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# **An Investigation into Vocational Preferences among University Students: A Case Study of Lahore Pakistan**

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## **Abstract**

The preference for general academic degrees over technical education among youth in Pakistan is a trend that has been observed in recent years. This trend may be attributed to several factors, such as the perception that general academic degrees are more prestigious than technical education degrees, the belief that general academic degrees offer more diverse career opportunities and lack of awareness about the benefits of technical education. The preference for general academic degrees over technical education is not unique to Pakistan. This trend may be observed in many other countries as well. Therefore, the current study aimed to learn from student's observations enrolled in general academic degrees to implement best practices in order to address this trend in Pakistan. A multifaceted approach was required to address the preference for general academic degrees over technical education among youth in Pakistan. This multifaceted approach focused on raising awareness, improving the quality of technical education programs, addressing the underlying factors, and learning from the experiences of other countries. Data was collected via a cross-sectional survey from the students of University of Management and Technology (UMT). The statistical results showed a significant association among low preference for technical education, preference for general university education, and preference for a white-collar job. Therefore, it was crucial to raise awareness regarding the benefits of technical education to address this trend. These benefits include development of practical skills, potential for higher earning, and alignment with the needs of labor market.

**Keywords:** general academic degrees, labor market, technical education, white-collar job

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## Introduction

Education as a whole plays a crucial role in the development of human beings by providing them knowledge and productivity. Whereas, technical education emphasizes equipping individuals with certain skills, for instance self-learning and increasing the potential of students. Technical and Vocational Education (TVE) plays a crucial role as it encourages the economic development and enhances the quality of employment. The Council of Technical Education of Pakistan started functioning in 1947-48 in Khyber Pakhtunkhwa (KPK). Later, fully-developed Directorate of Technical Education was established by an administrative order in 1971.

In 2020, the enrollment of students in universities was 1.91 million which was expected to increase by 1.96 million in 2021. Whereas, the enrollment in technical and vocational institutions was only 0.46 million in 2020 which was expected to increase by 0.50 million in 2021. On the other hand, the unemployment rate was at 6.9% (Government of Pakistan, [2022](#)). One of the major reasons of unemployment is that Pakistan lacks skilled workers. This is because general degrees are only producing unskilled students in the market. Therefore, TVE should be adopted to decrease the ratio of unemployment and aware the students about technical degrees (Ayoade et al., [2020](#)).

On the other hand, students prefer general degrees over technical degrees to a greater extent. The desire for a white-collar job is one of the main reasons for students to join universities. Students join general universities for their better future and status. While, there are many technical degrees and skills through which people may get more wages as compared to white-collar workers. The gap between the abilities that employers need and what prospective candidates are bringing to workforce is a problem for employers everywhere (Skatova & Ferguson, [2014](#)). Male and female educated adolescents submit their CVs to various governmental and non-governmental organizations and institutions, however, regrettably they only receive negative feedback from the market (Vooren et al., [2022](#)).

The demands of markets have changed over time, and in every field, you should have any skill, in this sense, technical degrees are more beneficial than general degrees. The choice of an undergraduate degree is the first major decision made by students. Undoubtedly, the academic degree has its own value as it identifies different paths of knowledge for students

(Aljohani et al., [2022](#)). However, after the completion of studies, students are not able to start any work on their own or join any sector without skills. That is why it is necessary to explore why students are not willing to choose a technical degree. The current study aims to determine the relationship between the low preference for technical education, preference for white collar job and preference for general university education.

### **Problem Statement**

Technical skill development is considered as a key element in getting young people interested in earning a good living. According to human capital theories, technical education increases the opportunities and employment levels. According to the World Bank ([2017](#)), Pakistan's unemployment rate is increasing steadily. The country's youth population is also growing simultaneously. Although, the number of graduates increases every year, they face problems despite having technical education instructions. The current study examined the function and significance of technical education, while it also focused on the preferences of young students to choose degrees. Additionally, students' views were also taken into account regarding the cultural values and their mindset for the desire to go to university.

