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Exploring the Role of Gender Stereotypes, Career Aspirations, and Self-Efficacy Among Higher Education Students in Punjab, Pakistan

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ABSTRACT

This study examined the perceptions of gender stereotypes, career aspirations, and self-efficacy of 300 higher education students in Punjab, Pakistan. Employing a quantitative survey design, data were collected via a structured questionnaire with validated scales for gender stereotypes, career aspirations, and self-efficacy, demonstrating high reliability (Cronbach's Alpha > 0.91). The objectives of the study were: 1) To examine the prevalence of gender stereotypes among higher education students in Punjab, Pakistan, in relation to their perceptions of professional roles. 2) To assess the career aspirations of higher education students in relation to gendered expectations. 3) To measure the level of self-efficacy among higher education students in relation to their career development. Descriptive data indicated a sharp consciousness of gender stereotypes, as 78-93 per cent of the participants asserted gender stereotypes statements that shed light on society, such as exclusion of women by male-dominated careers and questioning of men in female-dominated careers. There were also high career aspirations among the participants, indicated by the 86-94 per cent agreement on goal-setting and belief in pursuing non-traditional careers, as well as strong self-efficacy, indicated by the 87-95 per cent agreement on resilience and motivation, and mean scores reflecting moderate to high levels of the measured variables. These findings highlighted the need to implement gender-specific gender-equity interventions in Pakistani higher education to reduce imbalances and promote the inclusive establishment of career patterns.

Keywords: Gender Stereotypes; Self-Efficacy; Career Aspirations; Higher Education

INTRODUCTION

Gender stereotypes in modern higher education still have a significant impact on career choices and the self-efficacy of students, especially in such culturally conservative regions as Punjab, Pakistan. These stereotypes, which are deeply ingrained in the norms and cultural expectations of society, tend to determine the perceived roles of men and women, thereby restricting opportunities and perpetuating inequalities in their career choices (Eagly et al., 2023). As an example, the gender stereotypes that have historically associated masculinity with leadership and decision-making processes and femininity with caring and housework ensure that women are not willing to work in the ambitions sector, including science, technology, engineering, and mathematics (STEM), and also, men are not willing to work as nurses or educators (Cheryan et al., 2024).

This dynamic not only sustains gender differences but also makes students unsure about their capabilities, where self-efficacy, i.e., their belief in their ability to perform tasks and conquer challenges (Bandura, 1997), is inextricably linked to both social feedback and role models. With patriarchal organization overlapping with blistering educational growth in Pakistan, tertiary education learners face exceptional burdens that shape their career objectives and individual agency, which makes it critical to investigate the role of these stereotypes in mediating career aspirations and personal agency.

In the context of higher education institutions in Punjab, where the number of female students is rapidly increasing, but the distribution of genders is not equal, the perception of these stereotypes can perpetuate obstacles or, on the contrary, develop resistance and increased ambitions as a way of resisting (Alexiadou and Rambla, 2024). The research aims to examine the mean scores of such perceptions in a heterogeneous sample and, thus, shed light on the tendency of cultural specificity to strengthen patterns of gender inequity observed worldwide.

The consequences of unresolved gender stereotypes are not just limited to individual learners; they can also be applied to the wider consequences of society and economy, explaining the need to emphasize equity-based policies. It has been reported globally that biases have been perpetuated, leading to underrepresentation in major sectors, where women in low- and middle-income countries like Pakistan are only estimated to graduate around 25 per cent of STEM (UNESCO, 2024).

In addition, self-efficacy is a key moderating factor; its high level can help eliminate stereotype threat and enable students to pursue their ambitions despite societal challenges (Wiebe et al., 2023). The central idea of self-efficacy in Bandura's Social Cognitive Theory describes individuals' beliefs in their ability to carry out the behaviors necessary to develop designated performance attainments. Self-efficacy is important as it fuels motivation, persistence, and selection of activities (Bandura, 1977; see Self-Efficacy, 2019). Recent research in Pakistan suggests its relevance in educational settings: for instance, one study detailed how secondary school students' self-efficacy explained about 30% of cognitive ability variance among participants in Punjab. In addition, studies show that teaching interventions that enhance self-

efficacy, such as resilience-based training for teachers in Karachi, create large and significant changes in self-efficacy. According to these studies, self-efficacy is an important mediator when considering how gender-stereotypical views might affect students' career aspirations; therefore, it is important to explore baseline levels of self-efficacy, as well as its relationships with other variables, in higher education.

