



EXPLORING THE MODERATING ROLE OF GENERAL SELF-EFFICACY IN THE RELATIONSHIP BETWEEN CAREER MATURITY AND CAREER GOAL CLARITY AMONG POSTGRADUATE UNIVERSITY STUDENTS

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ABSTRACT

The study aimed to evaluate the relationship of career goal clarity in predicting career maturity among postgraduate students at public universities in Islamabad. In addition, it investigated the moderating effect of general self-efficacy in the causal relationship between career goal clarity and career maturity among these students. The study sample comprised 286 postgraduate students from social and natural sciences departments at two public universities in Islamabad. The Academic and Career Goal Clarity Scale was used as a tool to assess career goal clarity, while the Career Maturity Inventory-Revised and the General Self-Efficacy Scale were used to measure career maturity and general self-efficacy, respectively. The hypotheses were tested through t-tests, Pearson's r, bivariate linear regression, and moderation analysis using the Statistical Package for the Social Sciences (SPSS-XVIII). It was indicated that postgraduate students had similar average scores in career goal clarity and career maturity. A similar pattern was noted across different genders. The finding observed a moderate level of association between career maturity and clarity of career goals. The findings indicated that clarity in career goals is a significant predictor of career maturity, and general self-efficacy served as a catalyst in this relationship.

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

Introduction

Education fulfills various roles, with its main aim being to equip students with self-awareness and improve their capacity to select a career path. This education enhances understanding of career opportunities and fosters self-awareness. A career is a complex blending of numerous roles from other life domains like being someone's child, student, citizen and employee. This makes it difficult to choose careers in our country, where there is such diversity, with the educational system varying from madrasas to modern education. The success of schooling can be gauged by how well-prepared or successful students are in the workforce (Hood & Johnson, 1991). Educators strive to support students by incorporating diverse professional development initiatives included throughout the

curriculum. Incorporating career related learning in the curriculum helps students explore career interests, analyze personality, discover aptitudes, gather information about occupations, and more. Successful career progression involves setting realistic goals, finding alignment between interests and occupations, and understanding the labor market (Campbell & Dahir, 1997). This preparedness is a responsibility of the educational program. Helping people improve their careers is usually thought to be the primary responsibility of counseling and guidance workers. Counselors hired to foster career development adhere to standards set by the American School Counseling Association (ASCA), which has outlined three significant domains for academic counseling: personal and social, academic, and career development (Campbell & Dahir, 1997). Career counseling is not only a field of interest, but the development of academic counseling is closely linked to the career guidance movement (Gysbers & Henderson, 2000). Various theories explain career development processes, beginning with John Holland's work on matching personality with job roles to postmodern theories that emphasize career construction, all sharing a focus on how careers develop. Career counseling is essential in developing countries such as Pakistan, where rapid economic changes, resource constraints, stress, and political unrest diminish possibilities for employment. Making a career choice in these circumstances represents a crucial and complex life decision (Osipow et al., 1985). This elevates the responsibility of career advisors and educational institutions to prepare students for the workforce and facilitate their transitions.

Development is viewed as an ongoing progression towards maturity (Crites, 1971). Career development is strongly influenced by the choices one makes. It is assumed that university students have sufficient understanding of the professional landscape and have selected a discipline to follow as a vocation. Career counseling can help people grow up by assisting them in understanding their career goals and aspirations. Career guidance aids individuals in making educated vocational choices and strategizing for successful careers. Career choices may include selecting a vocation, an educational program of study, attending training or seminars to increase employability, and eventually successfully moving from academics to the work setting.

Career maturity has been a topic of inquiry and discussion since Super's (1957) career development theory, which was defined as the ability to handle career-related tasks suitable for one's developmental stage. Super (1957) introduced this concept as vocational maturity, which has evolved to modern interpretations. A critical component of Super's life-span, life-space career development theory is career maturity, associated with students' readiness to tackle vocational development tasks and their preparedness to make age-appropriate academic and career choices (Phillips & Blustein, 1994).

Career maturity represents a developmental perspective on understanding students' career behavior, involving measuring students' career growth as it relates to developmentally appropriate career tasks (Crites, 1976). In general, career maturity refers to an individual's capacity to make well-informed, age-appropriate career decisions and perform vocational development responsibilities (Savickas, 1984). The text encompasses a student's ability to make informed career decisions, highlighting the importance of understanding the factors involved in this process.

