

## Students' perception of quality in higher education: An empirical investigation

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### ABSTRACT

Students' evaluation of quality in higher education is becoming increasingly important and widely accepted. Various researchers have reported that "high quality" education creates sustainability among students to accomplish their goals over a period of time. The intention of the present study was to explore students' perceptions of quality in higher education in terms of curriculum content, learning and teaching experiences, institutional resources and outcome and assessment. A total of 91 students were randomly selected from the business and engineering colleges within Prince Sattam bin Abdulaziz University. The data were analyzed using descriptive and inferential statistics to obtain accurate results pertaining to the motif of the research. The findings revealed that total institutional factors emerged as one of the most prominent predictors of the outcome and assessment within the two different aforementioned disciplines. This paper concludes with suggestions for further investigation.

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## 1. Introduction

Quality education is one of the most crucial requirements for developing and sustaining careers and escaping from poverty. It is a universally accepted fact that a country's economic success depends on the quality of the educational system, which leads to greater efficiency in utilizing people's social skills as well as their affective, explicit and tacit knowledge (Turnbull, 1995). Such knowledge can be developed via higher educational institutions, which is why they are dubbed "economic engines". These engines should be considered as an imperative part of the governments, requiring them to provide the facilities and appropriate policies to ensure the quality of education for their citizen in every domain such as research, community service, etc. (Summers et al., 2005). If nations wish to generate higher levels of employment, they must facilitate higher employment skills so that citizens can serve their society nationally and internationally and uphold norms (Beeby, 1966). Higher education plays a vital role for students as well as the society in which these students live. Quality education not only develops students to secure and sustain work in a competitive era, but it also fosters civilized citizens of a nation who can contribute to their country's economic and social development (Moss & Pence, 1994; Tan & Kek, 2004; Abdullah, 2006).

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Indeed, students are considered to be customers of higher education institutions. Each customer in the modern world requires quality products and services – in the same fashion, students need quality education to sustain and develop them (Voss et al., 2007). It is the university's responsibility to provide this quality education in order to make its graduates employable and capable of dealing with challenging global situations in an effective manner (Sallis, 2014; Darmawan et al., 2017). Overall, very few studies have examined the quality of higher education via investigating students' views regarding admission criteria, curriculum content, resources, institutional factors and teaching and learning experiences including outcome assessments.

## 2. Literature Review

Various pragmatic studies conducted throughout the world have examined students', managers' and other subordinates' satisfaction (Allam & Siraj, 2013; Allam, 2017; Butt & Rehman, 2010; Allam & Harish, 2010; Al Kahtani & Allam, 2013; Allam, 2013; Al Kahtani & Allam, 2014); reported that satisfaction enhanced the quality of their work performance. Athiyaman (1997) built a link between consumer satisfaction and perceived service quality based on a scenario specific to higher education. Joseph and Joseph (1997) examined the New Zealand business students' perceptions of service quality in education. Hill (1995) discussed different methods for managing service quality in higher education and explored the role of the student as primary consumer. Oldfield and Baron (2000) investigated university students' perceptions of service quality in a UK school of business and management faculty. They reported that perceptions of service quality elements could change significantly over the time, with "acceptable elements" having increasing importance. Butt and Rehman (2010) conducted a study to shed light on the satisfaction level of students in higher education in Pakistan. They found that teachers' expertise was the largest factor influencing the students' satisfaction, and they suggested that high-ranking officials within the government must pay attention to this issue in order to satisfy the students and maintain the quality of its higher education system. Rahman (2013) performed an investigation on some students at a private school in Bangladesh to investigate the relationship between students' perceptions and the quality of their education. The study considered 10 items for measuring the quality including responsiveness, reliability, competence, courtesy, tangibility, empathy, costs, security and goodwill and image. He found that students' perceptions of quality created a positive image of the university. Allam and Ahmad (2013) investigated various stakeholders' perspectives to get insight about their perceptions of quality in higher education. Their findings disclosed that stakeholders' responses on quality in higher education were different, and the researchers found institutional factors and teaching and learning experiences as the most important factors contributing to quality in higher education. According to Akareem and Hossain (2016), parents' age, scholarship status, students' age, the university where they studied and their extracurricular activities all could substantially influence on the quality of their higher education. Finally, Sulphrey and Allam (2017) presented a model designed to learn more about the efficacy of mentoring students in a business program in the Kingdom of Saudi Arabia and found that the mentoring model could contribute significantly to academic outcomes.

