51	-1.30	.205
	CGCxGSE			.788	.59	13.11	1.31	.202

Dependent Variable: CM

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among MS male and female students of Uni. B moderation regression analysis was applied. Results revealed that GSE is not playing moderating role on career goal clarity and career maturity among MS male students of Uni. B (β(CGCxGSE) = 14.44, p > .05); female students (β(CGCxGSE) = 12.35, p > .05); male social sciences (β(CGCxGSE) = .28, p > .05); male natural sciences (β(CGCxGSE) = 12.13, p > .05); female social sciences (β(CGCxGSE) = 12.28, p > .05); and female natural sciences (β(CGCxGSE) = 13.11, p > .05). So, the hypothesis is rejected.

Table 37 *Moderating role of general self-efficacy on career goal clarity and career maturity among male MS students of Social & Natural Sciences of Uni. C*

Model		Faculty	Gender	UC		SC	t	Sig.
				B	SE	Beta		
1	(Constant)	-	Male	18.02	18.98		.95	.34
	CGC			-2.85	3.04	-7.29	-.93	.35
	GSE			-4.54	4.76	-5.57	-.95	.345
	CGCxGSE			.74	.76	8.87	.97	.33
2	(Constant)	SS	Male	19.27	24.59		.78	.445
	CGC			-3.05	4.00	-8.56	-.76	.456
	GSE			-4.88	6.17	-6.81	-.79	.441
	CGCxGSE			.79	1.00	10.89	.79	.439
3	(Constant)	SS	Female	27.87	15.93		1.74	.094
	CGC			-4.46	2.56	-19.49	-1.7	.096
	GSE			-7.01	3.99	-11.71	-1.7	.093
	CGCxGSE			1.14	.64	20.77	1.78	.088
4	(Constant)	NS	Male	-.12	.72		-.17	.86
	GSE			.01	.21	.01	.07	.93
	CGCxGSE			.02	.02	.25	1.04	.30

Dependent Variable: CM

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among MS male and female students of Uni. C moderation regression analysis was applied. Results revealed that GSE is not playing moderating

role on career goal clarity and career maturity among MS male students of Uni. C (β(CGCxGSE) = 8.87, *p* > .05); male social sciences (β(CGCxGSE) = 10.89, p > .05); female social sciences (β(CGCxGSE) = 20.77, p > .05); and male natural sciences (β(CGCxGSE) = .25, p > .05). So the hypothesis is rejected.

Table 38 *Moderating role of general self-efficacy on career goal clarity and career maturity among female MS students of Natural Sciences of Uni. C*

Model		Faculty	Gender	UC		SC	*t*	Sig.
				B	SE	Beta		
1	(Constant)	NS	Female	.88	.43		2.03	.057
	GSE			-.27	.11	-.43	-2.3	.029
	CGCxGSE			.034	.00	.70	3.84	.001
2	(Constant)	-	Female	26.87	11.41		2.35	.023
	CGC			-4.31	1.85	-19.29	-2.32	.025
	GSE			-6.77	2.86	-10.86	-2.37	.022
	CGCxGSE			1.11	.46	20.84	2.39	.021

Dependent Variable: CM

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among MS natural sciences students of Uni. C moderation regression analysis was applied. Results revealed that GSE is playing the moderating role on career goal clarity and career maturity among MS natural sciences female students of Uni. C GSE ($\beta_{(CGCxGSE)}$ = .70, p < .05); and MS female students ($\beta_{(CGCxGSE)}$ = 20.84, p < .05). So, the hypothesis is accepted.

Table 39 *Moderating role of general self-efficacy on career goal clarity and career maturity among male & female PhD students of Uni. B*

Model		Faculty	Gender	UC		SC	t	Sig.
				B	SE	Beta		
1	(Constant)	-	Male	32.73	18.40		1.77	.090
	CGC			-5.20	3.00	-5.32	-1.7	.097
	GSE			-8.94	4.81	-18.01	-1.8	.077
	CGCxGSE			1.44	.78	20.84	1.84	.080
2	(Constant)	-	Female	30.92	18.40		1.79	.080
	CGC			-4.21	3.00	-4.99	-1.78	.089
	GSE			-7.93	4.81	-19.01	-1.92	.0781
	CGCxGSE			1.39	.78	21.12	1.83	.079
3	(Constant)	SS	Male	.23	1.07		.21	.833
	GSE			-.06	.28	-.04	-.20	.837
	CGCxGSE			.02	.02	.28	1.17	.254
4	(Constant)	NS	Male	21.07	20.10		1.04	.305
	CGC			-3.34	3.26	-9.44	-1.02	.316
	GSE			-5.30	5.04	-7.94	-1.05	.304
	CGCxGSE			.86	.82	12.13	1.05	.302
5	(Constant)	SS	Female	20.32	15.70		1.05	.207
	CGC			-3.20	2.57	-9.41	-1.35	.216
	GSE			-4.91	2.99	-8.31	-1.4	.205
	CGCxGSE			.79	.61	13.46	1.29	.202
6	(Constant)	NS	Female	19.25	14.84		1.29	.208
	CGC			-3.03	2.38	-9.36	-1.2	.226
	GSE			-4.86	3.72	-9.51	-1.30	.212
	CGCxGSE			.78	.59	13.11	1.31	.200