Crites' (1971) career maturity model proposes the inclusion of emotional and cognitive elements. The cognitive aspect encompasses the faculties involved in decision-making, whereas the affective aspect pertains to the attitudes associated with the career decision-making process. Career maturity denotes varied levels of preparedness to fulfill professional growth obligations encountered by adolescents, as well as a person's readiness to select age-appropriate educational and career choices (Phillips & Blustein, 1994). A career-mature student is ready to make educated career choices and possesses a broad knowledge of vocational and educational choices. Career maturity is critical in career selection, as career-mature individuals typically have self-awareness, essential skills for making thoughtful career decisions, and integration of self-understanding with knowledge of the job market to design a career path.

This development cycle aims to enhance career maturity in higher education students, facilitating their social reintegration into the labor market. This aids individuals in making specialization

choices, career preferences, and a decision regarding transitions (Tekke & Ghani, 2013). Career maturity is enhanced through the acquisition of work-related knowledge and self-awareness pertinent to career objectives. It can be enhanced by exploring its relationships and factors that predict vocational maturity. Themba (2010) discovered that enhancing self-awareness, providing access to information about career opportunities, and improving decision-making skills can significantly boost career maturity in young individuals.

The relationship between career maturity and career decision-making self-efficacy is notably significant (Bozgeyikli et al., 2009). It has been noted that varying socioeconomic backgrounds influence the degrees of career maturity and self-efficacy in the context of career decision-making. The research concentrated on assessing the efficacy of career goal clarity as a measure of professional development. The research evaluated career maturity levels and the clarity of career goals among university students. It is frequently noted that individuals who achieve high academic success may encounter difficulties in obtaining desirable employment or may not perform optimally in professional settings, prompting inquiries into possible underlying factors. Do pupils possess insufficient employability skills or the requisite mentality for employment? Do deficiencies exist within our educational institutions, methodologies, and procedures, or are students responsible owing to insufficient motivation, inadequate study habits, or a deficiency in self-efficacy and well-defined professional objectives? Lack of clarity in job goals is undoubtedly a major factor contributing to these challenges. Bandura (1989) regarded career goal clarity as an essential process for cognitive engagement, a significant driver of students' motivation. Through cognitive processing, career goal clarity strengthens the motivation to set career goals, outline a course of action, and guide career planning efforts.

Problem Statement and Justification of the Research

The research focused on examining the influence of career goal clarity on career maturity, as well as the moderating effect of general self-efficacy among postgraduate students in public sector universities in Islamabad. The notion of career maturity was first introduced by Super in 1957, who suggested that a person attains vocational maturity through differentiated phases of professional growth. He introduced the idea of a "vocational maturity quotient," which represents the relationship between vocation and chronological age. According to Crites (1978), career maturity includes career readiness, an attitude toward developmental tasks, and the competency to address career-related developmental issues.

The concept of career maturity has been extensively researched since its inception, revealing various associated factors. It has been linked with career decision-making self-efficacy, general self-efficacy, and academic performance (Bozgeyikli et al., 2009). Additional factors influencing career maturity encompass emotional intelligence and social-vocational interest (Liu et al., 2014). No study has investigated the influence of career goal clarity on career maturity, considering general self-efficacy as a moderating factor. This study initiated the exploration of the influence of clarity in career goals on career maturity, with general self-efficacy serving as a moderating variable.

Most studies on career maturity have been conducted in Western countries, with many focusing on students aged 11-14 (Lokan, 1984). There has been limited research in Asia, particularly in Pakistan. The investigation aims to establish foundational data regarding the career maturity of Pakistani students pursuing higher education. Postgraduate students are at critical career stages, either at the beginning or mid-point of their professional lives. Older students generally exhibit higher career maturity than younger ones (Thompson et al., 1981). Higher level of career maturity is associated with a higher likelihood of professional success among students. Career maturity may be a predictor of students' performance and success in their careers (Barnes & Carter, 2002). Career maturity indicates students' preparedness for the workforce, strengthens career-related decision-

making, enhances knowledge of work-related competencies, builds self-image, assists in achieving career goals, and improves problem-solving skills (Crites & Savickas, 1995).