### **Research Questions**

The current study aimed to answer the following research questions:

RQ1: Does a low preference for technical education effect the preference for general university education?

RQ2: Does the desire for a white-collar job has an impact on the preference for university education?

### **Objectives**

Following are the objectives of the research:

RO1: To examine the relationship between students' low preference for a technical education and university education.

RO2: To explain the relationship between students' preference for a white-collar job and university education.

## Significance

The technical education system in Pakistan is governed by the National Vocational and Technical Training Commission (NAVTCC). Whereas, the academic education system at a higher level is managed by Higher Education Commission (HEC). The education system in Pakistan is not much praised in both fields since there is a lack of research on student's preferences to join the university and technical institutes. Resultantly, the current study aimed to focus on student's preferences in the selection of degrees for their career. The study aimed to answer the query pertaining to the culture or any other reason for students to join universities for general academic degrees. Moreover, the study also aimed to provide valuable insights to policymakers in both commissions in order to formulate policies according to the students' demands related to degrees. Additionally, the study also assisted the students particularly those who lack knowledge about technical education to know about the preference for technical education. On the other hand, this study also depicted the trend in academic and technical degrees. Resultantly, students would be able to witness the trends about the technical and general university education.

## Literature Review

The advancement of any civilization depends on its educated strata. Previous studies have highlighted the importance of education in economic growth. The present state of education in Pakistan shows that it is not getting the priority (Abdullah, [2020](#)). Education plays an essential role in the development of human capital. Students in universities and technical institutions expect to live a better life and make a better living after the completion of their studies. However, there are various factors which post obstacles in their way. One of the main factors is the wrong choice of degree. Previous studies focused on motivation and career concerns including intrinsic interest (Skatova & Ferguson, [2014](#)). By increasing personal productivity and efficiency, a trained workforce is created capable of guiding the economy down the road of long-term and sustainable economic growth. Pakistan's education sector is struggling with a lack of funding, low levels of program implementation efficiency, subpar management, monitoring, supervision, and instruction. Education contributes to mental development, training in logical and analytical thinking, and the development of organizational, administrative, and management abilities (Furqan et al., [2022](#)). Education in any field can

provide benefits in different situations. It has been observed that the choice of a career is a crucial decision in a human life (Hatim et al., [2022](#)). Different people choose different fields for their careers. They have different preferences and mindsets.

### **Low Preference for Technical Education**

The goal of technical education is to enhance an individual's knowledge, skills, and understanding so that they may perform the tasks associated with their chosen professions efficiently (Ahmedov et al., [2023](#)). Technical Vocational Education and Training (TVET) has been identified as a critical influences on employment variables. For emerging nations to change their economic status, vocational education and training are crucial (Iqbal et al., [2020](#)). According to National Vocational and Technical Training Commission (NAVTTTC), there are total 963 public and private technical institutes in Pakistan. The function of TVET in Pakistan is to address the problem of standardized technical education, issues related to teacher preparation materials, and curriculum. The requirements for skill-learning do not correspond to regional, national, or global norms. Majority of private institutions do not offer necessary learning processes, leading incompetency. Resultantly, there is a lack of skilled workers (Falaki, [2024](#)). In Pakistan, Technical Education and Vocational Training Authorities (TEVTAs) have been established at both the provincial and federal levels. These training authorities offer high-quality, relevant training. The NAVTTTC at the federal level and TVETA at the provincial level are Pakistan's current organizational structures. TVET is essential to create trained workforce required to handle the difficulties posed by the rapid changes in technological advances (Alam, [2015](#)).

The main advantage of TEVT is that it helps to reduce unemployment by developing young people's abilities to fulfill industrial demands. The need for trained workers is increasing every day, however, there is a major shortage of skilled workers in various industrial production sectors (Ayub, [2017](#)). Parents need to hearten this idea by persuading their children to pursue TVE. Moreover, they should not focus on the perception that it is only meant for students belonging to low academic or middle-class backgrounds. It is impossible to overstate the role that parents play in fostering students' interest in vocational and technical topics. This is because they appear to have a significant impact on their children's decision to pursue a particular educational path. (Falaki, [2024](#)). Vocational subjects

could aid in the formulation and problem-solving skills of both male and female pupils. Additionally, vocational training is also helpful for students in developing the skills and knowledge necessary for an independent existence that satisfies their needs and those of their families, especially in these trying times for the economy (Sadikova, [2023](#)).

