

FOSTERING STANDARDIZATION AND QUALITY IN HIGHER EDUCATION- A STUDENTS' PERSPECTIVE

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Abstract

Universities are specialized units aimed to deliver quality education and shaping future leadership to provide competent professionals to the industry. The establishment of ORIC in universities and significant increase in academia-industry linkage activities is strategic move towards achievement of the mentioned objectives. Bridging up the gap between academia and industry by adopting such strategies defines the successful role of HEIs. In view of increasing number of universities and continuous outflow of graduates it seems imperative to analyze and capitalize their potential towards the growth of economy. However, the unemployment ratio and limited growth in SME (Small & Medium sized Entities) sector reflect the insignificant absorption of graduates in corporate sector. The study aims to determine the factors that serve as barriers in achieving goals of HEIs by understanding the problems faced by university students in general and business graduates in particular on the basis of data gathered from 100 students from different universities present in Karachi. It shall also assists the policy makers in devising policy as per market demands, level of quality attained by universities, their involvement with corporate sector and in turn need of the industry to keep both parties at par in the fluctuating and contemporary era.

Keywords: Higher Education Institutions (HEIs), Socio-economic growth, Office of Research, Innovation & Commercialization (ORIC)

Introduction

Education plays a significant role in the personality development, psychological health and cognitive abilities of a person to contribute positively in the society. A person learns throughout his/ her life. Learning, education, and personality development are the key functions of social institutions whether it is the family institution, the educational institution or the economic institutions. A person encounters different kinds of social institutions and keeps on learning throughout their life. This was also the belief of Albert Einstein who was considered as a genius for his contributions to science and education. He believed that the intellectual growth of a person should start from his birth and should last till death. He also considered the end of learning as a start of a person death.

Literacy defines the success of any nation. The nations with comparatively high literacy rates have capitalized upon through economic developments and eventually lead

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themselves in the line of developed countries¹. A healthy society cannot be developed in absence of a sound education system. Hanushek & Woessmann (2007)² also identified lack of effective educational programs as one of the reasons behind failure to achieve many other societal goals.

Pakistan has been facing a number of challenges since its inception. Political instability is among the most crucial ones that lead to lack of governance and economic instability and consequently resulting in major issues including poverty, illiteracy and unemployment. According to Pakistan Bureau of Statistics, following were the key economic indicators in March 2019.

Key Economic Indicators of Pakistan	March 2019	Previous (2018)
GDP Annual Growth Rate (%)	5.2	5.79
Unemployment Rate (%)	5.9	5.9
Inflation Rate (%)	9.41	8.21
Balance of Trade (PKR Million)	-302889	-317370
Current Account (USD Million)	-1973	-3851
Current Account to GDP (%)	-5.8	-4.1
Government Debt to GDP (%)	72.5	67

Source: Trading Economics, Pakistan Bureau of Statistics 2019³

All the social institutions i.e. family, education, legal, political and economic are integrated to each other. The effect on any one of them, positive or negative,

¹Jagganath Mohanthy. "Current trends in higher education." *New Delhi, India: Deep & Deep*, 2000

²E.A. Hanushek, Ludger Woessmann. "Education and Economic Growth." In *The 4% Solution: Unleashing the economic growth*. New York, USA: Crown Publishing Group, USA, 2010

³*Trading Economics*. Pakistan Bureau of Statistics. March 30, 2019. www.tradingeconomics.com (accessed April 25, 2019)

consequently affects the rest of institutions⁴. The lack of standard education on Intermediate level and onwards has not only affected the economic growth of the country but also limit the ethics and morals of the society. The afore-mentioned socio-economic indicators of Pakistan along with the declining pass out ratio at intermediate level (45% on average during 2017 and 2018) and increasing dropout ratio of students on post-secondary levels affirms the need of well-developed policy and good governance in education sector to ensure sustenance in economic growth. A well-developed policy is the one that is designed considering its effect on all the institutions and that further strengthens the integration of institutions. Insufficient financial input due to limited quota of education in budget may be considered as a key reason for low level of efficiency and poor quality of management and teaching in Pakistan⁵.