This study will examine the strength of career decision-making abilities and work-related knowledge among Pakistani postgraduate students. People with higher career maturity tend to have more successful and satisfying careers (Savickas, 1990). Individuals frequently explore alternative career paths, demonstrate heightened awareness of the career decision-making process, establish connections between present actions and future objectives, exhibit increased self-reliance in career choices, and show commitment to their decisions. Career maturity is linked to various dimensions of career development. The concept correlates with realistic occupational aspirations and expectations, career decidedness, career decision-making self-efficacy, increased career salience, and a more internal locus of control (Gillespie, 2001). Clarity in career goals is a fundamental component of career development (Trucker & Rudmann, 2006). The significance attributed to career development is paramount, it may be essential to analyze whether clear goals fuel a sense of maturity; specifically, does goal clarity instigate career maturation? This study aims to assist counselors in developing interventions that improve career clarity, thereby promoting career maturity and facilitating optimal career development.

The National Educational Policy (2009, p. 37) stipulates that counseling must be offered to students across all educational tiers, highlighting the need for professional education to align with labor market requirements. A primary objective of career counseling is to assist students in achieving career maturity, which includes assessing career attitudes and competencies such as self-awareness, employment data, career choice, and problem-solving. The assessment of career maturity enhances individual self-awareness regarding the interests, skills, and preferences essential for career success. It helps students plan and explore their careers, allowing them to make more informed and efficient selections while also improving their grasp of prospective professional problems and the skills needed to solve them. Career maturity provides students with knowledge of market needs, facilitating a successful transition into their future occupations.

Nonetheless, our education system inadequately equips students for employment since our educational programs are misaligned with labor market requirements (NEP, 2009, p. 39). Career education assists students in selecting courses that align with their vocational aspirations. Students may explore and strategize their career paths, fostering career maturity and advancement. Career maturity allows students to recognize discrepancies between educational offerings and job demands, facilitating the establishment of career objectives for professional achievement. Consultation discussions regarding the National School Policy (2016, p. 54) emphasized the necessity of integrating life competencies into school, maximizing human capital, generating employment opportunities, and eliminating gender-related stereotypes. Career education imparts life skills, elucidates career objectives, and fosters mature decision-making. Career-mature students may use life competencies, becoming innovators to create work prospects and reduce gender-based professional roles.

Career maturity is a fundamental component of career growth. A comprehensive analysis is required due to the paucity of research in Pakistan and its importance in policymaking. Career maturity augments pupils' competencies contribute to career satisfaction, and aids in achieving career goals. Self-efficacy may act as a catalyst, strengthening career goal clarity to produce career-mature students. Career maturity is linked to various factors including career development, career decision self-efficacy, self-efficacy, career achievement, career satisfaction and academic performance (Rosdi et al., 2013; Singh & Shukla, 2015; Bhae, 2017; Talib et al., 2013). Clear career goals correlate with career advancement and self-efficacy (Gibbs et al., 2015). There has been no research conducted on the relationship between career goal clarity and career maturity, despite both being essential elements of career development. This research seeks to examine these relationships.

Significance of the Study

This study aimed to investigate the influence of career goal clarity on career maturity, as well as the moderating effect of general self-efficacy among master's and doctoral students in public sector universities located in Islamabad. This research stands out in its assessment of career maturity and the clarity of career goals among students in Pakistan. The study seeks to support students in enhancing their maturity career-wise, having clear career goals, and guiding them towards informed career decisions by means of professional guidance and counseling. The study examined the extent of to which students comprehend their occupational goals and the influence of this knowledge on their career progression.

The Education Policy of Pakistan (2009, p. 37) emphasizes the need to introduce career education to meet labour market demands, with career maturity being a result of such education. Super and Knasel (1981) assert that measures of career maturity aid in the exploration of careers, as well as in their establishment, maintenance, disengagement, and transitions. The policy emphasizes the importance of a skilled workforce with defined objectives in the higher education sector to promote the generation of new knowledge. This study analyzed postgraduate students, offering resources to explore their careers, develop professional identities, support career progression, minimize career disengagement and assess the appropriateness of career transitions. Career maturity enables individuals to identify constraints affecting their career objectives, highlighting the importance of recognizing potential obstacles to achieving clarity in career goals (Krumboltz, 1994). The study focused on assessing the clarity of career objectives, which will ultimately enhance the effectiveness of career guidance.