Dependent Variable: CM

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among male and female PhD students of Uni. B moderation regression analysis was applied. Results revealed that GSE is not playing the moderating role on career goal clarity and career maturity among PhD male students of Uni. B GSE ($\beta_{(CGCxGSE)} = 20.84$, p >.05); female students ($\beta_{(CGCxGSE)} = 21.12$, p >.05); male

social sciences ($\beta_{(CGCxGSE)}$ = .28, p > .05); male natural sciences ($\beta_{(CGCxGSE)}$ = 12.13, p > .05); female social sciences ($\beta_{(CGCxGSE)}$ = 13.46, p > .05); and female natural sciences ($\beta_{(CGCxGSE)}$ = 13.11, p >.05). So, the hypothesis is rejected.

Table 40 *Moderating role of general self-efficacy on career goal clarity and career maturity among male & female PhD students of Uni. C*

Model		Faculty	Gender	UC		SC	t	Sig.
				B	SE	Beta		
1	(Constant)	-	Male	31.98	17.87		1.68	.080
	CGC			-6.10	3.10	-4.82	-1.69	.089
	GSE			-7.99	3.98	-17.71	-1.77	.069
	CGCxGSE			1.32	.69	18.43	1.64	.074
2	(Constant)	-	Female	28.94	16.91		1.85	.099
	CGC			-4.42	3.20	-4.34	-1.64	.072
	GSE			-6.82	3.75	-17.01	-1.84	.064
	CGCxGSE			1.28	.69	20.82	1.74	.062
3	(Constant)	SS	Male	.22	1.12		.21	.821
	GSE			-.05	.27	-.03	-.20	.825
	CGCxGSE			.02	.02	.27	1.17	.248
4	(Constant)	NS	Male	20.09	18.18		1.03	.315
	CGC			-3.94	2.94	-8.81	-1.01	.301
	GSE			-5.21	4.05	-7.65	-1.03	.302
	CGCxGSE			.79	.67	11.99	1.03	.301
5	(Constant)	SS	Female	18.84	14.86		1.03	.216
	CGC			-2.99	2.33	-9.31	-1.23	.205
	GSE			-3.94	2.45	-8.21	-1.32	.203
	CGCxGSE			.64	.52	12.94	1.18	.202
6	(Constant)	NS	Female	17.97	12.75		1.24	.212
	CGC			-2.92	2.142	-8.97	-1.26	.202
	GSE			-3.74	3.45	-7.87	-1.21	.312
	CGCxGSE			.678	.48	11.88	1.915	.197

Dependent Variable: CM

To measure the moderating role of general self-efficacy on career goal clarity and career maturity among male and female PhD students Uni. C moderation regression analysis was applied. Results revealed that GSE is not playing the moderating role on career goal clarity and career maturity among PhD male students of Uni. C GSE ($\beta_{(CGCxGSE)}$ = 18.438, p >.05); female students ($\beta_{(CGCxGSE)}$ = 20.821, p >.05); male social sciences ($\beta_{(CGCxGSE)}$ = .272, p > .05); male natural sciences students of Uni. C ($\beta_{(CGCxGSE)}$ = 11.998, p > .05); female social sciences ($\beta_{(CGCxGSE)}$ = 12.941, p > .05); and female natural sciences ($\beta_{(CGCxGSE)}$ = 11.881, p >.05). So, the hypothesis is rejected.

CHAPTER 5:   DISCUSSION AND RECOMMENDATIONS

5.1 Discussion

The aim of this research was to find out the differences in career maturity, career goal clarity, their relationship and moderating role of general self-efficacy among postgraduate students of public sector universities of Islamabad.

The results of the study was supported by Gibbs, McGready, and Griffin (2015) by finding that a non-significant difference exist in career goals among higher education students. It showed that the students of same level share similar mean scores and students differ on career goal clarity who belongs to a different educational level. The current study also found that postgraduate students show non-significant mean difference on career goal clarity.

The findings of the present study suggested that a non-significant difference exist among postgraduate students of social and natural sciences of public sector universities of Islamabad on career maturity. The results of present study is supported by the findings of Allen (2014) and Bahrinsyah (2017), who found that non-significant difference exist on career maturity among university students.

The current study examined the gender differences on career maturity and career goal clarity among postgraduate students of postgraduate students of public sector universities of Islamabad. The results disclosed that there is a non-significant difference in the mean scores of postgraduate students on career goal clarity among postgraduate students. The study supported the findings of Jawarneh (2016) and Talib, Salleh, Amat, Ghavifekr, & Arif (2014) who stated that non-significant differences exist in the career maturity on the basis of gender. However, the finding of Bhae (2017) contradicted that the female students' scored higher than that of the male students. The study also contradicted Ottu and Idowu (2014) who stated that the male reported significantly higher career maturity than female students.

