



Gender and Disciplinary Differences in Future Plans of Postgraduate Students in Pakistan

Munaza Nausheen¹, Paul William Richardson²

¹University of the Punjab, Lahore, Pakistan

²Monash University, Melbourne, Australia

ABSTRACT

This article contributes to current discussions and knowledge concerning gender differences in the future plans and career choices of postgraduate students. It explores and compares the future plans of male and female postgraduate students across different areas of study at a large public university in Pakistan. The sample consisted of 365 postgraduate students (235 of which were female) with a mean age of 22.45 years. The students were enrolled in five different departments: the Department of Gender Studies (DGS); the Department of Mathematics (DM); the Department of Business Education (DBE); the Centre of English Language Teaching and Linguistics (CELTL); and the Institute of Business and Information Technology (IBIT). A regression analysis of one structured response question concerning the importance of various activities after gaining a postgraduate degree revealed that gaining employment was the most important activity that these students wanted to pursue. The current study did not show any significant gender effect on the importance of various future activities, such as employment, studying further, and getting married, although there were some differences noted across areas of study. A thematic analysis of the students' responses to two open-ended questions about the reasons for their preference for, and choice of, a future career revealed reasons such as personal interest, respect, and the suitability of working hours.

Keywords: Gender; Future Plans; Career orientation; Postgraduates; Disciplinary differences; Pakistan

Gender and Disciplinary Differences in Future Plans of Postgraduate Students in Pakistan

INTRODUCTION

The Islamic Republic of Pakistan is a sovereign country founded in 1947. It has an estimated population of 195.4 million with a median age of around 20 years, and is the sixth most populous country in the world. A total of 60.4% of the population are between the ages of 15 and 64. This segment of the population is of working age and can thus play an important role in economic growth through the provision of proper education and vocational training. From a labor force perspective, Pakistan is the tenth largest country in the world, and the overall unemployment rate has gradually decreased from 6.2% (in 2012–2013) to 5.9% (in 2014–2015;) (Government of Pakistan, 2016).

Labor force participation is generally lower among women (Government of Pakistan, 2016) and there is widespread inequality in education—including gender disparities and an urban-rural divide. The data shows that literacy remains higher in urban areas (76%) than in rural areas (51%), and is more prevalent among men (70%) when compared to women (49%). Although the data indicates that overall female literacy is rising, progress is uneven across the provinces (Government of Pakistan, 2016).

The higher education system in Pakistan is made up of two main sectors: the university/Degree Awarding Institutes (DAI) sector, and the affiliated colleges sector. A bachelor's degree (BA/BSc) is awarded after two years of study, mostly at affiliated colleges. A master's degree is a postgraduate degree mostly undertaken at universities, and requires a further two years of study subsequent to a bachelor's degree. In Australia, and the USA an undergraduate degree with honors requires at least four years of study at a university. Therefore, a postgraduate degree in Pakistan maybe considered the equivalent of the third and fourth years of an undergraduate degree with honors in Australia, the USA, and the UK. There are 108 public and 75 private universities (Higher Education Commission, 2016). Approximately 209,617 students are enrolled in postgraduate programs (MA/MSc), with more women (53%) than men studying at both public and private universities and Degree Awarding Institutes in Pakistan (Higher Education Commission, 2015).

Since 2000, women's access to higher education has improved significantly, and the current political environment is very supportive of women's educational opportunities (Malik & Courtney, 2011). However, their participation in scientific and technical fields is still marginal due to a number of social and cultural barriers that interfere with their development—as both citizens and professionals. Moreover, women who enter higher education often attend courses in the arts and social sciences rather than in pure sciences (Khan, 2007). Women's access to higher education depends on the social system to which they belong. Women from the upper and middle classes have greater access to educational and employment opportunities, and can exert greater control over their lives (Khan, 2007). During the last two decades, there has been a surge in student enrolments at universities

in Pakistan as well as worldwide (OECD, 2017), prompting the question: what motivates these students to enter university and to pursue a postgraduate degree? This paper reports on part of the results from a much larger study focused on the motivational beliefs, course experiences, and future plans of a diverse sample of postgraduate students.

LITERATURE REVIEW

The motivational forces exerted by both present and future goals drive much of human activity. According to McInerney (2004, p. 141), "a sense of purpose for the future is important in motivating individuals to engage in activities perceived to be instrumental in achieving valued future outcomes" (p. 141). In the contemporary literature on future life goals, the concept of Future Time Perspective (FTP) has proven to be a fruitful construct, which has been widely drawn upon. FTP refers to the mental representation of the future constructed by individuals at certain points in their lives—a perspective that reflects both personal and social influences (Husman & Lens, 1999; Lens, 2001; Nurmi, 1991). FTP serves as a basis for setting personal goals and making life plans, and aids in exploring future options when taking major decisions (Seginer, 1992). The extent of an individual's FTP, as well as how future goals are prioritized, is influenced by a range of factors such as culture, societal values, available opportunities, parental influence, technology, spirituality, gender, and society's gender norms for boys and girls (McInerney, 2004; McInerney, Liem, Ortiga, Lee, & Manzano, 2008; Nurmi, 1991). Moreover, the future that individuals articulate for themselves is also influenced by the rapidly changing world around them (McInerney, 2004).

A research study conducted in Peru by Dolan, Bejarano and Tzafrir (2011) points to the effect of gender on career aspirations, future plans, and career success. The sample in this Peruvian study consisted of 1011 engineers who graduated from a prestigious Peruvian college in the period between 1998 and 2005. Female graduates represented just 4% of the sample—a reflection of the national statistics for engineers in Peru during this period. A questionnaire was used to collect data, combined with archival data from the career offices of the participating Peruvian institutions/colleges for higher education. The relations between gender, career aspirations, and career success were primarily tested using multiple regression and structural equation modelling. The results supported the hypothesis that gender moderates the relationship between career aspirations and career success, and therefore affects the strength of the relation between the types of individual career aspiration and career success. Women looked for more secure career directions with an emphasis on the work-family balance in career orientation than their male counterparts. According to Dolan et al. (2011), men have been reported to aim at higher qualifications and higher posts than women, who are content with a secure job offering stability in terms of employment and working conditions. Similarly, women have been found to choose fields of study that are less competitive and demanding, and more in line with societal stereotypes for their gender. As a result, Peruvian men are overrepresented in science and technology, while women direct their aspirations towards the humanities and social sciences (Dolan, et al., 2011).

In a study of student teachers in Cyprus designed to explore the effects of gender on the career aspirations and expectations of female students, Menon and Christo (2012) found that, although approximately 80% of primary school teachers and 99.9% of pre-primary school teachers were female in 2010, the female participants in their study seemed reluctant to recognize the effect of gender on their own personal decisions when choosing teaching as a career. However, they acknowledged that this over-representation of women in the teaching profession is the result of gender stereotypes regarding the suitability of a teaching career for women (Menon & Christo, (2012).