The study was delimited to the public sector higher education institutions of Punjab, Pakistan, including colleges and universities. However, a subtle recognition of these perceptions can be used to inform curriculum changes, counseling, and awareness initiatives aimed at empowering students and thus having a more inclusive higher education culture that can support different career goals. This study does not include faculty, staff, or postgraduate students. Since the study was only in one cultural background and learning context, the findings might not be applicable in other settings. Similarly, the cultural perception of gender was a peculiar situation in Punjab; students might make different decisions and perceptions, making it more difficult to generalize the results of the study to other cultures.

LITERATURE REVIEW

The effect of gender stereotypes on the educational experiences and attitudinal perceptions of higher education students is immense and often supports the traditional roles that limit opportunities based on gender. They are manifested in societal expectations, which make men natural leaders in such fields as engineering and decision-making, and they guide women to a caregiving or family-focused path and thus get marginalized and become more suspiciously observed in male-dominated environments (Durrani and Mufaddal, 2025). Gender inequality is persistent in STEM education, and female students are faced with biases in the contents of curricular activities and in institutional policies and practices, which hinder their participation and confidence (Qaisar, 2024). Not only do such stereotypes change the way individuals perceive themselves, but they also lead to the larger inequities in academic performance due to the fact that cultural norms increase gender disparities in the way students view their abilities and positions (Pervaiz et al., 2025).

The career aspirations of higher learning students are highly influenced by the existing gender stereotypes, as it is likely to guide students into sex-typed careers that conform to the societal norms. As an illustration, stereotypes can discourage females from having a career in the ambitious fields in technical fields and males may avoid the feminine roles, hence restricting the exploration of the various career paths (Agyemang et al., 2020). However, these biases can occasionally lead to resilience, which makes the students have higher goals to achieve in response to it, but these impacts are controlled by cultural factors (Chan, 2022). Gender bias in particular settings, like in medical education, also influences aspirations; women students may experience obstacles that impact their future occupational goals and their attainment of social conformity (Durrani and Mufaddal, 2025).

Higher education students adapt gender stereotypes and develop career goals through self-efficacy, which is a critical mediator in attitude to overcoming barriers. Stereotyped expectations are also associated with low levels of self-efficacy in female students, which undermines their belief in success in non-traditional areas, leading to gender gaps in success (Pervaiz et al., 2025). These gaps are also widened by cultural and gender expectations, especially in STEM, where self-efficacy has a role in career path interest and career persistence (Chan, 2022). Self-efficacy may be positively impacted by supportive factors, including strong social networks, which subsequently allows exploring and choosing a career more comprehensively regardless of the widespread presence of stereotypical obstacles (Nguyen and Tran, 2024).

Objective of the study

1. To examine the prevalence of gender stereotypes among higher education students in Punjab, Pakistan, in relation to their perceptions of professional roles.
2. To assess the career aspirations of higher education students in relation to gendered expectations.
3. To measure the level of self-efficacy among higher education students in relation to their career development.

METHODOLOGY

The purpose of this research work was to investigate how higher education students of Punjab, Pakistan, perceived gender stereotypes, career aspirations, and self-efficacy. The following was the methodology of the study:

Research Design

The researchers employed a quantitative survey design to gather detailed opinions about how gender stereotypes, career aspirations, and self-efficacy were perceived by higher education students in Punjab, Pakistan. A survey was conducted as part of a descriptive and cross-sectional study for this research. Surveys, as Gay (2000) points out, are useful for finding out the current position by asking about one or more variables among many people. Creswell (2003) also advised using surveys because they cost less time and money.

Population and Sampling

Males and females enrolled in higher education institutions throughout the Punjab region of Pakistan took part in this research study. The researchers selected this group to understand how respondents gave their views on gender stereotypes, career aspirations, and self-efficacy.

Of the total participants, 300 male and female students of higher education institutions were selected from different colleges and universities of Punjab who were diverse in their academic programs and genders. Data was gathered with a stratified random sampling technique. Sampling participants in this way helped the study record a variety of ideas and beliefs about gender roles and future profession choices.