The findings of Shafeeq and Loona (2017) contradicted the findings of the study by discovering that female students scored higher on career readiness and career knowledge. Career readiness and career knowledge are the important components of career maturity.

The results of the study supported by the findings of Chan (2017) who investigated the importance of career goal clarity and proactive career behaviours in

predicting positive student outcomes. There was a postive association between career goal clarity on number of career behaviors which include proactive career engagement and positive student outcomes.

The study backed by Kanwal and Naqvi (2016) by discovering a positive association in the component of career maturity (career decision making) and career goals. The study also discovered similar results by finding a positive relationship between career goal clarity and career maturity.

The current study showed the impact of career goal clarity on career maturity among post graduate students of public sector universities of Islamabad. The findings of the study favored the findings of Sirohi (2013) who showed increase in career exploration and goal clarity was a predictor of decrease in career indecisiveness and increase in career maturity.

The study depicts the similarity with Singh and Shukla (2015) who mentioned that career maturity and self-efficacy showed a noteworthy association with self-efficacy of the students. The recent study found a moderating role of general self-efficacy on career goal clarity and career maturity in the postgraduate students of public sector universities of Islamabad. The present study is backed by the findings of Pothukuchi, Kumar, and Dash (2015) who examined the impact of academic self-efficacy on academic and career goal clarity among postgraduate women students in Bangalore. It indicated that academic self-efficacy influence the academic and career goal clarity. It highlighted that career goal clarity and career decision making are the important part of career development that leads towards self-efficacy.

Rosdi, Talib and Wahab (2015) also supported the current study by finding a correlation between career maturity and career self–efficacy. It was suggested that career maturity and career self–efficacy can be improved if the students provided with interventions on career programs. The current study also found general self-efficacy has a role in predicting the career maturity.

Pasha, Hamid and Shahzad (2017) found that self-efficacy moderates the career success and academic & career behaviors of students. The career maturity and career goal clarity are career behaviors and important contributors of career success. The present study also found that general self-efficacy moderating the career goal clarity and career maturity.

The study was supported by Starica (2014) findings by highlighting the contribution of career decision self-efficacy as moderator in predicting the career

maturity among girls and boys. The study also found that career goal clarity and career maturity is moderated by general self-efficacy. The study was also supported by Raziq, Borini, and Shabaz (2018) who found that self-efficacy partly moderates relationship and goal clarity and career decisions as component of career maturity.

5.2 Findings

Based on results following findings were drawn:

1. The mean difference among postgraduate students on career goal clarity and career maturity was calculated through *t*-test. It was found that *t*-test value for MS students was (1.451) and for PhD students was (1.09) students on career goal clarity. The *t*-test value on career maturity for MS students was (.066) and for PhD students was (.973) students. The *t*-test values were less than the critical value (1.66) at 0.05 level of significance. It shows a non-significant difference on career goal clarity and career maturity, hence hypothesis is rejected.

2. The mean difference among male and female postgraduate students on career goal clarity was calculated through *t*-test. It was found that *t*-test value for MS male and female students of Uni. B (-.391); Uni. B social sciences (-.291); Uni. B natural sciences (-.343); Uni. C (1.419); Uni. C social sciences (.994); Uni. C natural sciences (.961) and for PhD students of Uni. B (1.210); Uni. B social sciences (1.017); Uni. B natural sciences (1.572); Uni. C (.260); Uni. C social sciences (.068); Uni. C natural sciences (.281) were less than the critical value (1.6) at 0.05 level of significance. It shows a non-significant difference on career goal clarity hence hypothesis is rejected.

3. The mean difference among male and female postgraduate students on career maturity was calculated through *t*-test. It was found that *t*-test value for MS students of Uni. B (-.390); Uni. B social sciences (-2.81); Uni. B natural sciences (-3.33); Uni. C (1.419); Uni. C social sciences (.993); Uni. C natural sciences (.962) and for PhD students of Uni. B (2.23); Uni. B social sciences (1.12); Uni. B natural sciences (1.87); Uni. C (.270); Uni. C social sciences (.062); Uni. C natural sciences (.285) were less than the critical value (1.67) at 0.05 level of significance. It shows a non-significant difference on career maturity, hence hypothesis is rejected.

4. The analysis of variance (ANOVA) was applied to measure the mean difference in career goal clarity across disciplines. The calculated *F* value of MS social sciences

of Uni. B (*F*= .022); Uni. C (*F*= .067); and Uni. B & C (*F*= .103); natural sciences Uni. B (*F*= .739); Uni. C (*F*= .083); and Uni. B and C (*F*= .616), and PhD social sciences Uni. B (*F*= .595); Uni. C (*F*=.068); Uni. B & Uni. C (*F*= .067), for PhD natural sciences Uni. B (*F*=.519); Uni. C (*F*=8.520) and Uni. B and Uni. C (*F*= .489) were less than the critical value Uni. B social sciences (3.16); Uni. C (3.21); and Uni. B & C (3.08); natural sciences Uni. B (3.17); Uni. C (3.22); and Uni. B and C (3.09), and PhD social sciences Uni. B (3.46); Uni. C (3.55); Uni. B & Uni. C (3.22), for PhD natural sciences Uni. B (3.49); Uni. C (3.27) and Uni. B and Uni. C (3.27) at .05 of significance. It shows a non-significant difference on career goal clarity, hence hypothesis is rejected.