As this brief exploration of the existing literature demonstrates, most of the research on life goals and future plans has been conducted with adolescents and school-aged groups. It has been found that the goals adolescents set for themselves influence their actual achievements (Phinney, Baumann, & Blanton, 2001). Thus, there is a need to conduct research in non-western cultural contexts (McInerney, et al., 2008), examining the career aspirations of those engaged in higher education, especially at the postgraduate level.

OBJECTIVES OF THE STUDY

The main objectives of the study were:

- (a) to explore the future plans of postgraduate students;
- (b) to explore gender and disciplinary differences in the future plans of postgraduate students;
- (c) to explore the preferred careers and motivations of postgraduate students.

PARTICIPANTS IN THE STUDY

368 postgraduate students participated in the study, enrolled in five sampled departments—the Department of Gender Studies (DGS), the Department of Mathematics (DM), the Department of Business Education (DBE), the Centre of English Language Teaching and Linguistics (CELTL), and the Institute of Business and Information Technology (IBIT)—of four faculties (Science, Education, Behavioral and Social Sciences, and Economics and Management Sciences) of a large public university in Pakistan (Table 1). Almost all universities in Pakistan offer two shifts of study in order to enhance the cost-effectiveness and utilization of buildings and facilities. The participating university thus offered two types of enrolment in the form of morning (M) and afternoon (A) shifts. The same degree programs and courses were offered during these shifts, provided by the same teaching staff. Students who fail the high admission criteria of the morning shift or are otherwise unable to study during this timeslot were generally able to enroll in the afternoon shift. Fees were higher for the afternoon shifts, even though students were not provided with the accommodation and hostel facilities available to students enrolled in the morning shift.

Table 1: Participating departments, students and response rate

Faculties	Departments	Shift	Students Enrolled	Students Present	Respondents	Response Rate %
Social and Behavioral Sciences	Gender Studies	M	37	33	31	93.94
		A	37	30	30	100
Economics and Management Sciences	Institute of Business and Information Technology	M	50	44	44	100
		A	50	38	35	92.11
Science	Mathematics	M	65	55	51	92.72
		A	67	65	65	100
Education	Business Education	M	42	35	33	94.29
		A	35	31	31	100
	English Language Teaching and Learning	M	35	32	32	100
		A	23	16	16	100
Total			441	379	368	97.10

Women represented 64% ($N = 235$) of the sample group ($N = 368$), a figure comparable to the overall participation rate of women (53%) in higher education (MA/MSc degree) in Pakistan (Higher Education Commission, 2015). All departments had a higher percentage of female participants, except the IBIT (65.8% male) and the DBE, which had an almost equal percentage of male (48.4%) and female (51.6%) participants. The CELTL had the highest percentage of female participants (93.8%), while the DGS had 91.8 % female participants. Similarly, the DM had more female participants (63.8%) than men. All sampled departments follow an open merit admission policy and do not have a fixed number of admission seats for male and female applicants. The higher percentages of female students indicate the popularity of the subjects of Gender Studies, English Language Teaching, and Mathematics among women, whereas business related subjects were comparatively more popular among male students.

The average age of the participants was 22.45 years ($SD = 2.12$), the youngest being 19 years of age (one female) and the oldest being 40 years of age (one female). An independent samples t-test showed that there was a significant difference in the mean age of the male ($M = 23.05$, $SD = 1.86$) and female ($M = 22.11$, $SD = 2.18$) students, $t(363) = 4.15$, $p = .001$. The magnitude of the differences in the means (mean difference = .93, 95%, CI: 1.36 to 1.38) was small (eta squared = .04). There was also a significant difference between the average age of students attending the morning ($M = 22.13$, $SD = 1.79$) and the afternoon

shift ($M = 22.79$, $SD = 2.36$), $t(363) = 3.05$, $p = .002$. However, the magnitude of the differences in the means (mean difference = $-.67$, 95% CI: -0.24 to -0.23) was very small (eta squared = $.02$). This showed that slightly older students were enrolled in the afternoon shift, which had relaxed age restrictions on admission to facilitate access for those who are working as well as mature-aged applicants. The age limit for admission to the morning shift was 26 years in all sampled departments, whereas there was no age restriction for admission to the afternoon shift.

Initially six indicators, including parents' monthly income, personal car ownership, parents' educational qualifications, monthly pocket money, scholarships and paid employment were used to get an idea about the socioeconomic status of the students. According to Sirin (2005, p. 444), SES is a multidimensional construct and different components yield different results. Three traditional components (income, education, and occupation) are most frequently used as a basis for the conceptualization of SES. In Pakistan, however, no well-defined list of occupations exists at the government level, and therefore in the current study a score based on the combined monthly income and educational qualifications of the parents was calculated and used as a measure of socioeconomic status. Parental income reflects the potential social and economic resources that are available to students and is considered one of the most stable aspects of SES over time (Sirin, 2005, p. 419).

METHODS

As mentioned earlier, this paper reports only a selection of the results of a large-scale study focusing on the motivational beliefs, course experiences, and future plans of a sample of postgraduate students. Results related to the future plans of the students are presented in this paper. Data were collected using a paper-based questionnaire addressing three main topics about the future plans of the students: importance of various activities after the completion of current degree, preferred career and reasons for the choice of career. Questionnaire comprised of three questions. One (common stem) structured response question about the importance of various future activities, for further study; further study in Pakistan and abroad; getting married and having a family. Students indicated the importance of each of these topics on a five-point rating scale from "not important" to "very important." Two open-ended questions concerning the career students would like to pursue after receiving their degree, and the reasons for choosing this career, were also included.

Data collection took place just before the final examinations of the penultimate semester of study. Lecturers teaching in the sampled departments were invited to participate in the study. Five different lecturers taught each class during a single semester, so all lecturers were requested to provide access to their lectures and to distribute questionnaires during the last 15 minutes of the lecture before the lunch break, or whenever it was possible for them to do so. Students who did not wish to take part in the study were permitted to leave early. The researcher personally explained the study and invited participation, answering questions, and distributing and collecting the completed questionnaires. The direct method of survey administration was used, as it ensures a higher response rate and provides the

researcher with the opportunity to explain the study and answer potential questions (Fraenkel & Wallen, 2000). 368 participants completed the questionnaire. All questionnaires were checked for completeness and the accuracy of responses. No questionnaires were discarded.

ANALYSIS OF DATA AND RESULTS

All responses to the open-ended questions were recorded verbatim in an Excel worksheet. A decision was made not to utilize a computer software program, due to the relatively small amount of data. The responses to each question were analyzed at the departmental level, and all the responses were coded by the researcher in three stages. In the first phase of coding, core words and ideas were identified by marking words and phrases in the students’ answers. During the second phase, these core ideas and words were classified and grouped into main categories. A frequency count was taken for the responses grouped under each theme, and in the third phase, common themes were identified across all departments. A discussion of all categories at the level of each department, as well as at the overall sample level, along with the examples and quotations from the verbatim transcriptions of the students’ responses, is presented in the following sections.