## 3. Study Objectives

On the basis of the literature review we can conclude that only few studies have considered Saudi students' perspectives regarding the quality of higher education (Angell et al., 2008). Therefore, the researcher created a study to shed light into students' opinions on the quality of higher education with the following objectives:

- To understand the aspects of the quality of higher education from the students' perspectives,
- To identify the relationship between and the effect of outcomes and assessments on aspects of quality of higher education among business and engineering students,
- To explore the predictors of outcome and assessment on aspects of quality of higher education among the business and engineering students.

### 3.1 Hypotheses

The following null hypotheses were formulated to draw scientific inferences about the findings of the investigation:

HO1: There is no significant relationship between the outcome and the assessment within the domains of the quality of higher education among the students.

HO2: There are no predictors of the outcome and the assessment within the domains of the quality of the higher education with respect to students.

### 3.2. Methodology

#### 3.2.1. Sample of the study

The present investigation was probed on 91 students selected randomly from business and engineering college at Prince Sattam bin Abdulaziz University, in Kingdom of Saudi Arabia (K.S.A.). It is imperative to mention that respondents included in the investigation were male with varying ages and nationalities.

#### 3.2.2. Tools

Zachariah (2007) developed a questionnaire for measuring the quality in higher education which have been used in the current study with certain modifications according to the necessity of the research. This particular scale comprised of six domains such as (i) institutional factors (ii) outcome and assessment (iii) teaching and learning experiences (iv) resources (v) admission criteria and (vi) curriculum content. The questionnaire is designed based on 5 point rating scale in the continuum of most important to least important with 5 to 1 scores. The reliability and validity of the scale were tested and verified. Biographical information blank sheet is also used to gather the information about the personal characteristics of the respondents such as age, gender, college type, nationality, etc.

#### Statistics Used

Keeping the main objectives of the current investigation in mind, descriptive statistics is applied to analyze for the biographical information of the respondents. Furthermore, multiple regression analysis is used to verify the hypothesis formulated by the investigator. All the statistics used in the investigation such as stepwise multiple regressions, mean, standard deviation and product moment correlation were analyzed and coded with the help of SPSS and Microsoft Excel.

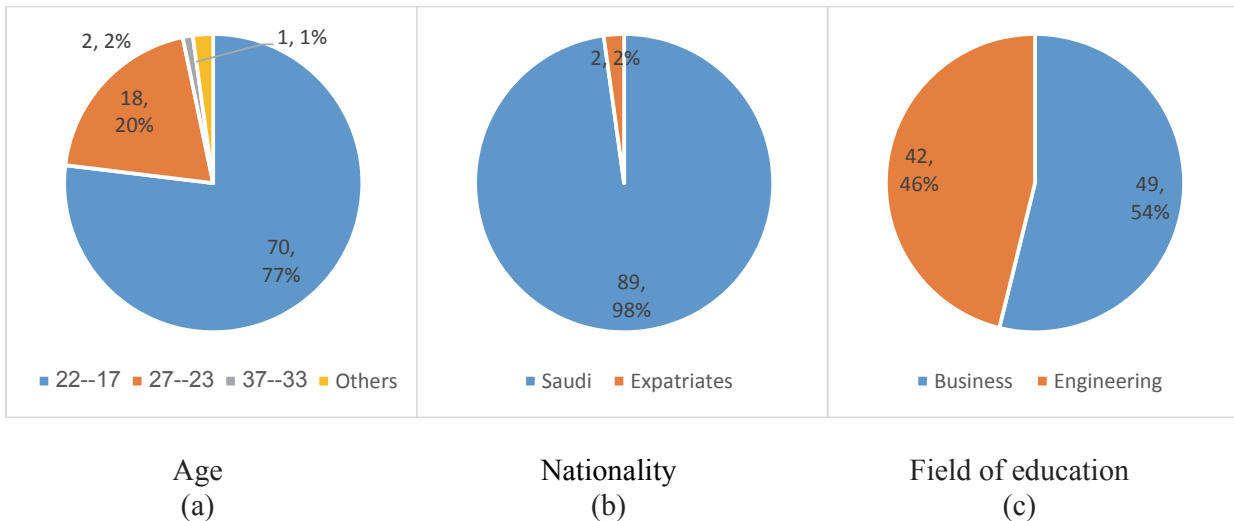
#### Procedure and ethics

In the first step, the questionnaire was translated from English to Arabic so that the local students in two different colleges of Prince Sattam bin Abdulaziz University could understand it better. The investigator conveniently distributed the questionnaires to the students. An instruction was written in a proper manner on the questionnaire to provide the responses in a correct way. The collected questionnaires were put into statistical analysis as decided by the investigator to get the results. All other ethics of research such as assurance was given to the respondents to maintain their confidently and their opinions would be used only for the research purposes.