5. The analysis of variance (ANOVA) was applied to measure the mean difference in career maturity across disciplines. The calculated *F* value of MS social sciences of Uni. B (*F*= .052); Uni. C (*F*= .337); and Uni. B & Uni. C (*F*= .299), for natural sciences Uni. B (*F*= .021); Uni. C (*F*= .1047); and Uni. B and Uni. C (*F*= .457); PhD social sciences Uni. B (*F*= .1.347); Uni. C (.637); Uni. B & Uni. C (*F*= .117) and PhD natural sciences Uni. B (*F*=.198); Uni. C (*F*=6.426) and Uni. B and Uni. C (*F*= 1.010) were less than the critical value Uni. B social sciences (3.16); Uni. C (3.21); and Uni. B & C (3.08); natural sciences Uni. B (3.17); Uni. C (3.22); and Uni. B and C (3.09), and PhD social sciences Uni. B (3.46); Uni. C (3.55); Uni. B & Uni. C (3.22), for PhD natural sciences Uni. B (3.49); Uni. C (3.27) and Uni. B and Uni. C (3.27) at .05 of significance. It shows a non-significant difference on career maturity, hence hypothesis is rejected.

6. The correlation between career goal clarity and career maturity among postgraduate was measured through product-moment correlation. The r value for MS students of social & natural sciences of Uni. B (0.278); social sciences of Uni. B (.277); natural sciences of Uni. B (.280); MS social & natural sciences of Uni. C (.364); social sciences of Uni. C (.400); natural sciences of Uni. C (.327); PhD social & natural sciences of Uni. C (0.375); PhD social sciences of Uni. C (0.434) were greater than the critical value MS students of social & natural sciences of Uni. B (0.21); social sciences of Uni. B (.216); natural sciences of Uni. B (.22); MS social & natural sciences of Uni. C (.17); social sciences of Uni. C (.24); natural sciences of Uni. C (.24); PhD social & natural sciences of Uni. C (0.28); PhD social sciences of Uni. C (0.36) at .05 level of significance. It was found there was a positive correlation

between career maturity and career goal clarity among, hence hypothesis is accepted.

7. The correlation between career goal clarity and career maturity among PhD students of was measured through product-moment correlation. The r value of PhD students of social sciences of Uni. B (0.320); PhD natural sciences of Uni. B (0.358) and PhD natural sciences of Uni. C (0.324). The r values were less than the critical value for PhD students of social sciences of Uni. B (0.33); PhD natural sciences of Uni. B (0.36) and PhD natural sciences of Uni. C (0.45) at .05 level of significance. It was found that there was a positive but non-significant correlation between career maturity and career goal clarity, hence hypothesis is rejected.

8. The impact of career goal clarity on career maturity among post graduate students was measured by using simple linear regression. The values of MS students of Uni. B & Uni. C (β=.320, p=.000); social and natural sciences of Uni. B (β=.278, p=.003); social sciences of Uni. B (β=.277, p=.034); natural sciences of Uni. B (β=.280, p=.040; social and natural sciences of Uni. C (β=.364, p=.000); social sciences of Uni. C (β=.400, p=.006); and natural sciences of Uni. C (β=.327, p=.028); PhD Uni. B & C (β=.357, p=.001); social and natural sciences of Uni. B (β=.320, p=.029); social and natural sciences of Uni. C (β=.375, p=.026); social sciences of Uni. C (β=.434, p=.049). The results found that career goal clarity had impact on career maturity, hence hypothesis is accepted.

9. The impact of career goal clarity on career maturity among PhD students was measure by using simple linear regression. The value were for PhD students of social sciences of Uni. B (β=.265, p=.210); natural sciences of Uni. B (β=.358, p=.093); and natural sciences of Uni. C (β=.324, p=.259). The results found that career goal clarity had no impact on career maturity, hence hypothesis is rejected.

10. The moderating role of general self-efficacy on career goal clarity and career maturity among MS students was measure through moderation regression analysis. The values were for MS Uni. B ($\beta_{(CGCxGSE)}$ = 12.851, p < .05); social sciences of Uni. B ($\beta_{(CGCxGSE)}$ = 13.001, p > .05); Uni. C ($\beta_{(CGCxGSE)}$ = 14.803, p < .05); Uni. B & Uni. C ($\beta_{(CGCxGSE)}$ = 13.673, p < .05). The results indicate that there is moderating of general self-efficacy, hence hypothesis is accepted.