The number of educational institutions should be setup as per the needs of growing population. Similarly, number of organizations in the industry should be set up in accordance with the number of graduates passing out each year. This would help avoid the unemployment that may arise as a result of widening of gap between population growth and job creation. Moreover, there should be relevance between the recommended curriculum for higher education and the nature of industries established within the country. Whenever, there is a gap between national education system and the national objectives, it results in the decline of industrial sector of a country. Ignorance towards national objectives regarding various types of workforce required in different domains of life results in mismatched manpower and failure of desired outputs.

Currently, there has been negligible or almost no integration between academia and the corporate sector. This is the reason that universities fail to provide appropriate manpower in various areas of corporate sector. Nevertheless efforts are exercised by the Government and institutions but in the highly competitive era, there exists a greater variance in actual and required growth rate to keep abreast with the developing nations.

In today's global era, the need to match the global education standards is inevitable. Equivalency of the degrees may be considered one of the barriers in pursuing for higher education globally. Standards, curriculum and strategies should be designed in accordance with the globally defined set of objective. This will also help the local students in identifying the opportunities created worldwide. Moreover, it will also benefit the country's own corporate sector by the provision of globally competent personnel thus making them capable of dealing with foreign competition well equipped with advance knowledge and technologies.

Objectives and Significance of the Study

Academic progress ensures the economic growth of a country. The study aims to determine the factors that serve as barriers in achieving goals of HEIs thus limiting

⁴ Taga, Abdul Hameed, and Abdul Aziz Taga. *An Introduction To Sociology*. Lahore: Abdul Hameed Taga & Sons, 1998

⁵ Memon, G.R. "Education in Pakistan: The Key Issues, Problems and The New Challenges." *Journal of Management and Social Sciences*, 2007: Vol. 3, No. 1

economic progress. The study will help understand the problems faced by university students in general and for business graduates in particular thus facilitating the policy makers in devising policy to ensure quality education as per market demands and industry to keep both parties at par in the fluctuating and contemporary era. The study aims to achieve the below mentioned objectives:

- To highlight the role of education with specific emphasis on higher education in economic development of a country.
- To analyze the situation of Higher education in Pakistan
- To highlight the barriers restricting literacy growth in Pakistan
- To identify the problems faced by the university students in achieving their desired goals and objectives i.e. quality education with their desired competitive status in the market.

Role of Higher Education In Socio-Economic Development

The success of education institutions defines the success of economic institutions. A healthy, literate and educated society contributes positively in the economic development of a country. Education plays a key role in the human capital formation. It produces skilled manpower by raising the productivity and efficiency of its individuals thus driving the country towards sustainable economic development⁶. A poor quality education system may be considered as one of the major obstacles in the economic growth of a country.

The primary objective of education in general and higher education in particular is not limited to understanding of facts in a vague sense rather it should be expanded towards the training of individuals for the purpose of inculcating the ability to think and act in an innovative and creative manner. Curiosity is the gateway to inventions, innovations and ideas generation and the essential of an entrepreneurial mindset. In Pakistan, unfortunately the quality of education is unsatisfactory despite of the government's efforts to improve and uplift the quality and quantity of education. There is only a very little improvement in literacy rate during the last decade i.e. the literacy rate rose from 55.5% in 2008 to 58% in 2018⁷ whereas the gross enrollment rate in tertiary education is just 10% of total population.⁸

Qazi, Raza and Jawaid have identified higher education as a key determinant of socio-economic development of a country⁹. Higher Education and training are of paramount importance in human capital development for the economic development of a country. Higher education institutions are responsible for preparing individuals to further serve the government and organizations in the form of entrepreneurs, employees and researchers.

⁶E.A. Hanushek, Ludger Woessmann. "Education and Economic Growth." In *The 4% Solution: Unleashing the economic growth*. (New York, USA: Crown Publishing Group, USA, 2010)

⁷World Bank Report, 2018

⁸ *Ibid.*

⁹ Wasim Qazi, Syed Ali Raza, Syed Tehseen Jawaid. "Higher education and growth performance of Pakistan:evidence from multivariate framework." *Springer Science*, 2013

Therefore, the growth of higher education institutions in the country will help ensure the social and economic development of the country. In Pakistan, Higher education is provided by universities and affiliated institutes and colleges. There are 78 public higher education institutions and 59 recognized private ones¹⁰ in Pakistan.