The study represented a progression towards identifying the correlation and causal relationship among these core variables that contribute to individual career development. Previous research has explored the relationships and determinants of career maturity; however, there is insufficient investigation into the clarity of students' career goals. The findings assisted career counselors in enhancing students' career maturity, clarifying decision-making processes, and preparing them for the labor market. Clarity in career goals is essential for adequate career preparation, which is a fundamental aspect of career maturity. Thus, it was crucial to investigate the clarity of the career goals of students and their impact on career maturity. Many researchers have examined each of these constructs in combination with various variables, no research has specifically examined the relationship between career goal clarity and career maturity. Research indicates a lack of studies in Pakistan regarding career maturity and career goal clarity. This study may pioneer research on career maturity in the country.

Research Strategy

The research employed a quantitative correlational design, examining the measurement of career maturity, career goal clarity, and their association, as well as the moderating role of general self-efficacy, utilizing a survey methodology.

Objectives

The aims of the research were:

- i. To analyze difference among male and female postgraduate students regarding their clarity of career goals and their level of career maturity within the public sector universities of Islamabad.
- ii. To investigate the correlation between the clarity of career goals and the level of career maturity among postgraduate students at public sector universities in Islamabad.
- iii. To evaluate the influence of career goal clarity on the development of career maturity among postgraduate students at public sector universities in Islamabad.
- iv. To examine the moderating influence of general self-efficacy on the relationship between career goal clarity and career maturity among postgraduate students at public sector universities in Islamabad.

Hypotheses”

The hypothesis of the study included:

- i. Postgraduate students attending public sector universities in Islamabad differ in mean scores of career goal clarity.
- ii. Postgraduate students attending public sector universities in Islamabad differ in mean scores of career maturity.
- iii. Career goal clarity is significantly associated with career maturity among postgraduate students at public sector universities in Islamabad.
- iv. A significant impact of career goal clarity on career maturity exists among postgraduate students of public sector universities of Islamabad.
- v. A moderating role of general self-efficacy exists in the association of career goal clarity on career maturity among postgraduate students of public sector universities of Islamabad.

Sample of the study

The study sample consists of a total population of 286 postgraduate students who are enrolled in the social sciences and natural sciences departments at two public sector universities in Islamabad. A total population sample represents a specific category of purposive sampling, involving the examination of the entire population. The study concentrated on individuals enrolled in Pakistan Studies, Economics, Psychology, Physics, Biotechnology, and Mathematics. The selection of universities was based on the fact that they represent the only public sector institutions in Islamabad with similar departments. The sample included 286 postgraduate students, comprising 203 MS and 83 PhD students, who were enrolled in the social sciences (Pakistan Studies, Economics, and Psychology) and natural sciences (Physics, Biotechnology, and Mathematics) departments at public sector universities in Islamabad. Below is a comprehensive overview of the sample distribution:

Table 1 Sample distribution

		Social Sciences				Natural Sciences				Total
		Pak Study	Eco	Psy.	Total	Phy.	Biotech	Math	Total	
Uni. A	MS	20	19	20	59	17	16	20	53	112
	PhD	07	08	09	24	06	09	08	23	47
Uni. B	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. A & B

Research Instrument

Academic and Career Goal Clarity Scale

This study utilized the Academic and Career Goal Clarity Scale developed by Tucker and Rudmann (2006), which comprises 21 items pertaining to educational and career objectives. This framework has been utilized 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). This measure aims to evaluate students' academic and career objectives. Participants evaluate each statement using a seven-point scale, indicating the degree of accuracy for each statement, ranging from "Extremely untrue about me" to "Extremely true about me." Responses are evaluated on a scale from 1 to 7, where 1 indicates "Extremely untrue about me" and 7 signifies "Extremely true about me." The Cronbach alpha value ranges from 0.85 to 0.88, indicating a strong level of reliability. The instrument has been shown to be accurate and valid across various demographics.