Technical education plays an important role in the field of jobs even without degrees. After matriculation and intermediate, some students opt for short courses in technical institutions. The so-called "skills gap" may be partially closed by investing less time and money in technical higher education which focuses on specific technical domains (Carruthers & Sanford, [2018](#)). However, the associate's degrees, certificates, and diplomas that students can obtain from two-year community colleges are valuable in labor market.

### **Preference for General University Education**

In terms of content, general education or academic education is more similar to obligatory school since it emphasizes general abilities, such as languages, mathematics, sciences, and so forth. Instead of preparing pupils for a particular career, it focuses on general information that may be used in a variety of situations (McDonald & Korber, [2023](#)). People with broad educational background enjoy a better possibility of transitioning from one occupation to another because general abilities are more adaptable and versatile (Tasleem, [2020](#)).

Employers claim that many graduates lack "soft skills", such as teamwork. They continue by saying that these graduates are academically strong, however, deficient in soft skills, such as thinking in both words and numbers as well as communication (Sadikova, [2023](#)). The current labor market, which is becoming more and more competitive in many professions, is one obvious explanation. Graduates applying for jobs must have a "competitive edge" that sets them apart from others with comparable qualifications and evaluation results to succeed in this competitive climate (Koçak & Demet, [2023](#)). Nowadays, it is generally accepted that individuals who are extroverted, skilled at self-promotion, and sociable are preferable over those who lack similar qualities (Tasleem et al., [2023](#)). A woman with a technical education may be viewed as a higher risk than a man with a similar profile or than a woman with a general education, and as a result, she may be less likely to receive a job offer. Studies have explored a smaller negative effect of vocational education on the occupational prestige for

women than for men. There is also a benefit of vocational education for women's earning potential, especially for those from underprivileged socioeconomic backgrounds. Our culture and society do not allow females to join technical education therefore, they join universities to acquire academic education (Quirino et al., [2023](#)).

Students prefer to pursue the academic degrees to attain white-collar jobs as compared to technical education. However, this trend has changed now as the market wants skilled persons whether the degree is technical or academic. Socially, it has become a trend to join universities for higher education which may be referred to as a social motivation. This is because many people consider technical institutions and degrees as below their dignity (Skatova & Ferguson, [2014](#)). The notion that jobs are easily derived through academic degrees is wrong, although it has value, technical education has become more demanded in market. The economic factor also plays a crucial role in joining the universities. Students with strong economic backgrounds do not prefer acquiring technical education and join the universities for general academic degrees which do not provide any particular skill (Qureshi et al., [2023](#)). Parental factor also plays an important role. Sometimes, students with technical skills are willing to join the technical institutions to pursue their skills but their parents do not allow them due to the perception of blue-collar tag (Tasleem et al., [2023](#)).

The study of psychological factors that are important to comprehend undergraduate degree choice motivations has a long history of research. The diversity of reasons involved in choosing an undergraduate degree is often overlooked when it is suggested that there is a prevailing motivation for each future route (Eales et al., [2023](#)). Moreover, government also pays more attention to academic and university education than technical education. Educational standards in universities are also high as compared to technical institutes. After intermediate, most students only have the knowledge about university education, however, students who are aware about their skills also join the university due to certain social and parental factors, although they should be encouraged in terms of their skills (Hryhorash et al., [2023](#)).