Instrumentation

A systematic review of the relevant scholarly literature and the previous tools were used to construct the research instrument. The questionnaire was developed using a five-point Likert scale, which was meant to measure the gender stereotypes, career aspirations, and self-efficacy of higher education students. Respondents were asked to express their degree of agreement on each of the items on a scale of Strongly Disagree (1) to Strongly Agree (5). The questionnaire was carefully designed to be in line with the intended objectives of the current study. Moreover, a demographic section was also included in the tool.

The gender stereotypes scale was developed based on the existing societal and cultural concepts of gender roles. The career aspirations scale was intended to measure the career aspirations of the participants. However, the self-efficacy scale was used to measure the assurance of the attainment of personal objectives and the control of misfortune.

Validity and Reliability

The researchers consulted with eight academic professionals who specialize in educational psychology, career and counseling, career development, self-efficacy, and gender equality. They offered suggestions on how clear and appropriate each item was, as well as on the questionnaire, whether it was matching the objectives of the study. After rigorous review, the research instrument was revised and improved using feedback from academic experts to increase clarity and understanding of the objectives of the research. In light of these suggestions, some changes were incorporated.

To ensure the data on the scale were consistent, Cronbach's Alpha was applied. All scales were considered acceptable when their threshold was 0.70 or higher. The reliability of the research instruments used to measure the consistency of research instruments, including gender stereotypes, career aspirations, and self-efficacy. The overall scale, comprising 45 items and demonstrated high reliability with a Cronbach's Alpha of 0.981. The gender stereotype scale (15 items) achieved a Cronbach's Alpha of 0.913, the career aspiration scale (15 items) scored 0.982, and the self-efficacy scale (15 items) recorded 0.950, all indicating high internal consistency and confirming the instruments' consistency for the study.

The pilot study involved 50 students studying at various higher education institutions in Punjab, Pakistan. At this stage, the researchers dealt with the results to confirm that the questionnaire could be used reliably before large-scale use.

DATA ANALYSIS

Then, the researchers administered the survey questionnaire using Google Forms and in-person distribution of the study tool. The SPSS software was used to analyze the quantitative data to summarize characteristics of people and important features of variables, with descriptive statistics.

RESULTS

The demographic profile of the study sample consisted of 300 students, with more females (63.0%) than males (37.0%). Most students came from rural areas (56.7%), while 43.3% were from urban settings. A greater proportion study at universities (60.7%) compared to colleges (39.3%). In terms of family income, 49.1% belonged to households earning less than 50,000, and 38.6% had income above 150,000. This diverse demographic distribution offered meaningful insights into self-regulated learning, digital distractions, and academic performance across different backgrounds.

Frequency Analysis of Gender Stereotypes

The following was the frequency analysis of gender stereotypes:

Table 1.1

Frequency Analysis of Gender Stereotypes

Sr#Statements	Disagreement Zone			Total Disagreement	N	Agreement Zone		Total Agreement	Result
	SDA	DA				A	SA		
1	It is more socially acceptable for men to take leadership roles than for women.			60	17	138	85	240	Agreement
	12	48							
	(4.0%)	(16.0%)		(20.0%)	(5.7%)	(46.0%)	(28.3%)	(80.0%)	
2	Society encourages women to prioritize family over career.			66	5	145	84	234	Agreement
	12	54							
	(4.0%)	(18.0%)		(22.0%)	(1.7%)	(48.3%)	(28.0%)	(78.0%)	
3	Men are viewed as naturally better decision-makers than women.			36	18	138	108	264	Agreement
	6	30							
	(2.0%)	(10.0%)		(12.0%)	(6.0%)	(46.0%)	(36.0%)	(88.0%)	
4	Women are often discouraged from pursuing ambitious career paths.			43	12	143	102	257	Agreement
	6	37							
	(2.0%)	(12.3%)		(14.3%)	(4.0%)	(47.7%)	(29.8%)	(81.5%)	
5	Women are considered better suited for caregiving roles.			18	11	200	71	282	Agreement
	12	6							
	(4.0%)	(2.0%)		(6.0%)	(3.7%)	(58.5%)	(23.7%)	(85.9%)	

