

**IMPACT OF LEARNER BACKGROUND FACTORS ON STUDENT
SATISFACTION IN UNIVERSITIES OF PAKISTAN**

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ABSTRACT

Scholars and educators believe that student satisfaction plays a vital part in the success of universities. The present investigation aims to determine the existing degree of student satisfaction, and to discover the differences between student background factors and their relevance to student satisfaction. 1356 undergraduate students volunteered to provide data who were seeking education at the selected three state-owned universities using a survey questionnaire. The descriptive statistics exhibit that majority of students felt satisfied from peer relationships and teachers' support in learning. Students were averagely satisfied from administrative support, cafeteria, transportation, and safety, library services, orientation and elective course offered, and accommodation and classroom facilities; while students were dissatisfied from career and psychological support, campus facilities, and extra-curricular and financial support services. The students' background differences, such as gender, family monthly earnings, age groups, and previous GPA on student satisfaction existed. This investigation strongly suggests policymakers to focus on improving the career and psychological counseling, extra-curricular pursuits, student financial support, and campus facilities. They should address students' needs and expectations keeping in view students' backgrounds and socio-economic differences.

Keywords: *Student satisfaction, Student background factors, IEO Model, Pakistan*

Introduction

It is an indisputable fact that quality of higher education serves as a solid foundation to create knowledgeable societies, which eventually lead to socio-economic prosperity of a country. It enhances the knowledge, skills, abilities, attitudes, talents, competencies, inner experiences and sharpens the minds of people. Since development of any economy relies on the quality of skilled work force, it becomes imperative to invest in the higher education structure to enhance the quality of human capital. Growing number of higher education institutions as well as student enrollment worldwide has shaped higher education as a major service industry; those institutes can survive, which are providing quality of service (Rasheed & Rashid, 2024). This situation has created competition among the organizations to catch the attention of student, which eventually increases the reputation of institutions (Nguyen et al., 2024). In this scenario, universities are applying market-orientated strategies considering students as its real customers and are putting greater emphasis on these customers' needs, expectations and satisfaction, which enable universities to advance the quality of teaching-learning services; hence the service quality could be examined by assessing student

satisfaction (Petruzzellis et al., 2006). Accordingly, the concept of student satisfaction has become the most important dimension to evaluate the quality of higher education service. Wong and Chapman (2023) state that assessing student satisfaction, institutions might be able to get important information, which helps universities in decision-making for the institutional success. On the other hand, it is believed that satisfied students become more knowledgeable, skillful and competent, they show loyalty with their institutions and they have fewer chances to drop out from their educational institutions (Borishade et al., 2021; Tinto & John, 1973; Pace, 1984). Therefore, university administrators should pay great attention to create student-center learning environment and emphasis on not only meeting the expectations and needs of students but also parents and other external and internal constituencies related with higher education to keep them more satisfied (Cheng & Tam, 1997; Elliott & Shin, 2002). Thus, it is essential to evaluate the process of higher education institutions for accountability, improvement, policy development, decision making, quality assurance, institutional effectiveness and to know that whether institutions are fulfilling their educational objectives how well.

Pakistan has 262 universities and degree-granting institutions, including 153 public universities and 109 private institutions having a total of 1,936,326 student enrolment. In Pakistan, Higher Education Commission (HEC) is assigned a major task to increase the quality of education from last decades by providing institutions with quality guidelines, ranking and evaluating universities regularly. HEC has taken some revolutionary steps to increase the output of universities especially to formulate policies, provide research support and to assure the quality of higher education concerning teaching and research. HEC has also supported for the construction of new educational institutions, maintained and expanded the existing ones. Although, after the establishment of HEC in 2002, the quality of higher education has increased than before, yet it is far from achieving the international standards of quality education. The number of institutions and students' enrolment has increased rapidly over the past few years. However, student satisfaction has never been considered as an important issue by educational authorities as well as institutions (Abbasi et al., 2011). Increased attention on the quality of higher education in Pakistan is quite latest while the area of student satisfaction remains under-explored (Butt & Rehman, 2010; Abbasi et al., 2011; Saleem et al., 2012). Existing scholarship on student satisfaction in Pakistan has some limitations, for example, some studies' sample size was not so large; while others selected only few universities or departments. That is why, some scholars have recommended for a comprehensive study on student satisfaction to be conducted by taking a large sample size and engaging more universities/departments to generalize the results for whole population (Abbasi et al., 2011; Ali, 2001; Ali et al., 2011; Ijaz et al., 2011; Kashan, 2012; Malik et al., 2010; Tabassum et al., 2013). Moreover, Malik et al. (2010) suggest that in Pakistan, student satisfaction should be investigated on students' background factors.