The Importance of Various Activities after the Completion of Students’ Current Degree

In a set of structured response questions, students were asked to indicate the importance of various activities (career, further studies, and marriage) after the completion of their current degree. Descriptive statistics in Table 2 show that the mean score ($M = 4.13$) for the importance of gaining employment was well above the scale midpoint, thereby indicating that the students considered it important to work. The mean scores for the importance of both continuing to study at the same institution ($M = 2.78$), and further study at another institution in Pakistan ($M = 2.92$) were registered below the scale midpoints, thereby indicating that students considered it less important to pursue further studies in Pakistan. However, they considered it more important to study abroad ($M = 3.30$). The mean score ($M = 2.86$) for the importance of getting married was also below the scale midpoint, suggesting that these postgraduate students did not consider it important.

Table 2: Descriptive results for the importance of various activities after the completion of students’ current degree

How important is it for you to	M	MID	SD	MIN	MAX	Skewness	Kurtosis
Gain employment	4.13	5	1.23	1	5	-1.41	0.91
Study further at this institution	2.78	3	1.47	1	5	.21	-1.33
Study further at another institution in Pakistan	2.92	3	1.42	1	5	-.01	-1.30
Study further abroad	3.30	4	1.56	1	5	-.35	-1.41
Get married and have a family	2.86	3	1.51	1	5	.44	-1.1

The results presented in Table 2 can be seen as a reflection of the aspirations of the participating students, all of whom were from low- to middle-income families. Gaining employment and climbing the career ladder were rated as their most important pursuits after completing their degree program, suggesting a focus on financial security—especially in an environment where jobs are not easy to attain and with an unemployment rate of 5.9% (Government of Pakistan, 2016).

The research sought to understand the effect of independent variables (gender and the department of study) on all levels of the students' responses concerning the importance of various activities after the completion of their current degree. For this purpose, an Ordinal Regression Model (see for example, Fox, 2008, pp. 363-368) was initially considered to be appropriate. However, before applying the Ordinal Regression Model, the data were examined to determine their suitability for ordinal regression. The assumption of parallel lines (i.e. the relationships between the independent variables and the logits are the same for all the logits, and the results are a set of parallel lines or planes—one for each category of the outcome variable) was tested. The data did not fulfil this assumption, indicating that a population odds Logit Model was not appropriate. Therefore, a Multinomial Logistic Regression Model (also known as the Polytomous Logit Model) was used for the current data. The Multinomial Logistic Regression Model is generally effective when the dependent variable is composed of a polytomous category with multiple choices (Hosmer & Lemeshow, 2000). This model contained three independent variables (gender, department, and shift of study). The model is expressed below:

$$P(Y_i = j) = \frac{\exp(\gamma_{0j} + \gamma_{1j}X_{1i} + \gamma_{2j}X_{2i} + \dots)}{1 + \sum_{j=1}^4 \exp(\gamma_{0j} + \gamma_{1j}X_{1i} + \gamma_{2j}X_{2i} + \dots)}$$

Where $j = 1 \dots 4$

$$P(Y_i = 5) = 1 - \sum_{j=1}^4 P(Y_i = j)$$

Where $X_1, X_2, X_3 \dots$ are the explanatory variables, X_1 is a dummy variable for gender, $X_2 \dots X_5$ are dummy variables for departments, and X_6 is a dummy variable for shift of study (Fox, 2008, p. 356). The multinomial logistic regression (see Table 3) revealed a significant model, indicating discrimination among groups for four future activities (i.e. gain employment; study further at this institution; study further at another institution in Pakistan; study further abroad), whereas the final model was not significant ($p = 155$) for one future activity, namely "get married and have a family." The deviance goodness of fit test was applied and all p values for this test were not significant, indicating that the model was adequate. The details of the final model fit for five future activities are expressed in Table 3.

Table 3: Results of the Multinomial Logistic Regression Model in the final model for five future activities

Final Model (How important is it for you to:)	-2 log Likelihood	Chi- square (df = 24)	p values	Pseudo R- Square (Nagelkerk)	Deviance GOF (df = 48) p values
Gain employment	173.20	37.45	.039	.112	.942
Study further at this institution	222.56	64.60	.000	.182	.184
Study further at another institution in Pakistan	230.07	57.97	.000	.166	.05
Study further abroad	215.89	67.19	.000	.189	.09
Get married and have a family	223.80	30.96	.155	.093	.326

The Likelihood Ratio test (Table 4) indicated a statistically significant effect of the department of study (independent variable) on the importance of all future activities except getting married and having a family, whereas gender was not statistically significant. The details of the significant results of the Likelihood Ratio tests concerning the effect of the department of study on the importance of various future activities are shown in Table 4.

Table 4: Results of Likelihood Ratio test for significant effect of the department of study on the importance of various future activities at .05 level

Following your current program of study, how important is it for you to:	-2 log Likelihood of reduced model	Chi-square	df	Sig
Gain employment	202.89	29.69	16	.02
Study further at this institution	279.61	57.05	16	.000
Study further at another institution in Pakistan	277.66	47.59	16	.000
Study further abroad	263.99	48.10	16	.000
Get married and have a family	248.29	24.49	16	.08

These results indicate that the department of study significantly affects the importance of various future activities such as gaining employment, and studying further in Pakistan or abroad. What did not significantly vary across departments was the perceived importance of getting married and having a family.

Gender did not significantly affect the importance of future activities. The absence of this significant effect is surprising, suggesting that—at the postgraduate level—men and women were foreseeing and planning their futures in a similar manner. Previous research in Pakistan by Malik and Courtney (2011) showed that participation in higher education was associated with women's empowerment, resulting from an increased awareness of their legal rights, and an ability to claim

those rights. This study also demonstrated that women considered higher education as a means toward increased economic independence. The absence of significant gender differences in the future plans of the postgraduate students may indicate that participation in higher education enables women to consider and plan their futures in a manner similar to their male counterparts.

The Multinomial Logistic Regression Model estimated the effect of the independent variable (department of study) on the probability of choosing a type of alternative response category (from 1 = not important to 5 = very important). The fitted model was used to generate Figures 1 to 5, showing the relationship between the department of study and estimated probabilities of the responses to a set of questions.

As shown in Figure 1, in almost all departments a majority of the participants considered it important to gain employment after completing their current degree (4 = important and 5 = very important). This proportion was highest (over 80%) in the Centre of English Language Teaching and Linguistics (CELTL), the Department of Gender Studies (DGS), and the Institute of Business and Information Technology (IBIT). It is interesting to note that the majority of the students from the DGS and CELTL were women, with only five men in the DGS and just three in the CELTL. These results indicate that the women who were undertaking these degrees had very strong intentions of working in their chosen profession. The graduates of the DGS have diverse career opportunities, such as teaching, research positions in universities and colleges, positions in public and private departments and institutions with programs addressing a wide range of social and cultural issues, including advocacy for social justice, human rights, and the development of public policy (Institute of Social and Cultural Studies, 2008). The career opportunities available to the graduates of the CELTL include English language teaching positions in schools, colleges, and universities. The IBIT had more male students (65.8%), and graduates may attain employment in a managerial capacity in reputable business organizations, information technology firms, banks, and local as well as multinational companies (Institute of Education and Research, 2008).