11. The moderating role of general self-efficacy on career goal clarity and career maturity among postgraduate students was measure by using moderation regression

analysis. The values were for MS natural sciences of Uni .B ($\beta_{(CGCxGSE)}$ = 12.766, p > .05); social sciences of Uni. C ($\beta_{(CGCxGSE)}$ = 16.261, p > .05); and natural sciences of Uni. C ($\beta_{(CGCxGSE)}$ = 13.250, p > .05); PhD Uni. B ($\beta_{(CGCxGSE)}$ = 15.063, p > .05); social sciences of Uni. B ($\beta_{(CGCxGSE)}$ = 13.503, p > .05); and natural sciences of Uni. B ($\beta_{(CGCxGSE)}$ = .363, p > .05); PhD students of Uni. C ($\beta_{(CGCxGSE)}$ = 13.080, p > .05); social sciences of Uni. C ($\beta_{(CGCxGSE)}$ = 19.310, p > .05); natural sciences of Uni. C ($\beta_{(CGCxGSE)}$ = .345, p > .05) and Uni. B & C ($\beta_{(CGCxGSE)}$ = 14.112, p > .05). The results indicate that general self-efficacy is not playing moderating role, hence hypothesis is rejected.

12. The moderating role of general self-efficacy on career goal clarity and career maturity among MS female students was calculated by using moderation regression analysis. The values were for MS natural sciences female students of Uni. C GSE ($\beta_{(CGCxGSE)}$ = .701, p < .05); and MS female students of Uni. C ($\beta_{(CGCxGSE)}$ = 20.843, p < .05). Results revealed a moderating role of general self-efficacy, hence hypothesis is accepted.

13. The moderating role of general self-efficacy on career goal clarity and career maturity among postgraduate male and female students was calculated by using moderation regression analysis. The values were for MS male students of Uni. B (β(CGCxGSE) = 14.449, p > .05); female students of Uni. B (β(CGCxGSE) = 12.355, p > .05); male social sciences of Uni. B (β(CGCxGSE) = .280, p > .05); male natural sciences of Uni. B (β(CGCxGSE) = 12.138, p > .05); female social sciences of Uni. B (β(CGCxGSE) = 12.284, p > .05); and female natural sciences of Uni. B (β(CGCxGSE) = 13.115, p > .05). MS male students of Uni. C (β(CGCxGSE) = 8.879, p > .05); male social sciences of Uni. C (β(CGCxGSE) = 10.893, p > .05); female social sciences of Uni. C (β(CGCxGSE) = 20.843, p > .05); male natural sciences of Uni. C (β(CGCxGSE) = .252, p > .05); PhD male and female students of Uni. B was measured by using moderation regression analysis, hence hypothesis is rejected.

14. The moderating role of general self-efficacy on career goal clarity and career maturity among postgraduate male and female students was calculated by using moderation regression analysis. The values were for PhD male students of Uni. B GSE ($\beta_{(CGCxGSE)}$ = 20.843, p >.05); female students of Uni. B GSE ($\beta_{(CGCxGSE)}$ = 21.128,

p >.05); male social sciences students of Uni. B ($\beta_{(CGCxGSE)}$ = .280, p > .05); male natural sciences students of Uni. B ($\beta_{(CGCxGSE)}$ = 12.138, p > .05); female social sciences students of Uni. B ($\beta_{(CGCxGSE)}$ = 13.462, p > .05); and female natural sciences students of Uni. B ($\beta_{(CGCxGSE)}$ = 13.115, p >.05); PhD male students of Uni. C GSE ($\beta_{(CGCxGSE)}$ = 18.438, p >.05); female students of Uni. C GSE ($\beta_{(CGCxGSE)}$ = 20.821, p >.05); male social sciences students of Uni. C ($\beta_{(CGCxGSE)}$ = .272, p > .05); male natural sciences students of Uni. C ($\beta_{(CGCxGSE)}$ = 11.998, p > .05); female social sciences students of Uni. C ($\beta_{(CGCxGSE)}$ = 12.941, p > .05); and female natural sciences students of Uni. C ($\beta_{(CGCxGSE)}$ = 11.881, p >.05). The results indicated that general self-efficacy is not playing the moderating role on career goal clarity and career maturity, hence hypothesis is rejected.

5.3 Conclusion

Based on findings following conclusions are made:

1. The postgraduate students of public sector universities of Islamabad showed similarities in mean scores and it has been observed there was a non-significant difference exists among postgraduate students.

2. A resemblance was observed among postgraduate students of public sector universities of Islamabad in the mean scores of career maturity. The postgraduates were not different in career maturity.

3. The gender differences on career goal clarity and career maturity were not observed in the male and female student of postgraduate students of public sector universities of Islamabad.

4. The postgraduate students of public sector universities of Islamabad showed a moderate positive association in the career goal clarity and career maturity.

5. The career goal clarity has influence to predict the career maturity in the postgraduate students of public sector universities of Islamabad.