Due to insufficient research work in Pakistan, it is very difficult to find out areas, which need more attention. Therefore, further studies should be conducted to explore the neglected areas and find out the loopholes, which are creating the big gaps in meeting standard education quality. Keeping in view these facts, this empirical research work was conducted to determine the present degree of student satisfaction, and to discover the variations between students' background factors on students' satisfaction.

Literature Review

The Concept of Student Satisfaction

Student satisfaction is a multifaceted concept, which controls the students' subjective experiences throughout their educational life. According to Okun and Weir (1990), student satisfaction is a cognitive assessment of overall quality of student's college life. It means that satisfaction is linked with student learning and development. Elliott and Healy (2001) describe it as a temporary attitude that stems from the assessment of educational experiences of students where students become more satisfied when they attain actual performance or when the acquired performance surpasses their expectations. From the higher education viewpoint, the concept of student satisfaction is originated from customer satisfaction. Customer satisfaction is well known and more important especially in the market research. Oliver (2014) defines customer satisfaction as a conclusion drawn in response to a gratifying experience of a product or service feature. Petruzzellis et al. (2006) believe students are the real customers of higher education. Hence, the concept of customer or student satisfaction is the center of attention for universities, which helps them to re-engineer their organizations, developing continuously monitoring system how to identify and deliver their services effectively according to the needs and expectations of students (Elliott & Shin, 2000). Thus, to acquire student satisfaction, universities can create a better learning environment in order to attract new students and maintain the satisfaction of existing ones (Nguyen et al., 2024).

The Dimensions of Student Satisfaction

It is believed that through different dimensions of student satisfaction, the quality of higher education can be assessed that would be helpful to higher education institutions to know their strengths and weaknesses for improvement. Elliott and Healy (2001) link eleven dimensions of student satisfaction: effectiveness of academic advising, campus climate, campus life, campus support services, concern for individual, teaching efficiency, effectiveness of recruitment and financial aid, registration efficiency, campus safety and security, service excellence and student-centeredness. Solinas et al. (2012) pinpoint three dimensions of student satisfaction including student motivation towards their studies, services provided by university, and teaching quality. O'Driscoll (2012) stated that academic support, infrastructure and welfare support are important predictors of student satisfaction. Thomas and Galambos (2004) identify that students' academic experiences particularly with faculty preparedness and social integration have more significant dimensions, which influence student satisfaction and their achievement. Similarly, a study of Qiuheg & Bukhari (2015) and Bukhari (2018) recognize that in the universities of Pakistan, there are eleven most leading dimensions including teachers' support, advisory staff, teachers' lecture delivery expertise, financial and social support, administrative support, library, orientation and courses offered, classroom facilities, accommodation, transport and safety, and peer relationship that drastically impact the level of student satisfaction.

Factors Affecting Students Satisfaction

In Pakistan, a number of researchers have identified some factors, which influence student satisfaction. For instance, Butt and Rehman (2010) recognize that teacher proficiency, courses offered, learning environment and classroom facilities affect student satisfaction.

Hameed and Amjad (2011) identify that students' connections with faculty, advisory staff, the environment and interactions in the classrooms have a very significant impact on the students' college experiences, which lead to students' satisfaction. Saleem et al. (2012) highlight that courses offered, teachers' expertise, library facilities, examination system and learning environment were the most influential factors.