6	Women feel excluded in male-dominated professional environments.	12 (4.0%)	9 (3.0%)	21 (7.0%)	20 (3.3%)	161 (62.0%)	66 (27.7%)	247 (93.0%)	Agreement
7	Men rarely pursue caregiving careers like nursing or teaching.	5 (1.7%)	17 (5.7%)	22 (7.4%)	5 (1.7%)	121 (35.5%)	152 (44.4%)	278 (81.6%)	Agreement
8	Men face societal judgment when pursuing caregiving careers.	5 (1.7%)	17 (5.7%)	22 (7.4%)	5 (5.7%)	124 (36.3%)	149 (43.6%)	278 (85.6%)	Agreement
9	Women in male-dominated fields face greater scrutiny.	5 (1.7%)	21 (7.0%)	26 (8.7%)	5 (1.7%)	132 (44.0%)	137 (45.7%)	274 (91.4%)	Agreement
10	Men are encouraged to avoid professions deemed feminine.	0 (0.0%)	30 (8.8%)	30 (8.8%)	0 (0.0%)	132 (44.0%)	138 (40.4%)	270 (84.4%)	Agreement
11	Gender stereotypes make me question my professional abilities.	1 (0.3%)	27 (9.0%)	28 (9.3%)	0 (0.0%)	128 (37.4%)	144 (42.1%)	272 (79.5%)	Agreement
12	I feel judged for pursuing a career not traditionally associated with my gender.	0 (0.0%)	27 (9.0%)	27 (9.0%)	1 (0.3%)	138 (40.4%)	134 (44.7%)	273 (85.4%)	Agreement
13	I avoid certain fields due to societal expectations about my gender.	0 (0.0%)	27 (9.0%)	27 (9.0%)	1 (0.3%)	132 (38.6%)	140 (40.9%)	273 (79.8%)	Agreement

Table 1.1 shows that the respondents revealed students' perceptions regarding gender stereotypes in career and social roles. The data indicated a high overall agreement with most statements, reflecting a shared awareness of persistent societal biases. The strongest agreement was noted for the belief that women feel excluded in male-dominated environments (93.0%), followed closely by the view that women in such fields face greater scrutiny (91.4%). Many students also agreed that men face

societal judgment when entering caregiving professions (85.6%) and are discouraged from pursuing careers deemed feminine (84.4%), highlighting the rigidity of gender roles. Furthermore, 85.9% of respondents agreed that women are considered better suited for caregiving roles, emphasizing traditional expectations. A substantial proportion (79.5%) admitted that gender stereotypes affect their confidence in professional abilities. The lowest agreement (78.0%) was related to societal encouragement for women to prioritize family over career, though it still represents a strong majority. Overall, these findings underscored the students' acute awareness of gender-based societal expectations and their potential impact on career choices and self-perception.

Frequency Analysis of Career Aspirations

The following was the frequency analysis of career aspirations:

Table 1.2
Frequency Analysis of Career Aspirations

Sr#Statements	Disagreement Zone		Total Disagreement	N	Agreement Zone		Total Agreement	Result
	SDA	DA			A	SA		
14 I have clear career goals for my future.	6 (2.0%)	30 (10.0%)	36 (12.0%)	12 (4.0%)	138 (46.0%)	114 (38.0%)	264 (88.0%)	Agreement
15 I take steps to make sure my goals are possible to achieve.	12 (4.0%)	22 (7.3%)	34 (11.3%)	10 (3.3%)	161 (53.7%)	95 (31.7%)	266 (88.7%)	Agreement
16 I focus on my education to help reach my career goals.	11 (3.7%)	22 (15.5%)	33 (19.2%)	11 (3.7%)	158 (52.7%)	98 (32.7%)	261 (89.1%)	Agreement
17 My career plans include both short-term and long-term goals.	6 (2.0%)	12 (4.0%)	18 (6.0%)	0 (0.0%)	120 (40.0%)	162 (54.0%)	282 (94.0%)	Agreement
18 I regularly set goals to help me achieve my career dreams.	6 (2.0%)	35 (11.7%)	41 (13.7%)	12 (4.0%)	127 (42.3%)	120 (40.0%)	259 (86.3%)	Agreement
19 My career goals are an important part of who I am.	6 (2.0%)	15 (5.0%)	21 (7.0%)	2 (0.7%)	121 (40.3%)	156 (45.6%)	279 (86.6%)	Agreement