6. The general self-efficacy acted as catalyst in the relationship of career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

7. The general self-efficacy showed no moderating role in the relationship of career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

5.4 Recommendations

Based on conclusions, following recommendations were given:

1. The universities may focus on the career education and career development by arranging career awareness sessions and career counseling programs to bring career goal clarity and career maturity in the students during the academic sessions. These will promote job related skills to produce skilled graduates who contribute in effective transition from academic to work life.

2. The universities may focus on the career maturity and career goal clarity of students by providing them career planning opportunities. This will improve career maturity, level of career goal clarity and wise decisions related to career choices.

3. There may be gender specific career related sessions and programs for the enhancing the career maturity and career goal clarity of male and female university students during the different levels of career progression.

4. There may be specific career planning and career awareness activities for MS and PhD students to raise their career goal clarity, career maturity and general self-efficacy.

5. There may be special sessions for confidence building for the students, so that their self-efficacy may be improved, that will increase students' confidence in their abilities.

6. In order to promote higher career goal clarity, career maturity and self-efficacy, students may be introduced with career educational activities in lower classes, so that when they reach at higher classes they may be well prepared to make career related decisions.

7. Career counseling and information may be provided at all levels of career development from lower to higher classes, so that the student should have mastery over all the career development tasks of choosing a career/subject and finding an opportunity related to their career development stage in accordance to their developmental age. This will enhance career maturity and career goal clarity.

8. Rather than believing that career maturity and career goal clarity will increase with the age and education, effective career workshops and seminars may be arranged to equip students with set of skills and promote professionalism.

9. The studies may also be conducted on cultural needs that hinder the career maturity and promote and highlight the issues related to career goals.

10. In order to increase the generalizability of the study and ensure the accuracy of data, the study may be conducted with larger sample size. That will provide a larger picture of the problem.

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LIST OF EXPERTS

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Academic & Career Goal Clarity

Case Processing Summary

		N	%
Cases	Valid	30	90.9
	Excluded	3	9.1
	Total	33	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.845	21

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. ACGC1	123.23	70.116	.549	.840
2. ACGC2	123.33	64.644	.815	.827
3. ACGC3	124.10	64.990	.358	.844
4. ACGC4	128.83	76.695	-.248	.875
5. ACGC5	123.63	65.551	.634	.831
6. ACGC6	123.63	57.757	.808	.816
7. ACGC7	123.67	68.644	.427	.839
8. ACGC8	123.77	68.116	.500	.837
9. ACGC9	123.70	72.907	-.017	.850
10. ACGC10	123.63	65.206	.616	.831
11. ACGC11	123.73	67.789	.529	.836
12. ACGC12	123.57	72.323	.051	.849
13. ACGC13	123.63	62.723	.741	.825
14. ACGC14	123.90	56.852	.843	.814
15. ACGC15	123.77	62.737	.563	.831
16. ACGC16	123.80	63.476	.656	.828
17. ACGC17	123.87	66.257	.272	.849
18. ACGC18	123.57	67.564	.492	.837
19. ACGC19	123.87	59.913	.769	.820
20. ACGC20	123.80	72.855	-.024	.853
21. ACGC21	123.63	74.447	-.193	.855

Career Maturity Inventory

Case Processing Summary

		N	%
Cases	Valid	30	90.9
	Excluded	3	9.1
	Total	33	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.847	50

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CMI1	26.73	69.237	.413	.842
CMI2	26.77	72.392	-.010	.850
CMI3	26.73	68.340	.537	.839
CMI4	26.83	76.144	-.450	.858
CMI5	27.07	74.340	-.239	.855
CMI6	26.93	67.789	.537	.839
CMI7	27.03	74.792	-.288	.856
CMI8	26.77	71.220	.139	.847
CMI9	26.93	68.478	.452	.841
CMI10	26.97	70.585	.198	.846
CMI11	26.83	69.454	.348	.843
CMI12	27.03	67.757	.545	.839
CMI13	26.97	70.171	.247	.845
CMI14	26.90	71.541	.087	.848
CMI15	27.07	67.651	.565	.838
CMI16	27.03	70.861	.167	.847
CMI17	26.83	69.454	.348	.843
CMI18	26.97	71.068	.141	.847
CMI19	26.90	70.438	.218	.846
CMI20	26.97	69.689	.305	.844
CMI21	26.93	66.892	.649	.836

CMI22	26.77	70.254	.264	.845
CMI23	26.93	69.651	.310	.844
CMI24	26.90	67.472	.581	.838
CMI25	27.00	69.103	.376	.842
CMI26	26.90	66.990	.641	.837
CMI27	26.90	68.921	.401	.842
CMI28	26.87	72.120	.020	.850
CMI29	27.00	67.241	.605	.837
CMI30	26.93	69.789	.293	.844
CMI31	26.93	70.961	.154	.847
CMI32	26.90	69.266	.359	.843
CMI33	26.97	68.654	.430	.841
CMI34	26.93	70.478	.211	.846
CMI35	26.97	66.930	.642	.836
CMI36	26.93	71.720	.065	.849
CMI37	26.93	67.582	.563	.838
CMI38	26.93	68.133	.495	.840
CMI39	26.73	74.961	-.338	.855
CMI40	26.97	66.999	.634	.837
CMI41	26.83	72.695	-.048	.851
CMI42	26.93	67.099	.623	.837
CMI43	26.87	71.430	.102	.848
CMI44	26.90	66.921	.650	.836
CMI45	26.87	67.292	.611	.837
CMI46	27.23	73.357	-.137	.852
CMI47	26.90	66.507	.702	.835
CMI48	26.83	75.523	-.379	.857
CMI49	26.90	66.645	.685	.836
CMI50	27.00	70.966	.153	.847