Additionally, other studies have also carried out selecting different other elements related to student satisfaction. For example, Menges and Kulieke (1984) explore that in classroom the role of teacher and classroom climate are most dominant factors, which influence on student satisfaction. Mavondo & Gabbott (2004) find relationship between student satisfaction and students' persistence. They determine that satisfied students undertake oral communication, recommend their current institution to other prospective candidates, return to engage in pursuit of higher qualification, cooperating with university by delivering guest lectures and they become valued alumni. Gruber et al. (2010) explain that student satisfaction descends from person-environment bond that reflects well-perceived quality differences of offered services and of the wider environment. Dryden et al. (1999) pointed out that student learning is most successful when students' satisfaction is higher. Fan and Tian (2024) also recognize that the interaction in online learning is positively correlated to satisfaction and learning of students. Gruber et al., (2012) reveal that student-teacher relationship is a compelling factor, which influence students' success that is why students should be treated friendly and maintain strong relationship. Kara and DeShields (2004) point out that understanding student's experiences and satisfaction or dissatisfaction is important for higher education institutes because it leads to student's retention or attrition. In the context of Pakistan, a study of Qiuheng & Bukhari (2015) and Bukhari (2018) discover that for student satisfaction, the gender, family size, college Grade Point Average (GPA), parental monthly income, current GPA, and residence of students are dominant factors.

Theoretical Foundation and Conceptual Framework of the Study

Many scholars have developed a variety of theories and models. Especially the Theory of College Departure by Tinto (1987) is the dominant sociological perspective. He theorizes that student background factors including family background, race, gender, previous school record and course of study directly influence students' outputs as well as the departure decision. Astin's (1999) theory of 'student involvement' focuses on the effect of students' backgrounds and organizational characteristics on interactions of individuals and their development, which consequently leads them to higher satisfaction. Bean (1981) indicates in his model, Theoretical Model of Student Attrition, that the background factors of students can affect students' level of satisfaction with their educational institutions. Another model developed by Astin (1991), named Input-Environment-Output (IEO), describes that inputs (student backgrounds) can affect students' outputs i.e. satisfaction either directly or by their contact with environmental variables. Similarly, 'College Impact' (Pascarella, 1985) intends that student's background factors and institutional aspects have a significant impact on student satisfaction. Moreover, 'Quality of Effort' (Pace, 1960, 1984), and 'Student Engagement' (Kuh, 1994) also detail that many background factors of students can affect students' educational outcomes i.e. satisfaction.

Several studies carried out to examine student satisfaction by linking student's background factors and verified that how those characteristics influence on student satisfaction. For example, Tinto (1987), Astin (1991) and Kuh, et al. (2006) explain that

student background factors, such as gender, race, ethnicity, high school grades, post college grades, campus residences, family educational background, family support, parental socioeconomic status are closely related to students' success and satisfaction. In the same way, Spady (1971) also describes that student family backgrounds i.e. parents' education, occupation, and civic affiliations, may directly influence student satisfaction and other outcomes. Scholars have found a strong association between student previous college grades and satisfactions, students who achieve high scores become most satisfied compared by those who achieve low grades (Pike, 1991; Kuh, et al., 2006; Tessema et al., 2012). Tessema et al. (2012) highlight that gender has a major effect on student's satisfaction. Liu and Lung (1980) endorse that students' age had a moderate impact on student satisfaction. Level of satisfaction is different from person to person because different individuals have different feelings about similar things (Michalos, 1980). Due to the individual differences and family backgrounds, each student may spend his/her time and efforts in different ways in college; some individuals enter into the college insufficiently prepared, some enter with goals, and others come from different backgrounds or situations (Astin, 1991; Biggs, 1999). That is why students' background factors influence their learning experiences and satisfaction (Astin, 1991). When students enter in colleges they learned experiences from their college environment; these experiences are strongly influenced by their involvement, which leads them to greater satisfaction with their universities (Astin, 1977). Thus, students' output performance can be determined by their background factors (Astin, 1991).