20	I believe I have the skills I need to succeed in my chosen career.	6	34	40	12	127	121	260	Agreement
		(2.0%)	(11.3%)	(13.3%)	(4.0%)	(42.3%)	(40.0%)	(86.3%)	
21	I am confident that I can overcome challenges in pursuing my career.	7	16	23	2	118	157	277	Agreement
		(2.3%)	(5.3%)	(7.6%)	(0.7%)	(39.3%)	(52.3%)	(92.3%)	
22	I believe my chosen career fits well with society's expectations for my gender.	6	31	37	10	127	126	263	Agreement
		(2.0%)	(10.3%)	(12.3%)	(3.3%)	(42.3%)	(42.0%)	(87.6%)	
23	I am confident that I can do well in a career field mostly dominated by the opposite gender.	6	30	36	11	124	129	264	Agreement
		(2.0%)	(10.0%)	(12.0%)	(3.7%)	(41.3%)	(43.0%)	(88.0%)	
24	My education has prepared me well for pursuing my career goals.	6	34	40	12	129	119	260	Agreement
		(2.0%)	(11.3%)	(13.3%)	(4.0%)	(43.0%)	(39.7%)	(86.7%)	
25	Exposure to various fields in school helps me set my career goals.	6	26	32	8	124	136	268	Agreement
		(2.0%)	(8.7%)	(10.7%)	(2.7%)	(43.0%)	(45.3%)	(91.0%)	
26	My education provides me with opportunities to explore diverse career paths	7	34	41	12	125	122	259	Agreement
		(2.3%)	(11.3%)	(13.6%)	(4.0%)	(41.7%)	(40.7)	(86.4%)	

Table 1.2 shows that the respondents indicated a consistently high level of agreement among respondents regarding their career aspirations. A substantial majority of students reported having clear career goals (88%), regularly setting goals (86.3%), and taking active steps to make those goals achievable (88.7%). The highest level of agreement (94%) was found for the statement “My career plans include both short-term and long-term goals”, suggesting a strong sense of direction and foresight among the participants. Furthermore, students expressed confidence in overcoming

career-related challenges (92.3%) and in their ability to succeed in fields traditionally dominated by the opposite gender (88%), indicating both self-efficacy and gender-role flexibility. Responses also revealed that students perceive their education as a meaningful contributor to their career readiness, with 91% agreeing that exposure to various fields helps shape their goals, and 86.4% affirming that their education allowed them to explore diverse career paths. These findings suggested that the participants possess a proactive and confident approach to career planning, supported by both personal ambition and institutional resources.

Frequency Analysis of Self-Efficacy

The following was the frequency analysis of self-efficacy:

Table 1.3

Frequency Analysis of Self-Efficacy

Sr#Statements	Disagreement Zone		Total Disagreement	N	Agreement Zone		Total Agreement	Result
	SDA	DA			A	SA		
27	I feel confident in my ability to learn new skills for my career.							
	5	29	57	10	127	129	266	Agreement
	(1.7%)	(9.7%)	(19.1%)	(3.3%)	(42.3%)	(43.0%)	(88.6%)	
28	I enjoy learning new things that can help me with my career.							
	6	32	38	12	131	119	262	Agreement
	(2.0%)	(10.7%)	(12.7%)	(4.0%)	(43.7%)	(39.7%)	(87.4%)	
29	I am sure that my skills will help me achieve my career goals.							
	5	29	34	9	129	128	266	Agreement
	(1.7%)	(9.7%)	(11.4%)	(3.0%)	(43.0%)	(42.7%)	(88.7%)	
30	I am determined to keep improving my skills, even when I face challenges.							
	5	27	32	9	127	132	268	Agreement
	(1.7%)	(9.0%)	(10.7%)	(3.0%)	(42.3%)	(44.0%)	(89.3%)	
31	My confidence in my skills motivates me to pursue my goals.							
	5	26	31	9	125	135	269	Agreement
	(1.7%)	(8.7%)	(10.4%)	(8.7%)	(41.7%)	(45.0%)	(95.4%)	
32	I keep focusing on my goals, even when there are distractions or pressures from outside.							
	6	28	34	11	125	130	266	Agreement
	(2.0%)	(9.3%)	(11.3%)	(3.7%)	(41.7%)	(43.3%)	(88.7%)	