## 4. Results and Discussion

### 4.1. Personal characteristics

Fig. 1 demonstrates personal characteristics of the participants who took part in this survey.



**Fig. 1.** Personal characteristics of the participants

Fig. (1a) demonstrates the age of the total number of 91 participants in the study. The results on subject's age indicates that almost 76.9 percent of the students are in the age category of 17-22 years, 19.8 percent are in age group of 23-27 years and 1.1 percent are in the age category of 33-37. In our survey, one person did not specify his age and one was 43 years old. It was also observed from the results that almost 97 percent of the students aged between 17 and 27. Fig. (1b) depicts the nationality of the students studying in two different courses at Prince Sattam bin Abdulaziz University. Out of 91 respondents, 97.8 percent were Saudis students who were enrolled in the program and 2.2 percent were also from other countries. This indicates that opportunities to study for other nationalities were also available at this school. Finally, according to Fig. (1c), the students who were doing education at Prince Sattam bin Abdulaziz University were enrolled in two different programs, Business and Engineering. According to our survey, 53.8 percent of the students were in the category of business program while 46.2 percent (N=42) were enrolled in engineering program. Table 1 demonstrates the mean, standard deviation as well as correlations among different components including admission criteria, institutional factors, curriculum content, resources and teaching & learning experiences with outcome & assessment among Prince Sattam bin Abdulaziz University.

**Table 1**

The summary of the statistical observations

Variables	Mean	Std. dev.	1	2	3	4	5	6
1.Outcome& Assessment	19.35	9.010	-	.312**	.240*	.103	.0166	.318**
2.Admission Criteria	16.37	4.654		-	.608**	.553**	.401**	.341**
3.Institutional Factors	20.55	6.121			-	.608**	.498**	.561**
4.Curriculum Content	20.40	6.061				-	.521**	.585**
5.Institutional Resources	19.11	7.619					-	.628**
6. Teaching & Learning Experiences	37.14	11.673						-

Source: Data analyzed by using SPSS 16 Version

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

As we can observe from the results of Table 1, Teaching & Learning Experiences maintain the highest mean followed by Institutional Factors, Curriculum Content, Outcome & Assessment and Institutional Resources while Admission Criteria represents the minimum score. In addition, a positive and meaningful correlation exists between different components of the survey. In fact, Institutional Resources and Teaching & Learning Experiences have represented the highest correlation ( $r = 0.628$ ,  $P < 0.01$ ) and Outcome & Assessment and Admission Criteria represent the minimum correlations ( $r = 0.204$ ,  $P < 0.05$ ). Results of the investigation also highlighted that out of five aspects only two items do not show significant correlation at any point with outcome and assessment criteria of quality in higher education.

It can be seen from the results that the teaching and learning resources have strong correlation with the outcome and assessment at  $p > .01$  level, which indicates that grades and outcome of the students depends on teaching style of the faculty, material used in the class and so on. Thus, the proposed hypothesis (H01) was statistically not accepted. Table 2 presents the summary of the stepwise multiple regression analysis for admission criteria, institutional factors, curriculum content, resources and teaching & learning experiences with outcome & assessment. Here, "outcome and assessment" is the dependent variable and Total Institutional Factors, Total Admission Criteria, Total Curriculum Content are independent variables.

**Table 2**

The results of multiple regression estimate

Predictors	R	R <sup>2</sup>	Adjust R <sup>2</sup>	R <sup>2</sup> Change	F Change
Total Institutional Factors	.318	.101	.091	.101	10.022**
Total Institutional Factors, Total Admission Criteria	.385	.148	.129	.047	4.844*
Total Institutional Factors, Total Admission Criteria, Total Curriculum Content	.448	.201	.173	.053	5.752**