General Problems of Higher Education in Pakistan

In Pakistan, there always been a declining trend in quality of primary and secondary education. Since the time of independence, the availability of resources, qualified personnel and provision of advanced and relevant curriculum has always been a major issue¹¹. According to World Bank (2018), there is only a very little improvement in literacy rate during the last decade i.e. the literacy rate rose from 55.5% in 2008 to 58% in 2018¹² whereas the gross enrollment rate in tertiary education is just 10% of total population. As the criteria of being literate is just the ability of a person to read and write, therefore, a vast proportion of literates are practically insignificant in economic contribution. Further elaboration of the identified 58% literacy rate by Ministry of Education Pakistan in 2018 highlighted a number of facts that can be considered the true reason for the restricted economic growth in Pakistan. In 2018, 23% of the total students were enrolled for primary education that further reduced with the increase in level of education i.e. only 2.95% were enrolled for secondary education and just 1.99% enrollment were observed in post-secondary education¹³. Post-secondary education starts from intermediate / Higher School Secondary Certificate (HSSC) in Pakistan and a little portion of 1.99% of 58% represents the statistics of higher education enrollments in Pakistan. Education and literacy are the determinants of economic growth; therefore, on the basis of mentioned statistics of university graduates, one can identify the main reason of economic backwardness of Pakistan.

Different educationists and research scholars have identified a number of factors that affect the quality of education imparted to the students and their level of absorption of knowledge. The eligibility criteria for higher education in Pakistan are Intermediate or Higher Secondary School. 26 provincial boards are responsible for taking examinations in secondary education. Different curriculum and different examination standards are defined by these boards. This results in greater variation and lack of standardization in intermediate education. The decline in quality of education is also evident with the current problems in Matriculation and Intermediate boards system including non-stagnant policies, non-satisfactory examination standards and results. There is also a consistency in the decline of pass out ratio every year. Being the pre-requisite of higher education, it plays a major role in the foundation development for further studies. UNECE (2018)¹⁴ also identified the lack of standardized curricula (differences between educational institutions) as one of the major setbacks in quality of higher education. According to

¹⁰EP-Nuffic. "Education System Pakistan: The Pakistani education system described and compared with the Dutch System." 2015

¹¹Memon, G.R. "Education in Pakistan: The Key Issues, Problems and The New Challenges." *Journal of Management and Social Sciences*, 2007: Vol. 3, No. 1

¹² World Bank Report, 2018

¹³ Ministry of Education, 2018

¹⁴ UNECE. *Bringing Standardization in University Curricula: Making the Case*. (Europe:United Nations, 2018)

World Bank Policy note Pakistan (2006), the clear evidences of non-eligibility of students for higher education is no more considered as a major problem due to intense competition in universities.

Memon (2007) identified extremely low level of public investment as one of the major reason behind the poor performance of education sector in Pakistan. It is also evident with the fact that apart from the projections of World Bank(2006) assuming increase of education budget from 1.8% in 2006 to 4% in 2015, public spending on education sector is just increased to 2.2% of GDP in recent years from 2 percent during last decades. Memon (2007) also considered the allocation of budget in accordance with the population growth almost impossible for the government.

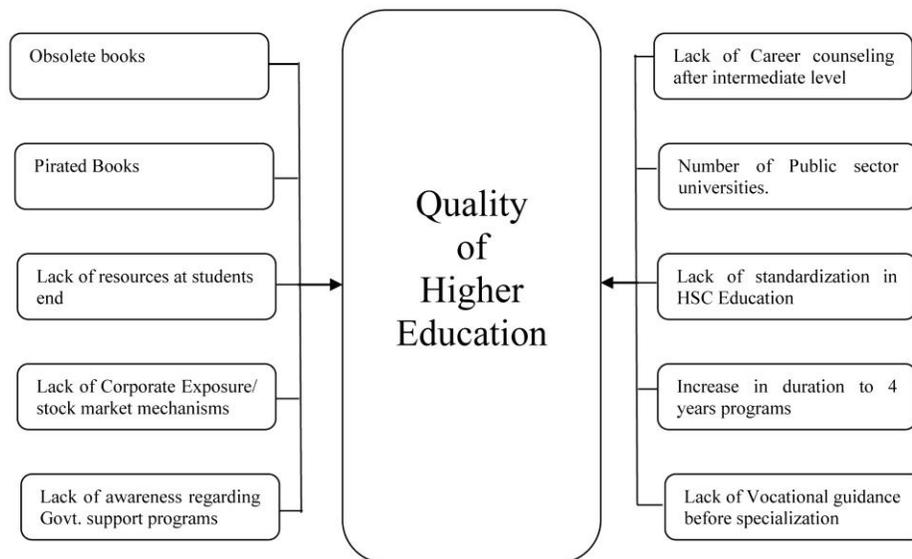
Although the number of private institutions seems less as compared to public sector universities i.e. 78 public and 59 private higher education institutions¹⁵ but they have much greater and increasing impact due to their continuous growth and increasing number of branches and facilities whereas the growth in public sector seems stagnant. It is evident with the fact that there is no prominent growth in number of branches provided with the same number of seats offered regardless of the increasing population day by day. In education sector, a wide gap is observed between the fees structure of public and private sector and same is the difference between the facilities and quality of service provided to the students. This difference is present from primary level of education till the HEIs level resulting in lack of standardization at all levels. It is also observed that there exists a huge dropout ratio of students that further discontinue or change their field after six months or year. The reasons were found to be either incompatibility with the chosen subjects or sometimes inability to produce resources required for studies.