33	My determination helps me navigate career obstacles.	6 (2.0%)	29 (9.7%)	35 (11.7%)	10 (3.3%)	126 (42.0%)	129 (43.0%)	265 (88.3%)	Agreement
34	I can recover quickly after failing or facing problems in my career plans.	6 (2.0%)	26 (8.7%)	32 (10.7%)	9 (3.0%)	124 (41.3%)	135 (45.0%)	268 (89.3%)	Agreement
35	I stay motivated to reach my career goals, even when I face difficulties	6 (2.0%)	29 (9.7%)	35 (11.7%)	10 (3.3%)	126 (42.0%)	129 (43.0%)	265 (88.3%)	Agreement
36	I see challenges as opportunities to grow and improve.	6 (2.0%)	26 (8.7%)	32 (10.7%)	9 (3.0%)	124 (41.3%)	135 (45.0%)	268 (89.3%)	Agreement
37	I believe that working hard in my career will lead to good results.	0 (0.0%)	27 (9.0%)	27 (9.0%)	1 (0.3%)	132 (44.0%)	140 (46.7%)	273 (91.0%)	Agreement
38	I believe that reaching my career goals will improve my life in many ways.	6 (2.0%)	29 (9.7%)	35 (11.7%)	10 (3.3%)	126 (42.0%)	129 (43.0%)	265 (88.3%)	Agreement
39	I am confident that following my career goals will bring positive results, even with challenges.	5 (1.7%)	28 (9.3%)	33 (11%)	9 (3.0%)	126 (42.0%)	132 (44.0%)	267 (89.0%)	Agreement

Table 1.3 shows that the respondents demonstrated a strong sense of self-efficacy among the respondents in relation to their career goals. Across all 13 items, a consistently high level of agreement was observed, with percentages ranging from 87.4% to 95.4%, reflecting students' confidence in their skills, motivation, and resilience. The highest agreement (95.4%) was for the statement “My confidence in my skills motivates me to pursue my goals”, indicating that self-belief played a pivotal role in driving students toward their career aspirations. Respondents also

showed strong determination to improve skills despite challenges (89.3%) and the ability to recover after setbacks (89.3%), suggesting a well-developed capacity for persistence and growth. Furthermore, the belief that hard work led to positive results (91%) and that challenges are opportunities for improvement (89.3%) highlights an optimistic and proactive mindset. Overall, these results suggested that the students possess a robust level of career-related self-efficacy, characterized by motivation, emotional resilience, and a belief in personal growth and goal achievement.

Mean, Standard Deviation, Ranking, and Interpretation of Gender Stereotypes

The following were the mean, standard deviation, ranking, and interpretation of gender stereotypes:

Table 1.4

Mean, Standard Deviation, Ranking, and Interpretation of Gender Stereotypes

Item	N	Mean	Std. Deviation	Rank	Mean Interpretation
Men rarely pursue caregiving careers like nursing or teaching.	300	4.33	0.892	1 st	High
Men face societal judgment when pursuing caregiving careers.	300	4.32	0.890	2 nd	High
Gender stereotypes make me question my professional abilities.	300	4.29	0.888	3 rd	High
I avoid certain fields due to societal expectations about my gender.	300	4.28	0.867	4 th	High
I feel judged for pursuing a career not traditionally associated with my gender.	300	4.26	0.862	5 th	High
Men are encouraged to avoid professions deemed feminine.	300	4.26	0.892	6 th	High
Women in male-dominated fields face greater scrutiny.	300	4.25	0.919	7 th	High
Women feel excluded in male-dominated professional environments.	300	4.06	0.888	8 th	Moderate
Women are considered better suited for caregiving roles.	300	4.04	0.845	9 th	Moderate
Men are viewed as naturally better decision-makers than women.	300	4.04	1.001	10 th	Moderate
Women are often discouraged from pursuing ambitious career paths.	300	3.99	1.028	11 th	Moderate
It is more socially acceptable for men to take leadership roles than for women.	300	3.79	1.140	12 th	Moderate
Society encourages women to	300	3.78	1.155	13 th	Moderate

prioritize family over career.

Table 1.4 shows that the statistics from each item display that most participants recognized the influence of gender stereotypes on career selections. Scores for these statements were very high, meaning that subjects found it easy to notice the limitations given by gender: “Men rarely seek jobs in nursing or teaching” (M = 4.33, SD = 0.89), “Men deal with scrutiny if they consider such jobs” (M = 4.32, SD = 0.89) and “I question my professional skills because of gender stereotypes” (M = 4.29, SD = 0.89). The majority of the items earned strong mean scores, showing that people tend to agree that social norms affect both men’s and women’s careers. On these items, “Society asks women to make family a top concern, not career” and “Society thinks men should lead more often than women” were rated moderately, with many respondents still concerned. These results told us that gender stereotypes were still a major influence on career views among respondents.