General Self-Efficacy Scale

Case Processing Summary

		N	%
Cases	Valid	30	90.9
	Excluded	3	9.1
	Total	33	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.841	10

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
1. GSE1	34.37	5.826	.332	.842
2. GSE2	34.37	5.137	.853	.805
3. GSE3	34.40	4.869	.931	.793
4. GSE4	34.60	6.455	-.113	.894
5. GSE5	34.40	4.869	.931	.793
6. GSE6	34.53	5.637	.156	.882
7. GSE7	34.40	4.869	.931	.793
8. GSE8	34.40	4.869	.931	.793
9. GSE9	34.53	5.430	.371	.844
10. GSE10	34.40	4.869	.931	.793

Name_____

Academic and Career Goal Clarity Scale (form B)

Directions: Please read each statement below, and then use the following scale to indicate what

BEST describes what is true for you.

Extremely Untrue of me						*Extremely True of me*
1	2	3	4	5	6	7

__ 1 I have identified at least one area of interest that I would like to pursue in my education.

__ 2 I have decided on an academic major.

__ 3 For my major or academic goal, I know the list of courses that I need to take.

__ 4 I have worked with a college counselor to develop a plan listing the courses I need to complete for my lower division coursework.

__ 5 I am aware of the steps it will take for me to complete my highest academic goal.

__ 6 I am clear about how long it will take for me to complete my education to meet my final academic goal.

__ 7 I am pretty sure about the amount of time it will take for me to complete all of my lower division (freshman and sophomore) coursework in my academic major.

__ 8 I know how many and the specific classes I will need to take each semester to complete my academic goal.

__ 9 All in all, I am set with a clear academic plan toward completing my educational goals.

__ 10 I am sure about what I want to do for my occupation.

__ 11 I have several career options in mind for myself.

__ 12 I've thought about the type of work environment that I desire for my career.

__ 13 I know the most important skills needed for at least one of the careers that I have in mind.

__ 14 I have a pretty good idea of the college degree requirements for the career I have in mind.

__ 15 I am familiar with the daily work routine for people working in my desired career.

__ 16 I know the approximate salary range for at least one of my occupational choices.

__ 17 I know the steps that I need to take to enter the career of my choice.

__ 18 I know the typical working hours for at least one of my career choices.

___ 19   I know what a curriculum vitae or resume is.

___ 20   I know how to make my own curriculum vitae or resume.

___ 21   I have spoken with or heard a talk given by someone
about the career I would like to have.

CMI Items

John O. Crites, Ph.D.

Mark L. Savickas, Ph.D.

1.	Once you choose a job, you can't choose another one.	AGREE DISAGREE
2.	In order to choose a job, you need to know what kind of person you are.	AGREE DISAGREE
3.	I plan to follow the line of work my parents suggest.	AGREE DISAGREE
4.	I guess everyone has to go to work sooner than later, but I don't look forward to it.	AGREE DISAGREE
5.	You can do any kind of work you want to as long as you try hard.	AGREE DISAGREE
6.	I'm not going to worry about choosing an occupation until I'm out of school.	AGREE DISAGREE
7.	Your job is important because it determines how much you can earn.	AGREE DISAGREE
8.	Work is worthwhile mainly because it lets you buy the things you want.	AGREE DISAGREE
9.	The greatest appeal of a job to me is the opportunity it provides for getting ahead.	AGREE DISAGREE
10.	I often dream about what I want to do, but I really haven't chosen a line of work yet.	AGREE DISAGREE
11.	You should choose a job that allows you to do exactly what you want to do.	AGREE DISAGREE
12.	Your parents know probably better than anybody else which occupation you should enter.	AGREE DISAGREE
13.	If I can just help others in my work, I'll be happy.	AGREE DISAGREE
14.	Work is dull and unpleasant.	AGREE DISAGREE
15.	Everyone seems to tell me something different; as a result, I don't know what kind of work to choose.	AGREE DISAGREE
16.	I don't know how to go about getting into the kind of work I want to do.	AGREE DISAGREE
17.	There is no point in deciding upon a job when the future is so uncertain.	AGREE DISAGREE
18.	I spend a lot of time wishing I could do work I know I can never do.	AGREE DISAGREE