Over 60% of the respondents in the Department of Business Education considered a job to be important to their future. This department had an equal percentage of men (48.4%) and women. The career opportunities available to graduates from the DBE include teaching positions in schools, colleges and universities, leadership positions in higher secondary schools and colleges of education, becoming research officers, and occupying positions in business firms and industries (Institute of Education and Research, 2008).

In the Department of Mathematics (68.3% female) over 60% of the respondents also considered gaining employment to be an important outcome of their studies. The career opportunities available to these graduates include teaching positions in schools, colleges and universities, and managerial positions in banks and accountancy firms (Department of Mathematics, 2008). Apart from these opportunities, students with a degree in mathematics can also work as private

tutors to secondary and higher secondary school students, or seek employment in private tuition centers.

These results suggest that, although there is variation in the percentage of respondents across different departments, overall, gaining employment was considered important by almost all of the students participating in the study. These results may be seen as representing the aspirations of this group of students, who belonged to low- and middle-class families with an average monthly income below 83000 rupees (1000 Australian dollars). These students wanted to improve their ability to support their families as well as their socioeconomic status, firstly by securing a higher education degree, and subsequently by seeking secure employment.

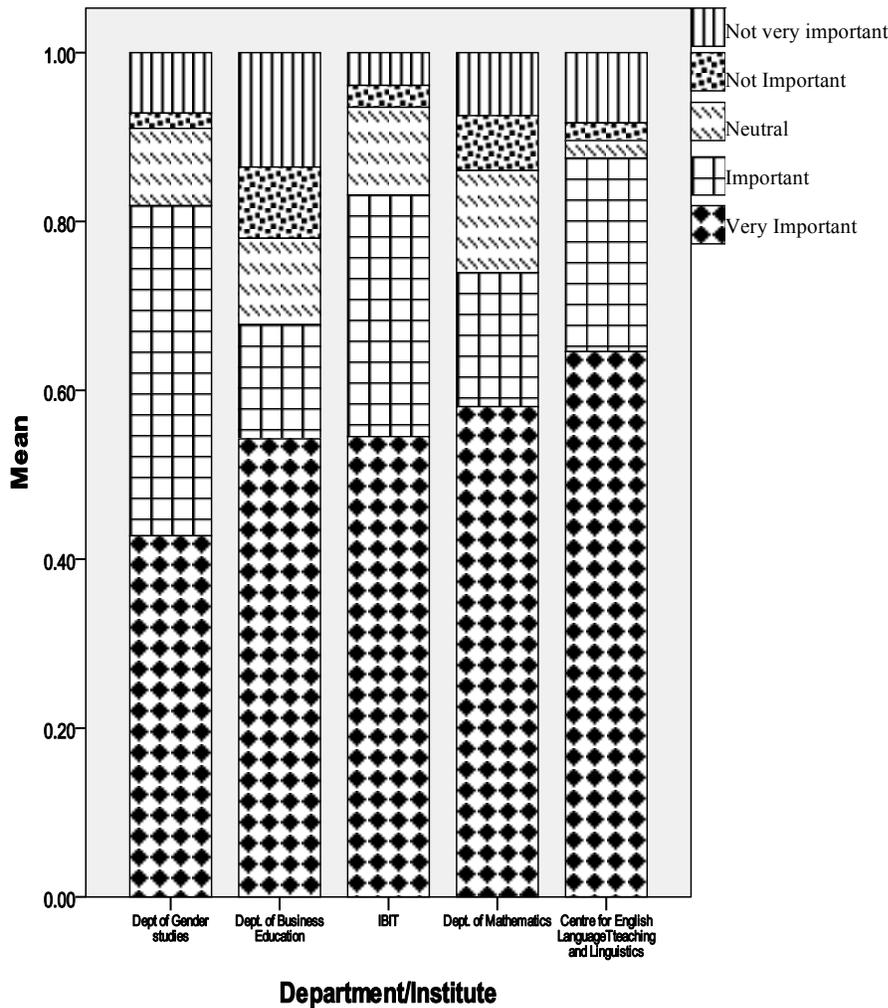


Figure 1: Estimated probabilities of responses to the question relating to the "importance of gaining employment" based on the Multinomial Logistic Regression Model

Figure 2 shows that in almost all departments, a small percentage of respondents considered it important to study further at their current institution. In the DGS, CELTL, and DM, over 40% of the respondents considered it important to study further at their current institution.

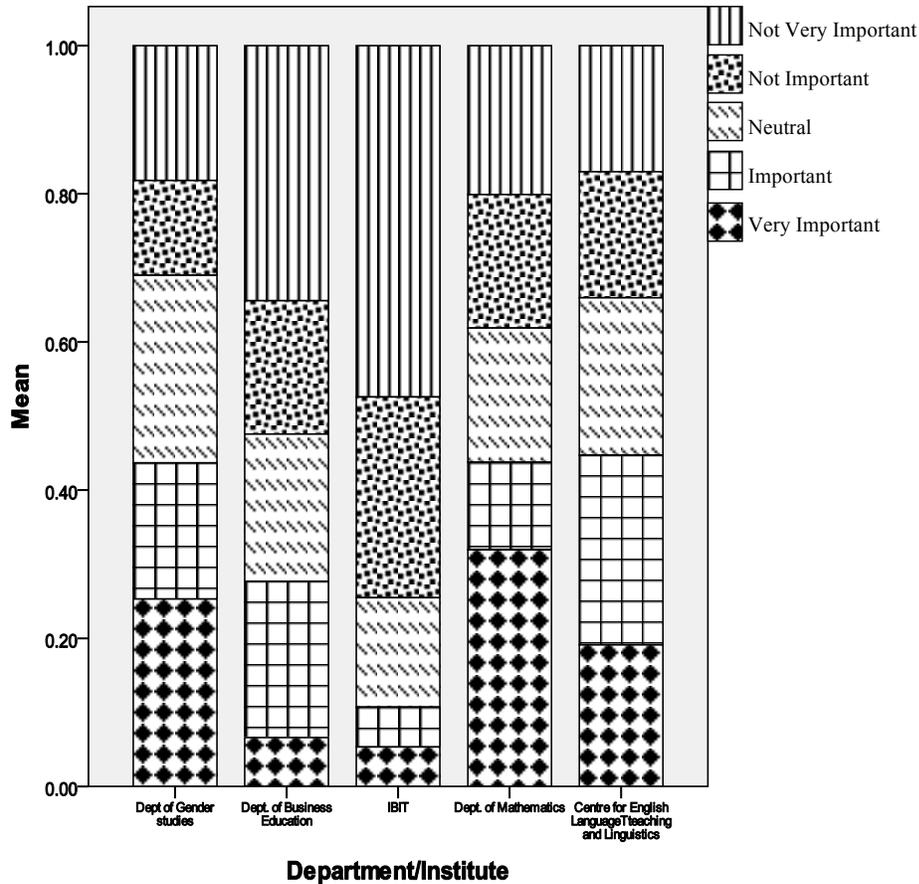


Figure 2: Estimated probabilities of responses to the question relating to the "importance of studying further at this institution," based on the Multinomial Logistic Regression Model

Similarly, the percentage of students who considered it important to undertake further study at another institution in Pakistan was less than 40% in the departments of Gender Studies and Mathematics, whereas a slightly higher percentage of students (just over 40%) in the DBE and CELTL wanted to study at another institution in Pakistan (see Figure 3). These results indicate that the majority of students were not planning to continue studying, suggesting that they were more intent on gaining employment after completing their degree.