Mean, Standard Deviation, Ranking, and Interpretation of Career Aspirations

The following were the mean, standard deviation, ranking, and interpretation of career aspirations:

Table 1.5

Mean, Standard Deviation, Ranking, and Interpretation of Career Aspirations

Item	N	Mean	Std. Deviation	Rank	Mean Interpretation
My career plans include both short-term and long-term goals.	300	4.40	0.850	1 st	High
My career goals are an important part of who I am.	300	4.35	0.886	2 nd	High
I am confident that I can overcome challenges in pursuing my career.	300	4.34	0.917	3 rd	High
Exposure to various fields in school helps me set my career goals.	300	4.19	0.986	4 th	Moderate
I am confident that I can do well in a career field mostly dominated by the opposite gender.	300	4.13	1.016	5 th	Moderate
I believe my chosen career fits well with society's expectations for my gender.	300	4.12	1.018	6 th	Moderate
I have clear career goals for my future.	300	4.08	0.998	7 th	Moderate
I believe I have the skills I need to succeed in my chosen career.	300	4.08	1.037	8 th	Moderate
My education has prepared me	300	4.07	1.034	9 th	Moderate

well for pursuing my career goals.					
My education provides me with opportunities to explore diverse career paths	300	4.07	1.053	10 th	Moderate
I regularly set goals to help me achieve my career dreams.	300	4.07	1.042	11 th	Moderate
I focus on my education to help reach my career goals.	300	4.03	0.994	12 th	Moderate
I take steps to make sure my goals are possible to achieve.	300	4.02	1.003	13 th	Moderate

Table 1.5 shows that the participants had a mostly positive attitude toward what they want to do professionally, as the mean for the statement “I plan for both the near and distant future at work” (4.40) suggests. In the same manner, participants agreed highly on viewing their career aspirations as a fundamental aspect of themselves and feeling confident enough to tackle career-related problems (M = 4.35, SD = 0.89, and M = 4.34, SD = 0.92). Although some items were rated highly, the great majority (about 73%) fell into the moderate range (between 4.02 and 4.19), concerning career fit with gender stereotypes, personal goals, and the role of education in career success. Apparently, students tend to be eager and sure about their career paths, yet there was an opportunity to improve their ability to set goals and receive more valuable help from their education.

Mean, Standard Deviation, Ranking, and Interpretation of Self-Efficacy

The following was the mean, standard deviation, ranking, and interpretation of self-efficacy:

Table 1.6

Mean, Standard Deviation, Ranking, and Interpretation of Self-Efficacy

Item	N	Mean	Std. Deviation	Rank	Mean Interpretation
I believe that working hard in my career will lead to good results.	300	4.28	0.867	1 st	High
My confidence in my skills motivates me to pursue my goals.	300	4.20	0.970	2 nd	High
I see challenges as opportunities to grow and improve.	300	4.19	0.987	3 rd	Moderate
I can recover quickly after failing or facing problems in my career plans.	300	4.19	0.987	4 th	Moderate
I am determined to keep improving my skills, even when I face challenges.	300	4.18	0.975	5 th	Moderate

I am confident that following my career goals will bring positive results, even with challenges.	300	4.17	0.983	6 th	Moderate
I am sure that my skills will help me achieve my career goals.	300	4.15	0.986	7 th	Moderate
I feel confident in my ability to learn new skills for my career.	300	4.15	0.990	8 th	Moderate
I keep focusing on my goals, even when there are distractions or pressures from outside.	300	4.15	1.002	9 th	Moderate
I believe that reaching my career goals will improve my life in many ways.	300	4.14	1.006	10 th	Moderate
I stay motivated to reach my career goals, even when I face difficulties.	300	4.14	1.006	11 th	Moderate
My determination helps me navigate career obstacles.	300	4.14	1.006	12 th	Moderate
I enjoy learning new things that can help me with my career.	300	4.08	1.020	13 th	Moderate

Table 1.6 shows that the statistics show that, overall, participants believe they can do well in their careers and, on average, agreed that putting effort into their job will pay off ($M = 4.28$, $SD = 0.87$). The finding suggested that the statement “My confidence in what I can do encourages me to achieve my ambitions” achieved the second-lowest mean (4.20), showing that self-assurance motivates many students to act toward their goals. The rest of the items were rated as moderate, with scores of 4.08 to 4.19, focusing on such things as being strong after facing difficulties, determined to progress, willing to learn, and committed to accomplishing tasks even though things were hard. The findings showed that although participants had well-established self-belief, their confidence and motivation to keep going in challenging situations were not always even, which could be improved with targeted instruction.