19.	I don't know what courses I should take in school.	AGREE DISAGREE
20.	It's probably just as easy to be successful in one occupation as it is in another. AGREE DISAGREE	
21.	By the time you are 15 you should have your mind pretty well made up about the occupation you intend to enter. AGREE DISAGREE	
22.	Whether you are interested in a particular kind of job is not as important as whether you can do it. AGREE DISAGREE	
23.	I seldom think about the job I want to enter.	AGREE DISAGREE
24.	It doesn't matter which job you choose as long as it pays well.	AGREE DISAGREE
25.	You can't go very far wrong by following your parents' advice about which job to choose. AGREE DISAGREE	
26.	Working is much like going to school.	AGREE DISAGREE
27.	I am having difficulty preparing myself for the work I want to do.	AGREE DISAGREE
28.	I know very little about the requirements of jobs.	AGREE DISAGREE
29.	The job I choose has to give me plenty of freedom to do what I want.	AGREE DISAGREE
30.	The best thing is to do is to try out several jobs, and then choose the one you like best. AGREE DISAGREE	
31.	There is only one occupation for each person.	AGREE DISAGREE
32.	There are so many things to consider in choosing an occupation, it's hard to make a decision. AGREE DISAGREE	
33.	I can't understand how some people can be so certain about what they want to do. AGREE DISAGREE	
34.	As long as I can remember, I've known what kind of work I want to do.	AGREE DISAGREE
35.	I want to really accomplish something in my work – to make a great discovery or earn a lot of money or help a great number of people. AGREE DISAGREE	
36.	You get into an occupation mostly by chance.	AGREE DISAGREE
37.	It's who you know, not what you know that's important in a job.	AGREE DISAGREE
38.	When it comes to choosing a job, I'll make up my own mind.	AGREE DISAGREE

39.	You should choose an occupation which gives you a chance to help others. AGREE DISAGREE
40.	When I am trying to study, I often find myself daydreaming about what it will be like when I start working. AGREE DISAGREE
41.	I have little or no idea what working will be like. AGREE DISAGREE
42.	You should choose an occupation, then plan how to enter it. AGREE DISAGREE
43.	I really can't find any work that has much appeal to me. AGREE DISAGREE
44.	You should choose a job in which you can someday become famous. AGREE DISAGREE
45.	If you have some doubts about what you want to do, ask your parents or friends for advice or suggestions. AGREE DISAGREE
46.	Knowing what jobs are open is more important than knowing what you are good at when you choose an occupation. AGREE DISAGREE
47.	The most important part of work is the pleasure that comes from doing it. AGREE DISAGREE
48.	I keep changing my occupational choice. AGREE DISAGREE
49.	As far as choosing an occupation is concerned, something will come along sooner or later. AGREE DISAGREE
50.	You shouldn't worry about choosing a job because you don't have anything to say about it anyway. AGREE DISAGREE

General Self-Efficacy Scale (GSE)

	Not at all true	Hardly true	Moderately true	Exactly true
1. I can always manage to solve difficult problems if I try hard Enough	□	□	□	□
2. If someone opposes me, I can find the means and ways to get what I want.	□	□	□	□
3. It is easy for me to stick to my aims and accomplish my goals.	□	□	□	□
4. I am confident that I could deal efficiently with unexpected events.	□	□	□	□
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	□	□	□	□
6. I can solve most problems if I invest the necessary effort.	□	□	□	□
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	□	□	□	□
8. When I am confronted with a problem, I can usually find several	□	□	□	□

solutions.				
9. If I am in trouble, I can usually think of a solution	□	□	□	□
10. I can usually handle whatever comes my way.	□	□	□	□

Cronbach's Alpha Reliability Coefficient of academic and Career Goal Clarity and

Career Maturity inventory and general self-efficacy scale (N=32).

Scale	No of items	Reliability
CMI	50	.847
GSE	10	.753
ACGCS	21	.845

CMI= *Career Maturity inventory*   **GSE**= general *self-efficacy scale*
ACGCS= academic *and Career* Goal Clarity

Consent Form for Participation

Description of the research and your participation

You are invited to participate in a research study conducted by Ziauddin MS student of Career Counseling & Education National University of Science & Technology (NUST) Islamabad. A study is being conducted on **"Career goal clarity and career maturity: The moderating role of general self-efficacy among postgraduate students of public sector universities of Islamabad".** The purpose of this research is to measure the impact of career goal clarity on career maturity among and the moderating role of general self-efficacy on career goal clarity and career maturity among postgraduate students of public sector universities of Islamabad.

Your participation will involve filling out filling out questionnaires of Academic & Career Goal Clarity, Career Maturity Inventory and General Self-efficacy Scale. You will be given 30 minutes to complete your responses.

Protection of confidentiality

The information related to identity will be kept confidential and scores obtained from your responses will be used for academic purposes anonymously. Your participation in this research study is voluntary. You may choose not to participate and you may withdraw your consent to participate at any time.

Consent

I have read this consent form and have been given the opportunity to ask questions. I give my consent to participate in this study.

Participant's signature_____ Date: _____

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