### **Preference for White-Collar Jobs**

Blue-collar and white-collar workers are the two main groups involved in the treatment of job status as a dichotomous parameter. White-collar work is mostly considered as intellect-based work. Both blue-collar and white-collar workers believe their earnings are generally enough to meet



their physiological demands, albeit they would prefer a considerable salary. Majority of them have good perceptions regarding their jobs including pay raises, benefits, breaks, working hours, supervision, facilities, and tools (Sadikova, [2023](#)). Research shows that social requirements are meaningful for both blue-collar and white-collar workers and both of these groups prioritize having strong relationships with their co-workers. However, evidence also suggests that blue-collar workers value social connections more than white-collar workers. Majority of blue-collar workers believe that incentives are based on a just system (fair evaluation, performance-based incentives). Rewards serve as a way for workers to show appreciation while boosting productivity and enjoyment (Najjar & Fares, [2017](#)). Additionally, due to the nature of specific jobs, blue-collar workers do not feel any need for training. On the other hand, white-collar workers demand training whenever they are hired for various jobs. This is because white-collar workers can blend themselves according to the requirements of the organization where they are employed.

Passion captures a cultural schema that governs social interactions in the minds of students and reflects a set of underlying cultural beliefs, values, and ideals that work ought to be meaningful, satisfying, and exciting. It also does the same for prospective employees. Culture can be defined as a body of symbolic meanings used by people to make sense of their daily experiences. A set of common expectations, ideals, beliefs, and values are referred to as schemas. In other words, cultural schemas work as organizing principles that direct human thoughts, actions, and interactions (Rao & Neely, [2019](#)). Cultural schemas shape relationships for students and as a result, have a significant impact on individuals having access to opportunities and rewards. In most culture, society does not allow students to join technical institutions as they consider technical education only for blue-collar workers but technical education in universities also offers white-collar jobs with numerous benefits. Students usually prefer general academic degrees as these degrees are helpful in attaining white-collar jobs, however, insecurity persists in such jobs. For instance, higher technical education offering white-collar jobs is more secured than general academic degrees. This is because technical education provides specific skills which ensures security in case of a job loss. Skills may be used even after the job lose, however, general academic degrees do not often help to create innovation (Decius et al., [2023](#)).

There is a relationship between general academic degrees and white-collar jobs. It has been assumed generally that general academic degrees is a source of white-collar jobs. This relationship has a negative impact on technical education as students do not prefer technical education anymore. Some students join the university without any reason because of their wealthy background but some join the University for Academic Degrees which actually do not provide any technical skill (McDonald & Korber, [2023](#)). Many students join universities due to their parents' pressure as parents' perceptions about university education have not changed yet. Well-off parents respond to economic changes by teaching their kids to deliberately and strategically cultivate passion as they are concerned about their future careers (Rao & Neely, [2019](#)). While, middle-class and lower middle-class families do not consider the skills of students and their interests in study. They only force them to join university to get white-collar jobs.

## Research Framework

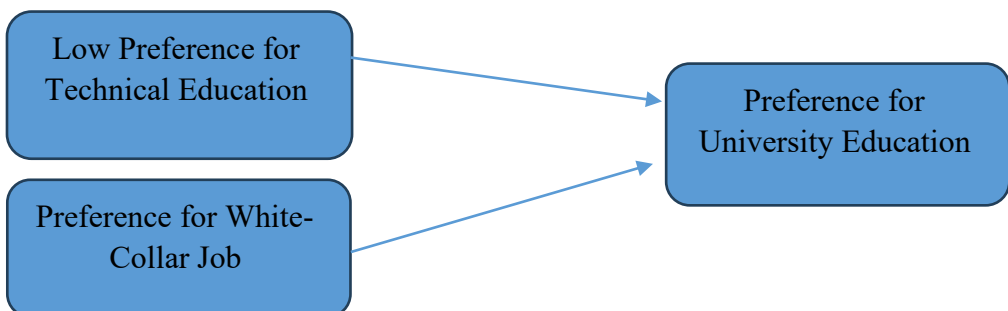
Research framework is the foundation of every research plan and is the focal point of any research (Tasleem, [2020](#)). The theoretical framework is an interconnected set of concepts which provides a direction for the investigation (Almalki, [2016](#); Creswell, [2014](#)). The research framework of the current study shows both independent and dependent variables. Technical education and white-collar jobs are the independent variables of the current study, whereas dependent variable is university education.