DISCUSSION

The findings of this study revealed a high level of awareness among higher education students in Punjab, Pakistan, regarding gender stereotypes, with strong agreement on statements highlighting societal biases such as women's exclusion in male-dominated fields and greater scrutiny for women in such environments. Despite this awareness, participants demonstrated elevated career aspirations, agreeing that their plans included both short- and long-term goals, suggesting a form of resistance where recognition of stereotypes might motivate higher ambitions rather than deter them. This aligned with recent research in South Asian contexts, where gender stereotypes, while pervasive, could foster resilience and proactive

career planning among university students, particularly in conservative societies like Pakistan (Rana et al., 2024). On the same note, the moderate to high averages of the gender stereotype items suggested that traditional norms still had a way of influencing perceptions, thus supporting the already proven gender bias in the Pakistani medical education. There, cultural demands created challenges and coping mechanisms (Durrani and Mufaddal, 2025). The findings built on the Social Cognitive Career Theory (SCCT) by demonstrating the interplay between the environmental influences (e.g., stereotypes) and individual agency to determine career paths, which had been demonstrated in the context of entrepreneurship intentions among students of higher education (Duong et al., 2024).

Moreover, the strong self-efficacy that the participants reported indicated that self-belief was a buffer to stereotype threats, and students could follow the various paths despite what society expects them to do. The observation was consistent with the Pakistani higher education where the gap in leadership positions by gender remains, but the gender energy of self-efficacy was linked to the motivation to surmount the challenges (Atique et al., 2025). Though the research did not directly discuss the effects of gender differences with regard to self-efficacy, it might depend on the context as observed in the area of business-education programs, where men reported having higher personal efficacy when compared to women—possibly increasing the difference in career-dreams (Moraga-Pumarino et al., 2025). Gender dynamics in online higher education in Pakistan also contributed to the formation of self-efficacy and engagement, and women often had to face higher stereotypes that undermine confidence and performance (Shoaib et al., 2025). The self-efficacy contrast, more robust stereotypes were associated with a little bit higher self-efficacy, suggesting that there was some compensatory effect: awareness might lead to determination, which was reflected in the patterns of self-efficacy predicting the performance regardless of gender and the program-specific conditions (Dumanjug et al., 2024).

Altogether, this knowledge highlighted the need to deal with the culture of Punjab with its patriarchal organization and its overlap with educational development to overcome the gender inequities in the long run.

CONCLUSION

To sum up, this paper sheds light on a complex relationship between gender stereotypes, career dreams, and self-efficacy among higher-education students in Punjab, Pakistan. The results showed that the situation is complicated with pervasive biases alongside high levels of personal agency and goals. Increased sensitivity to stereotypes, as well as improved aspirations and self-efficacy, underscored how resilient students could be in managing the demands of society and at the same time point to inherent obstacles that could hinder fair professional achievements. The study showed how local cultures increased global gender inequalities, particularly in low- and middle-income countries like Pakistan. Finally, these findings were an addition to the wider discussion of the subject of educational

equity and underline the possibility of specific intervention to empower students and to create an inclusive environment that could help align perceptions with the multitude of career opportunities.

Recommendations

According to the findings of the study, schools in Punjab were advised to adopt gender-sensitive curricula, awareness programs aimed at breaking stereotypes, and improve self-efficacy by organizing gender-specific mentorship programs targeting female students who were joining male-dominated disciplines. Policy makers were advised to enhance the existing policies in favor of work-life balance policies and anti-discrimination policies in institutions of higher learning, based on the successful and contextualized examples. Moreover, longitudinal outcomes of these variables may be studied in future research with the inclusion of such interventions as self-efficacy-enhancement courses to track the consequences on actual career transitions. Digital platforms could also be implemented in career counselling in universities, thus compensating for gender dynamics in the online learning experience and promoting aspirations among demographic groups.

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