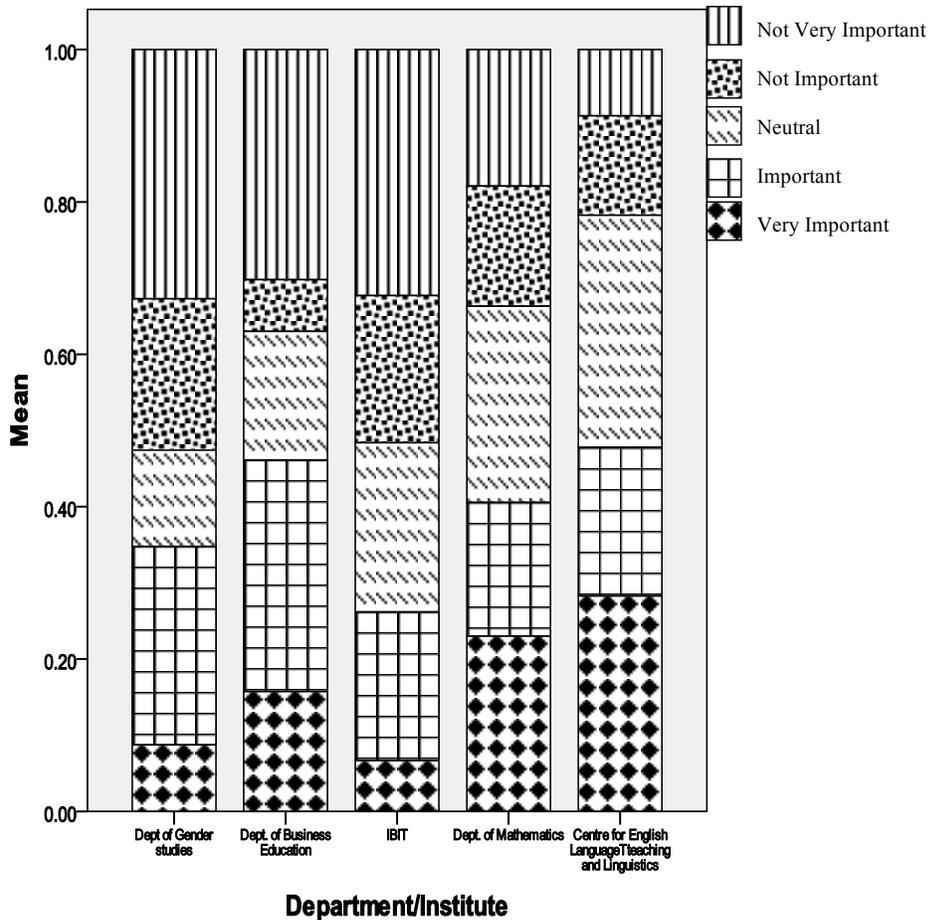


Figure 3: Estimated probabilities of responses to the question relating to the "importance of studying further at another institution," based on the Multinomial Logistic Regression Model

In contrast, as shown in figure 4, the majority of the students in the IBIT (over 70%), CELTL (over 60%), and DBE (50%) had a desire to study abroad. The percentage of such students was lowest (almost 30 %) in the Department of Gender Studies. The more pronounced preference for studying abroad among the students enrolled in the IBIT, CELTL, and DBE may have been due to the greater competition on the job market for the graduates of these departments. This may also reflect the students' awareness of the high rate of unemployment in Pakistan, and the fact that these students knew there would be no "pot of gold waiting at the end of their degree rainbow"—hence their focus on further studies may be a consequence of trying to improve their future prospects.

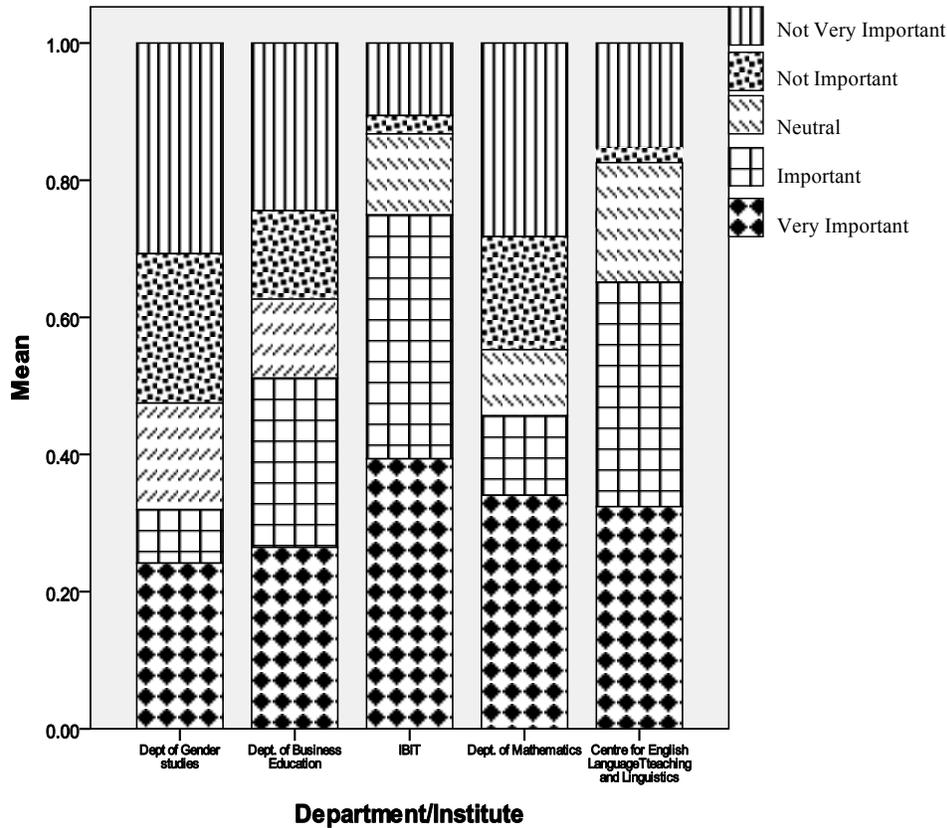


Figure 4: Estimated probabilities of responses to the question relating to the "importance of studying further abroad," based on the Multinomial Logistic Regression Model

As can be observed in Figure 5, just over 40% of the respondents in the DGS, CELTL, and IBIT considered getting married and having a family as important future goals. Both the DGS and CELTL had a majority of female students (with only three men in the CELTL and five men in the DGS), whereas the IBIT had more men (65.8%). These results further support the results of the Multinomial Logistic Regression Model, indicating no significant effect of gender on the perceived importance of future activities.