According to World Bank Policy Note (2006)¹⁶, obsolete, irrelevant and static curriculum in Pakistan are among major factors that are failed to produce desirable results on the quality of Higher education and the economic growth of the country. Some other factors identified by Mughal & Manzoor (1999) that have direct impact on growth of higher education included differences between the resources and facilities provided by higher education institutions along with lack of student's and teacher's access to resources and scholarships.

The aforementioned literature helps to identify the factors that affect the quality of education in general thus deteriorating the quality of higher education in particular. On the basis of the reviewed literature, the quality of higher education (QHE) may be defined as function of Pirated Books PB, Obsolete books OB, Increase in Duration to 4 years ID, Availability of Resources AOR, Awareness about Government support programs/institutions AGS, Standardization in Intermediate education SIE, required corporate exposure CE, appropriate number of public sector universities PSU, career counseling after intermediate CCI and vocational guidance before specialization VGS.

¹⁵ EP-Nuffic. "Education system Pakistan: The Pakistani education system described and compared with the Dutch System." 2015

¹⁶*Pakistan: An Assessment of the Medium-Term Development Framework*. Higher Education Policy Note, Report No. 37247, World Bank, 2006



$$QHE = f(PB, OB, ID, AOR, AGS, SIE, CE, VGS, CCI, PSU)$$

Fig 1: General Problems of Higher Education in Pakistan

Source: Authors

Hypothesis

After the review of the above literature and on the basis of the identified factors, following hypotheses are designed:

H1: Pirated Books negatively influences the quality of Higher Education

H2: Obsolete Books have an inverse relationship with the quality of Higher Education.

H3: Increase in duration of BS to 4 years has negative effect on quality of Higher education.

H4: There exists a direct relationship between availability of resources and quality of Higher education.

H5: Lack of standardization (Curriculum and Examination) in Intermediate education negatively influences the quality of Higher education.

H6: Quality of higher education is negatively affected by the limited corporate exposure relevant to subject requirement.

H7: Lack of Vocational guidance before specialization course selection results in low quality of higher education.

H8: Limited number of Public sector universities in comparison to population size has a negative effect on quality of higher education.

H9: There exists a direct relationship between awareness about available government support programs/ institutions and quality of higher education.

H10: Lack of career counseling after intermediate has a negative effect on quality of higher education.

Methodology

This is a descriptive research that will help identify the relation and impact of identified variables on quality of higher education. Other than the secondary data gathered through articles and publications, the primary data is gathered through questionnaires. According to standard number 4 among the stated 11 standards by HEC Pakistan, being the stakeholders, students should be involved while devising policies, therefore the data source included the students to identify their point of view regarding barriers to higher education.

Due to limited time frame, the research is kept limited to universities present in Karachi and sample size to 100 respondents. The data was gathered from the students of different universities in Karachi including University of Karachi, Jinnah University for women, Iqra University, Mohammad Ali Jinnah University, Bahria University, Federal Urdu University of Arts, Science & Technology.

As the research is focused on the problems faced by students, therefore, a random sample of 100 students from different universities was selected for data gathering. To maintain the authenticity, data sources also included the passed out students working in organizations and the research students currently enrolled in different universities. The questionnaire is designed on likert scale taking 10 identified variables affecting quality of higher education showing their impact from "Very Low" to "Very High". The frequency tables and descriptive statistics are applied to verify their relation and their impact on quality of higher education.