For the current study, several aspects of students' subjective experiences including student background factors to explore satisfaction have been selected. To find our results, we apply Astin's (1991) Input-Environment-Output (IEO) model. There are three components in IEO Model: *Input*, *Environment*, and *Output*. Inputs refer to those individual characteristics, talents, skills, ambitions, and other promising flairs and learning, which the fresh student carries initially to the educational program or college (Astin, 1991). Inputs can be divided into two larger groups. First are fixed characteristics, including student's family size, marital status, gender, ethnicity, parent's income, education, religion and occupation. Second are those characteristics which can change over the time, including student's high school GPA, different types of standardized and achievement tests, student's self-predictions and self-rating; while input variables can be called control or independent variables (Astin, 1991). Environment denotes students' actual experiences at the institutions of higher education and the entire institution in terms of its size, selectivity, type of control and location, student's college major department, and place of residence because each institution is regarded as a different environment (Astin, 1991). Astin's IEO model (1991) provides flexibility to the researchers either to explore the relationship among three major components such as inputs, environment and output or they may only explore the relationship or impact of input variables on environmental variables or on output variable. Keeping in view of this flexibility, we only employ the input variables in terms of student background factors (gender, age groups, parent's monthly income, and previous GPA) and the output variable of student satisfaction. Outputs refer to the "Talents" including students' accomplishments, knowledge, skills, values, attitudes, aspirations, interests, and day-to-day pursuits (Astin, 1991). Output can be classified into cognitive and affective domains. Former refers to student's subject knowledge, learning, reasoning, logic and development and latter refers to student's feelings, attitudes, values, beliefs, self-concepts, and student's subjective feelings of satisfaction with college (Astin, 1991). Output variables could also refer to the outcome variables as dependent variables (Astin, 1991). Based on the conceptual framework and

literature, it is hypothesized that there are statistical significant differences between the mean scores of input variables (i.e. students' gender, age, parent's monthly income, previous GPA) and output variable (i.e. student satisfaction).

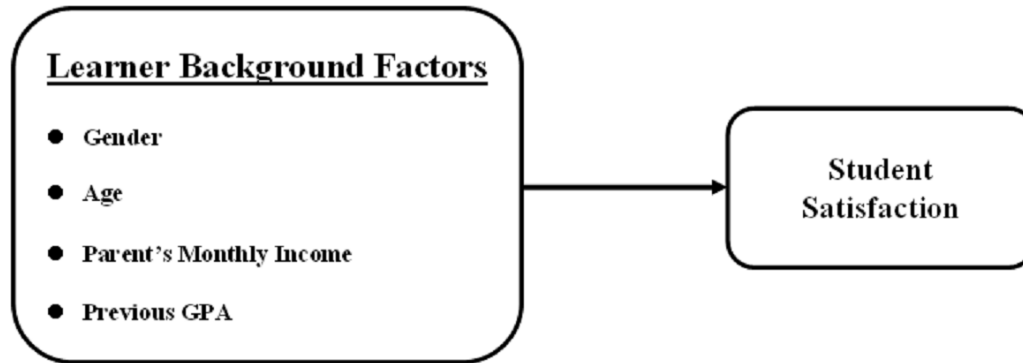


Figure 1: Input-Environment-Output (IEO) Model Based on Astin's (1991) study

Research Objectives

- (1) To determine the present degree of student satisfaction in public sector universities of Pakistan
- (2) To assess the impact of gender on student satisfaction
- (3) To assess the impact of age groups on student satisfaction
- (4) To assess the impact of parent's monthly income on student satisfaction
- (5) To assess the impact of previous GPA on student satisfaction

Research Methodology

Research Tool

A modified questionnaire by the National College Student Survey (NCSS), Xiamen University China, translated from Chinese to English, was applied (Qiu-heng & Bukhari, 2015; Bukhari, 2018). There were several aspects of students' university experiences in the questionnaire including teaching, interrelationships, facilities, resources and services. Students were invited to evaluate honestly about their degree of dissatisfaction or satisfaction on a six-point Likert scale with a continuum ranging from "very dissatisfied" to "very satisfied". To measure the internal consistency of the instrument, Chronbach's alpha was used separately for each factor and overall satisfaction. The Table-1 shows different values of Cronbach's alpha for each factor. The value of alpha greater than 0.50 is considered acceptable, if the value is closer to 1.00; it shows the greater internal consistency of items in the questionnaire (George & Malley, 2007). In this study, the value of alpha ranges from 0.98 to 0.93 for different factors separately, which were excellent.

Table 1: Reliability Analysis of Each Factor of Student Satisfaction

Name of Factor	Cronbach's Alpha
Teachers' Support in Learning	0.984
Career and Psychological Support	0.978

Accommodation and Classroom Facilities	0.970
Cafeteria, Transportation and Safety	0.970
Campus Facilities	0.969
Extra-Curricular and Fanatical Support Services	0.965
Library Services	0.961
Peer Relationships	0.936
Orientation and Elective Course Offered	0.949
Administrative Support	0.953
Overall Satisfaction	0.959

Data Sources

For this study, participants were male and female students studying at undergraduate level in selected three public sector universities of Pakistan, i.e. Shah Abdul Latif University, Khairpur Mirs, University of Sindh, Jamshoro, and Government College University Hyderabad. Convenience sampling technique was applied. In total, 1450 questionnaires were distributed whereas 1356 were returned; the response rate was 93.5 percent (See Table–2).