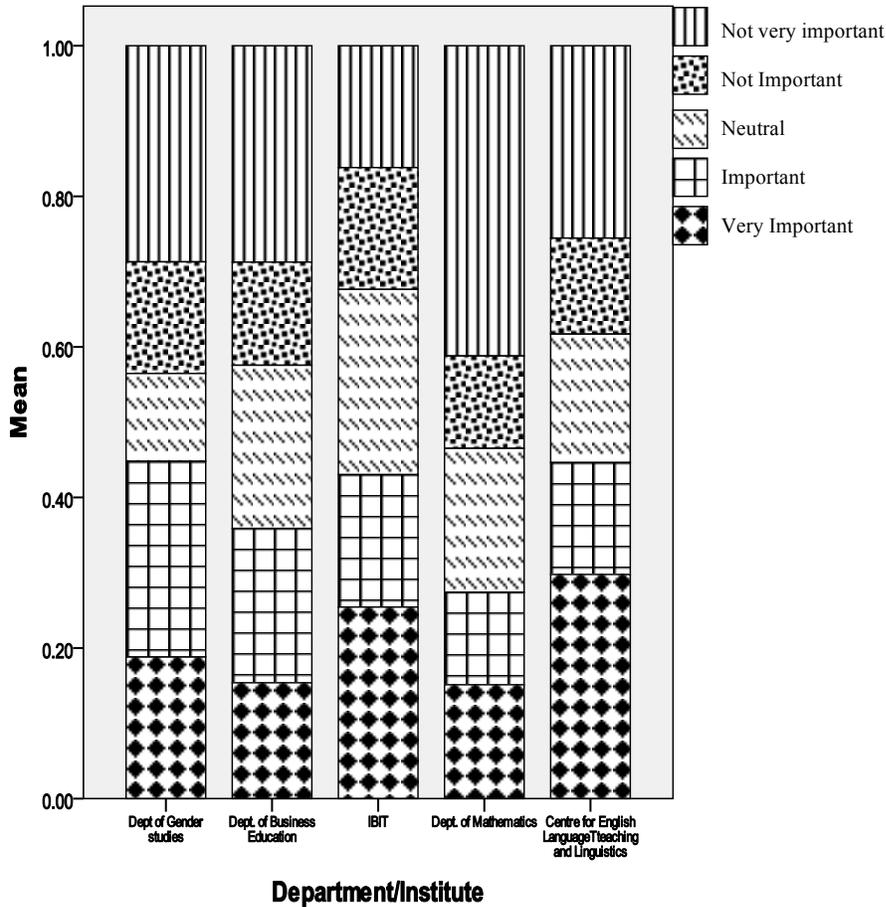


Figure 5: Estimated probabilities of responses to the question relating to the "importance of getting married and having a family," based on the Multinomial Logistic Regression Model

These results are quite unexpected in the social context of Pakistan, where the average age of marriage amongst women is 22.1 years (Government of Pakistan, 1999-2000). However, Gangadharan and Maitra (2000) have shown that education has significantly affected the age of marriage in Pakistan. The reduced importance of marriage indicates that postgraduate students may be more career oriented. A majority of the respondents hoped to gain employment towards the end of their degree, and also considered this the most important reason for undertaking the degree. This preference for gaining employment probably reflects a desire for better socioeconomic status and financial security.

Post-Graduate Career Preferences

In order to explore the students' career preferences and the reasons for choosing a particular job, two open-ended questions were added to the questionnaire. What follows presents the results of the students' responses to these questions.

In response to the first open ended question concerning their career preferences, 47% of the respondents reported teaching as their preferred job after attaining their current degree as shown in Table 5. It is interesting to note that all respondents ($n = 48$; all women) from the CELTL preferred teaching. Similarly, most of the students from the Department of Mathematics wanted to become teachers—89 out of 107 (of which 61 were women).

Table 5: Students' career preferences after the completion of their current degree ($n = 346$)

Responses/ Themes	DGS $n = 61$	IBIT $n = 72$	DM $n = 107$	DBE $n = 58$	CELTL $n = 48$	Count	Percentage of Respondents	M n	F n
Teaching	17	2	89	18	48	164	47.39	20	144
Job in a bank		22	18	17		57	16.47	40	170
Job in their respective area of specialization (marketing or finance)		32		24		56	16.18	29	279
Job in NGO Management job	36	23				36 23	10.40 6.65	52	313
Any job with good remuneration	6	1	7			14	4.05	12	22
Government job	6		12			18	5.20	2	16
No job			3	2		5	1.45		5
Total						373	107.80		

There appears to be a match between the higher percentage of women in the CELTL and DM, and the preferred career path. The graduates of the CELTL are generally able to get jobs in private schools in which all instruction is conducted in English, whereas the graduates within the Department of Mathematics can secure jobs in governmental as well as private institutions. Even when they cannot find a suitable position, these students have ample opportunity to work as private educational tutors, teaching students in their homes, or by working for private tuition centres. Where there are strong sociocultural expectations of balancing between family and work—particularly for women, as there are in the context of Pakistan—teaching is considered a very viable and acceptable career path. This preference is understandable in the context of patriarchal values, embedded in Pakistani society, where women are mostly placed in reproductive roles as mothers and wives in their private lives at home, whereas men are seen as the breadwinners. Women are generally not allowed to pursue a career after marriage (Khan, 2007). Therefore, the participants of the study were aware of these expectations and preferred to do a job in which they could balance their roles as career women on the one hand, and as wives and mothers at home on the other.

Both the DBE and IBIT offer the choice of specialization in specific areas of study, such as marketing, accounting, and finance. Over 16% of the respondents from these two departments wanted to attain jobs related to their areas of specialization, such as becoming a marketing or finance manager:

I would prefer a career related to finance, such as finance manager in a bank or multinational company. (male, IBIT)

I want to be a market specialist/sales officer. (male, IBIT)

However, 10.4% of the respondents, all from the Department of Gender Studies, preferred a position in a nongovernmental organization. 16% of the respondents (all from the IBIT, DBE, and DM) wanted to gain employment at a bank. A possible reason for this choice may be the relevance of their degrees to banking jobs—to hold a position at a bank, one must have a background in mathematics, finance, or accounting, and the graduates from the IBIT, DM, and DBE thus have the relevant knowledge and skills required for such positions.

The results presented in Table 5 show that most of the responses concurred with the professions and job opportunities mentioned in the prospectus of the respective departments. However, the high rate of unemployment in Pakistan may cause the longer-term outcomes to differ quite substantially from the expectations and aspirations of these respondents. However, these students also had their own reasons for choosing the above mentioned career paths, as will be discussed in the proceeding section.

Reasons for Choosing a Specific Career

In responses to the second open-ended question concerning the reasons for students' choice of a specific career, over 50 % of the respondents reported that they have a personal interest in their preferred career, and many students reported more than one reason, such as the desire to have a respectable job, their degree's relevance to the job, and opportunities for future development, when asked why they had chosen this specific career (see Table 6).