Data Analysis

Below is the summary and analysis of different statistical tests applied on the data. The data consists of 100 respondents/ students either studying or passed out from a higher education institution. The scale was selected from 1-5 representing level of negative effect from "Very Low" to "Very High". Other than Cronbach's alpha to verify reliability, descriptive and non-parametric test were applied for the data analysis

Reliability Test

Cronbach's alpha explains whether the designed and applied test is accurately measuring the variable of interest or not. According to the result findings (as shown in Table 1), the Cronbach's alpha is .829 which indicates a high level of internal consistency of scale with this specific sample or high level of reliability exists.

Table 1: Reliability Statistics

Cronbach's Alpha	N of Items
<i>.829</i>	<i>10</i>

Descriptive Statistics

In the descriptive analysis chart (Table 2), the variables are arranged on the basis of their mean value i.e. variable with highest mean value is at the top and lowest at the bottom. All the mean values are greater than 3 showing that majority of the respondents considered them as significant variables having negative effect on quality of higher education. According to the descriptive statistics analysis (Table 2), lack of career counseling, Lack of awareness regarding available Government Support Programs and Institutions, Lack of standardization in Intermediate Education, Limited availability of resources required for education, Inappropriate Corporate/ Stock Market Exposure relevant to the subject requirement, Inappropriate number of Public Sector Universities comparative to Population Size and Lack of Vocational Guidance before Specialization Course selection are the most influential factor that restrict the quality of higher education. Furthermore, The Obsolete Books (Available Versions Published 3-4 years back), Low quality Publishing/ Pirated Books, Increase in Duration to 4 years have also negative influence on quality of higher education.

Table - 2
Descriptive Statistics

	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Lack of career counseling after Intermediate Education	4.47	.771	.595	-1.986	.241	5.161	.478
Lack of awareness regarding available Government Support Programs and Institutions	4.37	.774	.599	-1.687	.241	4.165	.478
Lack of standardization in Intermediate Education	4.36	.811	.657	-1.334	.241	1.506	.478
Limited availability of resources required for education	4.26	.928	.861	-1.706	.241	3.371	.478
Limited or Inappropriate Corporate/ Stock Market Exposure relevant to the subject requirement	4.08	.884	.781	-.875	.241	.664	.478
Inappropriate number of Public Sector Universities comparative to Population Size	4.07	.987	.975	-1.106	.241	1.143	.478
Lack of Vocational Guidance before Specialization Course selection	4.01	1.020	1.040	-1.186	.241	1.070	.478
Obsolete Books (Available Versions Published 3-4 years back)	3.87	.981	.963	-.781	.241	.266	.478
Low quality Publishing/ Pirated Books	3.41	1.147	1.315	-.451	.241	-.554	.478
Increase in Duration to 4 years	3.22	1.079	1.163	-.403	.241	-.448	.478

Non-Parametric Binomial Tests

The Non-Parametric binomial test is used for testing whether a proportion from a single dichotomous variable is equal to a presumed population value. Moreover, it also helps in evaluating the significance of the identified variables.

Table - 3
Binomial Test

		Category	N	Observed Prop.	Test Prop.	Exact Sig. (2-tailed)
Low quality Publishing/ Pirated Books	Group 1	<= 3	47	.47	.50	.617
	Group 2	> 3	53	.53		
	Total		100	1.00		
Obsolete Books (Available Versions Published 3-4 years back)	Group 1	<= 3	29	.29	.50	.000
	Group 2	> 3	71	.71		
	Total		100	1.00		
Increase in Duration to 4 years	Group 1	<= 3	55	.55	.50	.368
	Group 2	> 3	45	.45		
	Total		100	1.00		
Lack of career counseling after Intermediate Education	Group 1	<= 3	6	.06	.50	.000
	Group 2	> 3	94	.94		
	Total		100	1.00		
Lack of standardization in Intermediate Education	Group 1	<= 3	11	.11	.50	.000
	Group 2	> 3	89	.89		
	Total		100	1.00		
Lack of awareness regarding available Government Support Programs and Institutions	Group 1	<= 3	7	.07	.50	.000
	Group 2	> 3	93	.93		
	Total		100	1.00		
Limited availability of resources required for education	Group 1	<= 3	12	.12	.50	.000
	Group 2	> 3	88	.88		
	Total		100	1.00		
Limited or Inappropriate Corporate/ Stock Market Exposure relevant to the subject requirement	Group 1	<= 3	22	.22	.50	.000
	Group 2	> 3	78	.78		
	Total		100	1.00		
Lack of Vocational Guidance before Specialization Course selection	Group 1	<= 3	20	.20	.50	.000
	Group 2	> 3	80	.80		
	Total		100	1.00		
Inappropriate number of Public Sector Universities comparative to Population Size	Group 1	<= 3	24	.24	.50	.000
	Group 2	> 3	76	.76		
	Total		100	1.00		