### Figure 1

#### *Research Framework*

Independent Variables

Dependent Variable



## Research Hypothesis

H<sub>1</sub>: A relationship exists between preference for white-collar jobs and general university education.

H<sub>2</sub>: A relationship exists between low preference for technical education and general university education.

## Methodology

The major step in the current study was to select a representative sample from the population. Sampling is a process of selecting the subjects from population with almost the same properties as the population and the results could be generalized over all the population. Students were selected as a unit of study analysis. The estimated population of UMT is 27,000 as of December 12, 2023 according to the official website. After defining the population, the next step involved the selection of sample size. Taking into consideration Krejcie and Morgan (1970), the ideal sample size should not be less than 379 respondents. The sample of the current study was 379.

This study was conducted using survey method in UMT. The questionnaire was administered in the School of Governance and Society for the students of social sciences. Research study data regarding technical education and white-collar job were collected from the students of university of management and technology. Data was collected via cross-sectional survey involving the distribution of structured questionnaires among the students.

**Table 1**

*Overview of the Research Design and Methodology*

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Research Design	Quantitative
Unit of analysis	University Students
Population	27000
Sample Size	379
Sampling Technique	Restricted probability sampling
Data collection method	Questionnaire
Data analysis tool	SPSS

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## Results and Discussion

The current study aimed to investigate the preferences of youth for technical and general academic education. A questionnaire consisting of 21 items was

used to measure the relationships among variables. To ensure the reliability of results, Cronbach's alpha, a measure of internal consistency was calculated.

### **Cronbach's Alpha**

The value of Cronbach's alpha is usually between 0 and 1, with higher values indicating greater reliability. In general, a Cronbach's alpha value of 0.7 or higher is considered acceptable.

**Table 2**

*Reliability Statistics*

Construct	N of Items	Cronbach's Alpha
PTE	7	0.867
PUE	8	0.872
PWJ	6	0.791

The strong reliability of the data is indicated by Cronbach's alpha. Cronbach's alpha is a measure of internal consistency and it assesses how closely related a set of items is as a group. The closer the items are related, the higher the Cronbach's alpha value would be. Cronbach's alpha values of 0.867, 0.872, and 0.791 suggest that the items in the study are highly related and they measure the same underlying construct. Overall, Cronbach's alpha values indicate that the data is highly reliable.

**Table 3**

*Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
PTE	349	1.63	4.88	3.4260	.59908
PUE	349	1.00	5.00	3.3994	.72880
PWJ	349	1.00	5.00	3.4984	.80287
Valid N (listwise)	349				

According to the values of mean, it may be said that youth prefer white-collar jobs to a greater extent as compared to technical education. There is a minor difference among the variables which shows the answers to be near the neutral and agree.

**Table 4***Model Summary*

<i>R</i>	<i>R</i> Square	Adjusted <i>R</i> Square	Std. Error
.634 <sup>a</sup>	.403	.391	.56894

The *R*-value represents the correlation between the dependent and independent variables. A value greater than 0.4 is taken for further analysis. In this case, the value is .634, which is good. As indicated in the table, the value of *R*-square shows a total variation, that is, .403. It means that the independent variables Low preference for technical education and Preference for white-collar jobs cause a 40.3% change in the dependent variable Preference for university education.

**Table 5***ANOVA*

Model	Sum Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Regression	21.809	2	10.904	33.687	.000 <sup>b</sup>
Residual	32.369	100	.324		
Total	54.178	102			

ANOVA results show that *p*-value is 0.000, which is less than 0.05. Hence, it may be said that there is a significant relationship between dependent variable, that is,

Preference for a university education and independent variables Low preference for technical education and Preference for white-collar job.

*F*-ratio shows improvement in the prediction of the variable by fitting the model after considering the inaccuracy present in the model. A value is greater than 1 for *F*-ratio yields efficient model. In the above table, the value is 33.68, which is good.