Table 6: Reasons for choosing a career (n = 298)

Responses/ Themes	DGS n = 35	IBIT n = 71	DM n = 92	DBE n = 55	CELTL n = 45	Count	Percentage of Respondents	M n	F n
Personal interest	8	36	50	34	26	151	50.67	7	77
Respectable job/ good job for ladies	7	2	31	10	22	72	24.16	4	72
Relevance to degree	4	13			6	23	7.72	1	12
Salary/ Economic independence	4	8		7		19	6.38	1	8
Opportunities for future developments /better scope		12	4	2	1	19	6.38	1	7
To serve my parents/family /country			13	4		17	5.70	8	9
I can make a difference for women	12					12	4.03		12
Total						313	105.03		

Personal interest

More than half (50.67%) of the respondents reported that they preferred a certain career due to a personal interest, as articulated in the following responses:

- I like teaching and I have [a] lot of interest in teaching as teaching in itself is learning. (female, CELTL)
- I like this. I am getting this degree to fulfil my inner desire. It is my dream to become a lecturer. (female, DM)
- I am interested in it. (female, DM)
- I am interested in this job. (male, DM)
- I have chosen this career because it clearly matches with my field of finance, so I want to excel in my own field and I find this very interesting. (male, IBIT)
- I find [it] really interesting to work with the dynamics of [a] managerial [position] and marketing. (male, IBIT)

These responses reflect that students' choice of profession was based on their personal interests and preferences.

Respectable and suitable job

Teaching as well as government jobs were considered to be very suitable for women by 24.16% of the respondents. They were considered suitable for many reasons, such as gaining respect, the suitability of working hours, and the ease of achieving a balance between work and family:

It's easy for women to do this job and take care of their family simultaneously. I can manage it easily. (female, CELTL)
Because, teaching is a respectable and convenient job. (female, DM)
I feel my future is in [a] government job. The honour of [a] government job is more than [for] private employees. (female, DGS)
It is suitable [and] you can give good time to your family also. Family is not totally ignored. (female, CELTL)
It is most respectful for women and timing is appropriate for girls to teach and to do their duties [at] homes [sic]. (female, DM)
Teaching is [a] very respectable job for women in Pakistan. (female, CELTL)

These responses indicate that female students preferred to have a career in which they could easily balance their responsibilities—both to their jobs and to their families.

Relevance to degree or area of specialization

The relevance of a particular job to the degree and area of specialization was another reason reported by 7.72% of the respondents. Students thought that their degree was most appropriate for doing the specific type of job they had chosen. Students grouped under this response category were from the IBIT ($n = 13$), CELTL ($n = 6$), and DGS ($n = 4$).

It suits to my study program as I am doing MBIT(Master of Business and Information Technology) in finance. (male, IBIT)
My current degree fulfils the needs and is appropriate for this job. (female, CELTL)
I have chosen this career because it clearly matches with my field of finance. So I want to excel in my own field and I find this work an interesting one [sic] which matched with my personality. (female, IBIT)
Because I am doing my specialization in finance and find [it] interesting to work in a financial sector. (male, IBIT)

These responses suggest that the participants preferred to have a job that was relevant to their area of specialization.

Salary and financial independence

A small percentage of the respondents (6.38%) considered their preferred job as a means of achieving economic independence:

I have chosen marketing as [my] career because it is high paying and also jobs are available in this field. (male, IBIT)
I want to be economically independent. (female, DGS)
I can lead a happy and wealthy life. (male, IBIT)
To earn money. (male, DM)
I will get enough income which will be suitable for me and my family. (female, DBE)
It is respectable and has reasonable salary. (male, IBIT)

This response category contained more men (11 out of 19), perhaps due to the fact that men considered their role as the breadwinners of the family, and wanted to have a job that offers the maximum financial benefit.

Opportunities for future development

A small percentage of respondents considered their preferred job as a means for future, professional development.

Because there is a good chance of future career development. (male, IBIT)

Because there is a very high value of business field and Marketing is one of them. (female, DBE)

The career I will choose is due to the boom and the growth in the job position and in [the] above sector there is [a] good chance for growth. (male, DBE)

I have chosen [this job] because there are a lot of opportunities regarding this. (male, DBE)

Therefore it can be said that their choice of a specific job was based on its future scope and opportunities for growth and progress.

To serve my parents, family and country

A small percentage (5.7%) of the respondents wanted to serve and support their family and country by gaining employment, thereby indicating their sense of social obligation:

I want to support my father because I have no brother. (female, IBIT)

I am interested in it and want to help my brother and sisters by teaching [them] to earn money and [to] help them. (female, DM)

Because I want to do something for my parents. (female, DM)

Because I want to do something for my parents and want to support them in a better way. (female, DM)

I wish to serve my parents and country. (male, DM)

I want to serve my country and humanity. (male, DM)

Because I want to do something for my country. (female, DM)

These responses indicate that the participants in the study aspired to support their parents and family financially. They also wanted to contribute to the development of Pakistan.

CONCLUSION AND DISCUSSION

Gaining employment was not only the most important reason for doing a postgraduate degree; it was also the most important activity that these students wanted to pursue after attaining their degree. These results can be explained with reference to the concept of Future Time Perspective (Husman & Lens, 1999; Lens, 2001; McInerney, 2004; McInerney, et al., 2008; Nurmi, 1991). Future Time Perspective serves as a basis for setting personal goals and life plans, and helps in exploring future options and taking major decisions (Seginer, 1992). For the postgraduate students in the study sample, the current postgraduate degree had a

high instrumentality or utility value for the future, as students considered that a degree would help them to gain employment in the future.

It should be noted that a comparatively small percentage of students in almost all departments considered further study attractive (either at their current institution or at other institutions in Pakistan). This may be because most of the students wanted to secure a job after attaining their current degree. However, a comparatively higher percentage of the students wanted to study abroad, although this varied across departments. For example, more students in the IBIT (over 70%) and CELTL (over 60%) than in the Departments of Business Economics (50%) and Gender Studies (30%) considered it important to continue their studies in another country. This preference for further study in a foreign country may be explained by the high rate of unemployment in Pakistan. For these students, a foreign degree may provide opportunities for academic development, as well as greater leverage in gaining employment in Pakistan, if not abroad.

In contrast to previous research on the effects of gender differences on the future goals of college students, this study did not show any significant effect of gender on the importance of various future activities. In a study of the future goals of Greek college students by Abowitz and Knox (2003), being well-educated and having close friendship and family ties were rated as significantly more important by women than by men. It is quite unexpected and surprising in the social context of Pakistan—where the average age of marriage for women is 22.1 years (Government of Pakistan, 1999-2000)—that, although the postgraduate students participating in this study did not ignore the importance of getting married and having a family, they did not rate this as their most significant future goal. Regardless of their gender, few students considered marriage as an important future goal. However, Gangadharan and Maitra (2000) have demonstrated the significant impact of education on the age of marriage in Pakistan. Their study showed that an increase in the number of years of education increased the age of marriage. The lesser importance attached to marriage indicates that postgraduate students are more career oriented at this point in their lives, and prefer to pursue a career after attaining their degree. Despite the high rate of unemployment in Pakistan, the majority of the participants in this study hoped to gain employment after completing their current degree. Teaching or a lecturership were the preferred career options for students from the CELTL and DM.