Career Maturity Inventory-Revised

The Career Maturity Inventory-Revised, developed by Crites and Savickas (1995), was utilized to assess students' professional maturity. The principal rationale for using the Career Maturity Inventory-Revised is its content's enhanced pertinence for senior students (Crites & Savickas, 1995; Savickas, 1990). The first Career Maturity Inventory was formulated by Crites in 1978, and the contemporary updated edition was produced by Crites and Savickas in 1995. The amended version sought to minimize testing and administrative duration, rendering it more appropriate for older students and adults. The inventory has 50 elements for evaluating career maturity, with scores spanning from 0 to 50. Cronbach's alpha indicated a dependability of .82 (Porter, 1999). The equipment demonstrates reliability and accuracy across several groups.

General Self-Efficacy Scale

This study employed the General Self-Efficacy Scale developed by Schwarzer and Jerusalem in 1995. The measure has 10 items assessed on a 4-point Likert scale, with ratings from 1 to 4, resulting in total scores between 10 and 40. This concise tool has great reliability and validity in evaluating general self-efficacy in individuals who are twelve and older. The internal reliability, assessed by Cronbach's alpha, varies from .76 to .90.

Pilot-Testing

The pilot testing involved MS and PhD students from a public sector university located in Islamabad. A total of 32 students participated in the pilot study, comprising sixteen from social sciences and sixteen from natural sciences, none of whom were included in the actual sample. According to Issac and Michael (1995), it is advisable to include 10 to 30 participants in a pilot study.

Reliability of the Instrument

To assess the reliability of the instruments, Cronbach's alpha was utilized through the application of SPSS XXIII. The Academic & Career Goal Clarity Scale demonstrated a reliability of .845, while the Career Maturity Inventory showed a reliability of 0.847, and the General Self-efficacy scale had a reliability of 0.841.

Procedure

In alignment with the ethical guidelines established by the American Psychological Association (2010), the researcher secured approval from appropriate authorities to carry out the study. The researcher contacted the admission offices of both universities to obtain a list of students enrolled in the chosen departments. All departments were consulted to confirm the student list. The universities and departmental offices gathered data to create a list of postgraduate students enrolled in various departments across multiple schools. Participants provided informed consent to participate in the study. Participants were guaranteed confidentiality and provided with information regarding the study's nature and purpose. The participants received the instruments to respond to the items and were instructed to complete the questionnaire within thirty minutes.

Data Analysis

The Statistical Package for the Social Sciences (SPSS-XXIII) was used to do a t-test, an analysis of variance (ANOVA), a product-moment coefficient of correlation, a linear regression analysis, and a moderation regression analysis on the data. A t-test is a statistical way to find out how different two sets of mean scores are from each other. The correlation between two or more factors is shown by the product-moment coefficient of correlation. A simple linear regression is used to find out how an independent variable changes a dependent variable.

Results

H1: Postgraduate students attending public sector universities in Islamabad differ in mean scores of career goal clarity

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

	University	Descriptive Statistics		t-test for equality of means			
		<i>M</i>	<i>SD.</i>	<i>t</i>	df	MD	<i>P</i>
Career Goal Clarity	A	6.17	.48	1.45	226.79	.10	.135
	B	6.07	.64				

A t-test was utilized to assess the disparities in career goal clarity across MS students. Levene's test result (.016) demonstrated that equal variance was not assumed—students from University A ($M = 6.17$, $SD = .48$) exhibited higher mean scores than those from University B ($M = 6.07$, $SD = .68$). Nonetheless, there was no substantial difference in the mean scores of MS students from University A and University B ($t(226) = 1.45$, $p > .05$) concerning career goal clarity. Consequently, the hypothesis is rejected.

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

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

A t-test was used to compare the differences in career goal clarity across PhD candidates. Levene's test result (.036) suggested that equal variance was assumed. Students from University A ($M = 5.98$, $SD = 0.77$) had lower mean scores compared to students from University B ($M = 6.14$, $SD = 0.54$). Nonetheless, there was no notable variation in the mean scores of PhD students from University A and University B ($t(80) = 1.09$, $p > .05$) concerning career goal clarity. Consequently, the hypothesis is rejected.

H2: Postgraduate students attending public sector universities in Islamabad differ in mean scores of career maturity

Table 1 *Independent Samples Test of MS students on career maturity*

	University	Descriptive Statistics		t-test for equality of means			
		<i>M</i>	<i>SD.</i>	<i>t</i>	df	MD	<i>P</i>
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 2 *Independent Samples Test of PhD students on career maturity*

Table 2. Independent Samples Test of PhD students on career maturity								
Descriptive Statistics					t-test for equality of means			
	University Faculty	<i>M</i>	<i>SD.</i>		<i>t</i>	df	MD	<i>P</i>
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.