**Table 6***Coefficients*

Model	<i>B</i>	Std. Error	Beta	<i>t</i>	Sig.
(Constant)	.691	.358		1.928	.057
PTE	.346	.100	.284	3.465	.001
PWJ	.436	.074	.480	5.852	.000

Table 6 shows the coefficient results. As indicated, the value is 0.436 for the independent variables Preference for white-collar job and the value is 0.346 for the other independent variable Low preference for technical education. It means that change in independent variable Preference for white-collar job by one unit would bring change in the dependent variable Preference for a university education by 0.436 units. Moreover, change in independent variable Preference for technical education by one unit would bring change in the dependent variable, that is, Preference for a university education by 0.346 units.

Furthermore, the beta value is positive which indicates positive relationship among Preference for technical education, Preference for white-collar jobs, and Preference for university education.

## Results of Hypothesis

**Table 7**

### *Results of Hypothesis*

Hypothesis Values	Relationship Decision	B-Values	T- Values	P-Values
H1 Accepted	PWJ→PUE	0.480	5.852	0.000
H2 Accepted	PTE→PUE	0.284	3.465	0.001

Table shows the hypothesis summary that all the variables are direct in nature. Following hypothesis relationships were examined in this study.

H1: It has been hypothesized that preference for white-collar jobs has a significant impact on preference for general university education. The bootstrapping results also show that preference for white-collar jobs casts a significant impact on the preference for general university education ( $\beta=0.480$ ,  $t=5.852$ ,  $p=0.000$ ).

H2: It has been hypothesized that low preference for technical education has a significant impact on preference for general university education. The bootstrapping results also show that low preference for technical education casts a significant impact on the preference for general university education ( $\beta=0.284$ ,  $t=3.465$ ,  $p=0.001$ ).

## Conclusion

The current study showed that there is a low preference for technical education over general academic degrees among youth in Pakistan. This preference is driven by a number of factors including the perception that technical education is meant for blue-collar jobs. Besides, there is less promotion for technical education by the government. Socially technical education is considered as a low-status job. However, this study also highlighted some of the shortcomings of the current education system in Pakistan, particularly with respect to technical education. Based on findings, it may be concluded that there is a positive relationship between low preference for technical education and university education. The variable desire for white-collar jobs among youth in Pakistan also influences the desire for a university education. No doubt, it is strange that youth preferred university academic degrees for white-collar jobs. However, according to findings, youth showed willingness to pursue technical education with the preference for white-collar jobs which shows that the trend of academic education is deteriorating due to the demand of skills in job markets. Research shows that many young people in Pakistan view technical education as a means to gain skills and knowledge needed to secure white-collar jobs. This is because technical education is often seen as providing practical and job-oriented training that is directly applicable to the needs of labor market.

Additionally, the current study also suggested that the preference for university education is decreasing among young people in Pakistan. This trend can be attributed to a number of factors including the perceived lack of job opportunities for university graduates, the high cost of university education, and the perception that university education is not always relevant to the needs of the labor market. One factor contributing to the decreasing preference for university education is the perception that university graduates in general academic degrees without any skill are not always able to find suitable employment. Many young people in Pakistan are aware of high levels of unemployment among university graduates with general academic degrees and are concerned that investing in a university education may not lead to a good return on investment.

Finally, according to the findings many students in Pakistan do not see general academic education as being directly relevant to the needs of the labor market. They may view technical education as being more practical

and job-oriented, and therefore more likely to lead to employment opportunities.

The current study also showed that many young people in Pakistan are interested in pursuing careers in fields, such as engineering, computer science, and other technical fields which can be typically associated with white-collar jobs. This suggests that there is a strong demand for technical education programs that may provide skills and knowledge needed to succeed in these fields.

Overall, this study shed light on an important issue facing the education system in Pakistan and provided valuable insights for policymakers and educators seeking to improve the quality and relevance of technical education in the country.

### **Conflict of Interest**

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

### **Data Availability Statement**

The data associated with this study will be provided by the corresponding author upon request.

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