There appeared to be a match between the higher percentage of women in the CELTL and DM, and the preferred choice of career. More women preferred a career in teaching, and the degrees from these two departments provided the maximum opportunities for attaining such positions. The graduates of the CELTL generally gain employment in private schools and English-medium schools in which all instruction is conducted in English, whereas the graduates of the Department of Mathematics can get jobs in the government sector, as well as in private institutions. Even if they are not able to find a job, they still have opportunities for employment as private tutors, teaching students in their homes, and in private tuition centers. The preference for teaching jobs among women can be explained in the Pakistani sociocultural context because there is an expectation of achieving a

balance between responsibilities to both work and family (Khan, 2007). Similarly, this is reflected in the answers of students from the two business-related departments, expressing their desire to work in jobs related to finance, accounting, and marketing—in line with their specialized areas of study. An explanation for this preference is to be found in the large number of NGOs working on gender and human rights issues in Pakistan.

The most important reason for the choice of a preferred career as mentioned by the postgraduate students in this study was personal interest. Other reasons mentioned by female participants were having a job that is considered respectable for women, and the ease of attaining a balance between work and family. This preference is understandable in the context of the patriarchal values embedded within Pakistani society, where women are mostly considered in their reproductive roles as mothers and wives, whereas men are considered the main breadwinners. Women are generally not allowed to pursue a career after marriage (Khan, 2007), and the participants in this study were aware of these expectations, preferring a job in which they could balance their roles as career women on the one hand, and wives and mothers at home on the other. These findings concur with the results of the study conducted by Menon and Christo (2012) concerning the effects of gender on the choice of the teaching profession in Cyprus.

LIMITATIONS AND RECCOMENDATIONS FOR FUTURE RESEARCH

The sample group for this study was selected from only one public university in Pakistan for reasons of availability and access. It is therefore not prudent to conclude that these results are applicable to all universities in Pakistan.

Another limitation of the study is the reliance on self-reported questionnaire data. In order to explore and understand future as well as career aspirations and trajectories of Pakistani students in greater detail, semi-structured or structured interviews could also be conducted. These interviews could further illuminate the reasons and reasoning of participants for their preference and choice of specific careers.

REFERENCES

- Abowitz, D. A., & Knox, D. (2003). Life goals among Greek college students. *College Student Journal*, 37(1), 96-110.
- Department of Mathematics. (2008). *Prospectus: 4 years BSc Mathematics, M.Sc Mathematics*. Lahore: Department of Mathematics, University of the Punjab.
- Dolan, S. L., Bejarano, A., & Tzafirir, S. (2011). Exploring the moderating effect of gender in the relationship between individuals' aspirations and career success among engineers in Peru. *The International Journal of Human Resource Management*, 22(15), 3146-3167. doi: <http://dx.doi.org/10.1080/09585192.2011.560883>
- Fox, J. (2008). *Applied regression analysis and generalized linear model*. Los Angeles: SAGE
- Fraenkel, J. R., & Wallen, N. E. (2000). *How to design and evaluate research in education* (4th ed.). Boston: McGraw Hill.
- Gangadharan, L., & Maitra, P. (2000). The effect of education on the timing of marriage and first conception in Pakistan (Discussion paper). Clayton: Department of Economics, Monash University.
- Government of Pakistan. (1999-2000). Pakistan demographic survey 1999-2000. Islamabad: Federal Bureau of Statistics.
- Government of Pakistan. (2016). *Pakistan economic survey 2015-2016*. Islamabad: Ministry of Finance, Government of Pakistan Retrieved from http://www.finance.gov.pk/survey_1516.html.
- Higher Education Commission. (2016). Recognised universities and degree awarding institutions, from <http://hec.gov.pk/english/universities/pages/recognised.aspx>
- Higher Education Commission. (2015). Universities Statistics, from <http://www.hec.gov.pk/english/universities/Pages/test-page.aspx>
- Hosmer, D. W., & Lemeshow, S. (2000). *Applied logistic regression*. New York: Wiley.
- Husman, J., & Lens, W. (1999). The role of future in student motivation. *Educational Psychologist*, 34, 113-125.
- Institute of Education and Research. (2008). *Prospectus 2008 : Regular two year master degree programmes*. Lahore: Institute of Education and Research, University of the Punjab.
- Institute of Social and Cultural Studies. (2008). *Prospectus 2007-2008*. Lahore: Institute of Social and Cultural Studies, University of the Punjab.
- Khan, S. A. (2007). Gender issues in higher education in Pakistan. Retrieved 12 November 2011, from <http://www.international.ac.uk/resources/Gender%20Issues%20in%20Higher%20Education%20in%20Pakistan.pdf>

Lens, W. (2001). How to combine intrinsic task motivation with the motivational effects of the instrumentality of present tasks for future goals. In A. Efklides, J. Khul & R. M. Sorrentino (Eds.), *Trends and prospects in motivational research* (pp. 23-36). Norwell, MA: Kluwer.

Malik, S., & Courtney, K. (2011). Higher education and women's empowerment in Pakistan. *Gender and Education, 23*(1), 29-45.

McInerney, D. M. (2004). A discussion of future time perspective. *Educational Psychology Review, 16*(2), 141.

McInerney, D. M., Liem, A. D., Ortiga, Y. P. Y., Lee, J. Q., & Manzano, A. S. (2008). Future goals and self regulated learning among Singaporean Chinese students: The mediating role of the utility values of schooling, academic self-concept and academic motivation. In O. S. Tan, D. M. McInerney, A. D. Liem & A.-G. Tan (Eds.), *What the West can learn from the East* (pp. 267-293). Charlotte, North Carolina: Information Age

Menon, M. E., & Christo, M. (2012). *Gender effects on the choice of education as a field of study: The perceptions of female students*. Paper presented at the The 13th International Conference Of ISSEI International Society for the Study of European Ideas in cooperation with the University of Cyprus, University of Cyprus.

Nurmi, J.-E. (1991). How do adolescents see their future? A review of the development of future orientation and planning. *Developmental Review, 11*, 1-59.

OECD. (2017). Education at a glance 2017: OECD indicators Retrieved from <http://www.oecd-ilibrary.org/docserver/download/9617041e.pdf?expires=1520228066&id=id&accname=guest&checksum=64426F07AECBFDCBFE4820BA1B49F5D6>
doi:<http://dx.doi.org/10.1787/eag-2017-en>

Phinney, J. S., Baumann, K., & Blanton, S. (2001). Life goals and attributions for expected outcomes among adolescents from five ethnic groups. *Hispanic Journal of Behavioral Sciences, 23*(4), 363-377. doi: 10.1177/0739986301234002

Seginer, R. (1992). Future orientation: Age related differences among adolescent females. *Journal of Youth and Adolescence, 21*, 421-437.

Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research, 75*(3), 417-453. doi: 10.3102/00346543075003417