H3: Career goal clarity is significantly associated with career maturity among postgraduate students at public sector universities in Islamabad.

Table 6 Correlation between career goal clarity and career maturity among MS students

		Career Maturity	Career Goal Clarity
Career Maturity	Pearson Correlation	1.00	.40*
	Sig. (2-tailed)		.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 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 $r = .40$, $n = 46$, $p < .001$. So, hypothesis is accepted.

Table 7 Correlation between career goal clarity and career maturity among PhD students

		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.

H3: A significant impact of career goal clarity on career maturity exists among postgraduate students of public sector universities of Islamabad

Table 8 impact of career goal clarity on career maturity exists among postgraduate students of public sector universities of Islamabad.

Variables		B	S. E	B	p	R ²	ΔF
MS							
DV	IV						
	(Constant)	-2.53	6.44		.69	.09	19.95
CMI	ACGCS	.23	.05	.30***	.000		
PhD							
	(constant)	-.77	8.41		-.092	.09	9.38
CMI	ACGCS	.211	.06	.322**	.003		

Note. CMI = Career maturity, ACGCS = career goal clarity, GSE = general self-efficacy, R^2 = r-square, p = probability value * $p < .005$, ** $p < .001$, *** $p < .000$

Results of above table revealed that career goal clarity is positively significantly predicting career maturity among MS students of. Results of above table also revealed that career goal clarity is positively significantly predicting career maturity among PhD students. Results are statistically significant as p value is less than.05.

H 4: A moderating role of general self-efficacy exists in the association of career goal clarity on career maturity among postgraduate students of public sector universities of Islamabad

Table 9 Moderating role of general self-efficacy between career maturity and career goal clarity among MS students

DV	IV	B	S. E	β	ΔR^2	ΔF
CMI	ACGCS	-.13	.003	-.17***	.99	94.50
	GSE	-.02	.01	-.00**		
	ACGCS*GSE	-.02	.00	1.06***		
	constant	18.03	.53			

Note. CMI = Career maturity, ACGCS = career goal clarity, GSE = general self-efficacy, β = Standardized Coefficient, S. E= standard Error, ΔR^2 =adjusted r squared symbol * $p < .005$, ** $p < .001$, *** $p < .000$

The result revealed that career goal clarity is negatively significant predictor for career maturity ($\beta = -.17$, $p < .00$) among MS students. The results also displayed that general self-efficacy was negatively significant predictor for career maturity ($\beta = -.00$, $p < .01$) among MS students. The results further revealed that interaction between general self-efficacy and career goal clarity was positively significant predictor for career maturity ($\beta = 1.06$, $p < .000$) among MS students. Results revealed that self-efficacy is playing role of moderator between career goal clarity and career maturity in among MS students.

Table 10 Moderating role of general self-efficacy between career maturity and career goal clarity among PhD students

DV	IV	B	S. E	β	ΔR^2	ΔF
CMI	ACGCS	-.13	.004	-.20***	.99	38.56
	GSE	-.03	.01	-.01*		
	ACGCS*GSE	-.00	.00	1.08***		
	constant	18.16	.88			

Note. CMI = Career maturity, ACGCS = career goal clarity, GSE = general self-efficacy, β = Standardized Coefficient, S. E= standard Error, ΔR^2 =adjusted r squared symbol * $p < .005$, ** $p < .001$, *** $p < .000$

The result revealed that career goal clarity is negatively significant predictor for career maturity ($\beta = -.20$, $p < .00$) among PhD students. The results also displayed that general self-efficacy was negatively significant predictor for career maturity ($\beta = -.01$, $p < .04$) among PhD students of. The results further revealed that interaction between general self-efficacy and career goal clarity was positively significant predictor for career maturity ($\beta = 1.08$, $p < .00$) among PhD students. Results revealed that self-efficacy is playing role of moderator between career goal clarity and career maturity in among PhD students.