According to the data based on students perception of barriers impeding quality in higher education (Table 3), all variables including Obsolete Books (Available Versions Published 3-4 years back), Lack of career counseling after Intermediate Education, Lack of standardization in Intermediate Education, Lack of Vocational Guidance before Specialization Course selection, Inappropriate number of Public Sector Universities comparative to Population Size and Lack of awareness regarding available government support programs were found proportionally highly significant whereas low quality Pirated Book and Increase in Duration of BS to 4 years were not found significant as their level of significance was 0.617 and 0.368. Therefore, 8 out of 10 hypotheses were accepted with the high level of significance, showing greater impact on quality of higher education whereas two hypotheses were rejected showing lower impact on the quality of higher education.

Conclusion

The study was conducted to evaluate the relation and impact of identified variables on quality of higher education. The data gathered from current or the passed out students of the universities helped in identifying the problems experienced by them from their perspective thus restricting them from learning and having negative influence on quality of higher education. The significance of the identified variables affirms the earlier studies and the high level existence of the mentioned problems in education system in Pakistan.

A greater number of students identified Lack of standardization in Intermediate and lack of career counseling after Intermediate as highly influential variable having negative effect on quality of education. Pre-requisite education is of prime importance for further studies as they provide foundation for the advanced concepts of higher education¹⁷. Lack of standardization at intermediate level and the weak foundation concepts restrict smart building of advanced concepts. This defines the need of quality maintenance at intermediate level. Being the pre-requisite education, integration between intermediate and higher education is required and ensure quality of higher education.

Moreover, negligence towards career counseling before the beginning of higher education, another significant variable, leads the students towards selection of inappropriate fields. Incompatibility of student potential with the opted field increases chances of exhaustion or withdrawal from studies. Proper counseling at the universities during student's admissions will help reduce the students drop out ratio as it will help identify the appropriate potential along with the available resources required for education that was identified as another barrier limiting quality of higher education. The study also revealed the need of proper awareness campaigns and promotion of available Government support programs and institutions working for the improvement of higher education quality. Limited availability of resources to students was another significant

¹⁷ Cuadra, Ernesto, and Juan Manuel Moreno. *Expanding Opportunities and Building Competencies for Young People: A New Agenda for Secondary Education*. USA: World Bank, 2005

variable that is due to limited government spending in education along with lack of resources at personal end in Pakistan¹⁸.

Some other variables based on students' perception were found highly significant including obsolete and outdated books. Obsolete curriculum is among the major problems of higher education in Pakistan. ¹⁹Although there is a significant increase in the number of universities in Pakistan during the last decade, however, there is no standard publication house for the provision of advance and up-to-date books for HEIs²⁰. There exists a very strong need of registered and recognized publishing house for higher education in Pakistan as the obsolescence of curriculum not only restricts the quality of higher education but also restricts the socio-economic growth of the country. The industry remains deprived of advance technology and research. Moreover, the students seeking for higher education abroad found it difficult to match international standards.

The study also emphasizes the need of incorporating activities at higher education level that provide appropriate corporate and stock market exposure relevant to the subject requirements especially in business studies. Students also considered lack of vocational guidance before specialization course selection as another reason behind effective higher education depicting the need of it. It is recommended that policy makers should devise policies considering the mentioned problems of students that are working as a barrier in good quality higher education as the growth of higher education also ensures the socio-economic growth of the country.

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¹⁸ N.A Mughal, Manzoor. "Issues in Higher Education: Problems and Prospects of the Pakistani University." *Jamshoro, Pakistan: University of Sindh*, 1999

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