\*\* Significant at .01 level

\* Significant at .05 level

a. Total Institutional Factors

b. Total Institutional Factors, Total Admission Criteria

c. Total Institutional Factors, Total Admission Criteria, Total Curriculum Content

d. Dependent variable: Outcome and Assessment

According to Table 2, institutional support appears as the most prevailing predictor of the outcome and assessment among two different categories of students. The correlation coefficients between institutional factors and outcome assessment is  $R = .318$ , which means that the outcome and assessment of the students were influenced by the institutional factors. The observed value of  $R^2$  represents the quantity of variations in the outcome and assessment in the regression model. It is reported for 10.1% of the variations, the value of F-change is ( $F = 10.02$ ,  $P > .01$ ) in the outcome and assessment of the two varied discipline of students studying at the Prince Sattam bin Abdulaziz University. The result shown in the second step of Table 2 indicates that admission criteria are identified as the dominant predictor of the outcome and assessment along with institutional factors among two different categories of students. The correlation coefficient between admission criteria and outcome assessment ( $R = .385$ ) is statistically significant. The obtained value of  $R^2$  describes the 14.8% of the variations, the value of F-change is ( $F = 4.844$ ,  $p > .05$ ) for the outcome and assessment of the two varied discipline of the students studying at Prince Sattam bin Abdulaziz University. In the third step, curriculum content emerged as the most important predictor of the outcome and assessment with institutional factors and admission criteria among two different categories of students. The correlation coefficients between predictor and dependent variable ( $R = .448$ ) indicate a good relationship. The coefficient of determination ( $R^2 = .201$ ) is accounted for 20.1% variation along with two predictors (institutional factors and admission criteria), F-change value is ( $F = 5.752$ ,  $P > .01$ ) for the outcome and assessment. The R squared change (.053) is accounted for the 5.3% variation of the curriculum content along with outcome and assessment. Table 3 shows the results of ANOVA test for the multiple regression estimation.

**Table 3**

The results of ANOVA test

Model	Sum of Squares	df	Mean Square	F
1. Regression Residual	739.509	1	739.509	10.022**
	6567.238	89	73.789	
	7306.747	90		
2. Regression Residual	1082.150	2	541.075	7.649**
	6224.598	88	70.734	
	7306.747	90		
3. Regression Residual	1468.140	3	489.380	7.292**
	5838.607	87	67.110	
	7306.747	90		

\*\* Significant at .01 level

a. Total Institutional Factors

b. Total Institutional Factors, Total Admission Criteria

c. Total Institutional Factors, Total Admission Criteria, Total Curriculum Content

d. Dependent variable: Outcome and Assessment

It is inferred from the results of Table 3 that F-ratio for institutional factors ( $F=10.022$ ,  $p> .01$ ), admission criteria ( $F=7.649$ ,  $p> .01$ ) and curriculum content ( $F=7.292$ ,  $p> .01$ ) were found significant and contributed to the outcome and assessment among two varied group of students studying business and engineering. Hence the proposed null hypothesis (HO2) was partially accepted.

## 5. Conclusions

The aims of the present investigation have been achieved and the following conclusions have been drawn based on the findings:

- All the domains of quality in higher education taken into the study maintained positive relationship with outcome and assessment.
- Admission criteria, institutional factors and teaching & learning resources revealed significant relationship with outcome and assessment.
- Total institutional factors emerged as one of the most prominent predictor of the outcome and assessment within the two different disciplines of the students studying at the Prince Sattam bin Abdulaziz University.
- Total admission criteria and total curriculum content were also observed dominant factors of quality in higher education with the outcome and assessment among students studying at the Prince Sattam bin Abdulaziz University.

## 6. Recommendation and limitation

There are literally different expectations for the quality in educational systems. Some people believe that increasing quality in higher education does not necessarily produce better graduates who could also contribute to the nation's success and peace. Nevertheless, this particular investigation contributes to draw the attention of higher officials to build the curriculum and develop the infrastructure accordingly to maintain the realm of quality in higher education by looking into students' perspective. Higher education in the Kingdom of Saudi Arabia has been improving during the past ten years and the present regime is also putting all the efforts to improve further so that the Vision 2030 can be achieved. Indeed, the quality assurance should take all the responsibility to maintain the quality in higher education. The study cannot be generalized to all the University of Saudi Arabia due to small sample size and participation of only two college students. Future research studies should include a comparison between various colleges within the university and with other university students to make the research more authentic and scientific. Finally, other researchers have avenues to conduct further investigation by taking into consideration other instruments and samples to contribute more values to the contemporary knowledge of quality in higher education.

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