Discussion

In this study, postgraduate students at public universities in Islamabad were asked to examine variations in career maturity and career goal clarity, their relationship, and the moderating effect of general self-efficacy. The findings of the investigation are consistent with those of Gibbs et al. (2015), who found no appreciable difference in college students' career goals. This implies that while students at different educational levels have varying degrees of clarity regarding their career

goals, students at the same educational level have similar mean scores. The findings of the present investigation demonstrated that no discernible variation in the clarity of career goals among postgraduate students. Additionally, the data indicates that there is no discernible disparity in the career maturity of postgraduate students at public sector universities in Islamabad. The findings are aligned with the findings of Allen (2014) and Bahrinsyah (2017), who found no noticeable changes in college students' vocational sophistication.

The research investigated the differences on the basis of gender in career maturity and goal clarity between among postgraduate students at public universities in Islamabad. The findings indicated no notable variation in the mean scores pertaining to the clarity of career goals. This validates the results of Talib et al. (2013) and Jawarneh (2016), who did not find any gender differences in career maturity. The results, however, conflict with those of Bhae (2017), who found that female students outperformed male students, and Ottu and Idowu (2014), who found that male students reported considerably greater career maturity than female students.

Furthermore, Shafeeq and Loona (2017) discovered that female students performed better in terms of professional readiness and knowledge, both of which are essential components of career maturity, contradicting the current study's conclusions. This study is consistent with Chan (2017), who examined the significance of career goal clarity and proactive career behaviors in estimating positive student outcomes. A positive association was observed between career goal clarity and various career behaviors, Incorporating proactive career engagement leads to favorable student outcomes. Kanwal and Naqvi (2016) further substantiate the study by identifying a positive correlation between career maturity, particularly in career decision-making, and career goals. The present study yielded analogous findings, demonstrating a positive correlation between the clarity of career goals and the level of career maturity. This study elucidated the influence of career goal clarity on the development of career maturity in postgraduate students attending public sector universities in Islamabad. The findings support those of Sirohi (2013), who demonstrated that increased career exploration and goal clarity predict decreased career indecisiveness and increased career maturity.

The findings of the study align with the work of Singh and Shukla (2015); they identified a notable correlation between career maturity and self-efficacy. This research additionally revealed that general self-efficacy serves as a moderating factor in the interplay between career goal clarity and career maturity among postgraduate students in public sector universities in Islamabad. The research conducted by Pothukuchi et al. (2015) substantiated these findings, examining the influence of academic self-efficacy on the clarity of academic and professional goals among postgraduate women in Bangalore. Their findings illustrated that academic self-efficacy significantly impacts the precision of academic and professional aspirations, highlighting the importance of elucidating career goals and making informed career decisions for professional development, ultimately fostering self-efficacy.

Rosdi et al. (2015) further demonstrate the present study by identifying a correlation between career maturity and career self-efficacy, indicating that both career maturity and career self-efficacy may be enhanced through targeted interventions in career programs for students. This research additionally revealed that general self-efficacy plays a significant role in forecasting career maturity. Additionally, Pasha et al. (2017) found that self-efficacy moderates career success and influences academic and career behaviors. The development of career maturity and the clarity of career goals are fundamental to professional behaviors and play a significant role in achieving career success. The current investigation additionally revealed that general self-efficacy serves as a moderating factor between career goal clarity and career maturity. Starica (2012) validated the study's findings, stating that career decision self-efficacy serves as a moderator in predicting professional maturity for both boys and girls. This study also discovered that general self-efficacy influences both career goal clarity and maturity. The findings also align with Raziq et al. (2018), who discovered that self-efficacy serves as a partial moderator in the interplay between the clarity

of goals and the decisions made regarding one's career, which are integral elements of career maturity.

Conclusion

The findings revealed that postgraduate students of public sector universities in Islamabad showed similarities in mean scores, and it has been observed that a non-significant difference exists among postgraduate students. A notable similarity was identified among postgraduate students at public sector universities in Islamabad regarding their mean scores in career maturity. The postgraduates exhibited no discernible variation in their levels of career maturity. No discernible gender differences in career goal clarity and career maturity were found among male and female postgraduate students at public sector universities in Islamabad. The postgraduate students enrolled in public sector universities in Islamabad exhibited a moderately positive correlation between the clarity of their career goals and their level of career maturity. The clarity of career goals significantly impacts the ability to forecast career maturity among postgraduate students attending public sector universities in Islamabad. The general self-efficacy served as a pivotal factor in the interplay between the clarity of career goals and the level of career maturity among postgraduate students at public sector universities in Islamabad.

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