Table 2: Sample Structure

Items	Category	Frequency	%age
Students' Background Factors			
Gender	Male	775	57.2
	Female	581	42.8
	Total	1356	100
Parents' Monthly Income	Less than Rs. 60,000	891	65.7
	More than Rs. 60,000	465	34.3
	Total	1356	100.0
Age Groups	18 Years or Less	351	25.9
	19 to 20 Years	447	33.0
	21 to 22 Years	405	29.9
	Over 22 Years	153	11.3
	Total	1356	100.0
Previous GPA	Very Poor	72	5.3
	Poor	98	7.2
	Relatively Poor	85	6.3
	Relatively Good	171	12.6
	Good	607	44.8
	Very Good	323	23.8
	Total	1356	100.0

Data Analysis

In this study, student background factors are considered as independent variables include gender, parents' monthly income, age and previous GPA. The dependent variable is student

satisfaction. Data are analyzed with the help of SPSS version 22.0. Descriptive statistics are used to find out the level of student satisfaction analyzed with the help of mean, standard deviation and percentages. To test the proposed hypothesis Independent-Sample T-Test and ANOVA are applied.

Current Status of Student Satisfaction

Table 3 shows the level of student satisfaction in the universities of Pakistan with respect to 10 factors and overall satisfaction. The level of student satisfaction can be divided into three categories: generally satisfied, neither satisfied nor dissatisfied and dissatisfied. The first category (satisfied) include the factors such as “peer relationship” (M = 4.42; SD = 1.166; 68.4%), and “teachers’ support in learning” (M = 4.32; SD = 1.160; 66.5%). The second category (generally satisfied) include the factors, such as “administrative support” (M = 3.95; SD = 1.345; 59.2%), “cafeteria, transportation, and safety” (M = 3.64; SD = 1.445; 52.9%), “library services” (M = 3.56, SD = 1.43; 51.3%), “orientation and elective course offered” (M = 3.55, SD = 1.29; 51.2%) and “accommodation and classroom facilities” (M = 3.29; SD = 1.347). The third category (generally dissatisfied) include the factors such as “career and psychological support” (M = 2.86; SD = 1.314; 37.3%), “campus facilities” (M = 2.68; SD = 1.360; 33.7%), and “extra-curricular and financial support services” (M = 2.54; SD = 1.273; 30.8%). Finally, the overall satisfaction mean was (M = 3.56; SD = 0.7955). From these data, it is clear that students are satisfied only with respect to peer relationships and teachers’ support in learning. On the other hand, the level of student satisfaction is at average level with respect to administrative support, cafeteria, transportation, and safety, library services, orientation and elective course offered, and accommodation and classroom facilities. In contrast, students are dissatisfied with respect to three factors include career and psychological support, campus facilities, and extra-curricular and financial support services.

Table 3: Status of All Factors of Student Satisfaction

Factors	Sample Size	Mean	SD	%age
Teachers’ Support in Learning	1356	4.327	1.160	66.5%
Career and Psychological Support	1356	2.865	1.314	37.3%
Accommodation and Classroom Facilities	1356	3.292	1.347	45.8%
Cafeteria, Transportation and Safety	1356	3.646	1.445	52.9%
Campus Facilities	1356	2.686	1.360	33.7%
Extra-Curricular and Financial Support Services	1356	2.540	1.273	30.8%
Library Services	1356	3.565	1.433	51.3%
Peer Relationships	1356	4.421	1.166	68.4%
Orientation and Elective Course Offered	1356	3.559	1.297	51.2%
Administrative Support	1356	3.958	1.345	59.2%
Overall Student Satisfaction	1356	3.565	.7955	51.3%

Analysis of Differences Based on Input Variables in Student Satisfaction

To test the proposed hypothesis, and to find out the differences between input independent variables (students’ background factors) and output dependent variable (student satisfaction),

t-tests and ANOVA are done after ensuring the assumption of homogeneity of variances.

Analysis of Gender Differences in Student Satisfaction

The results revealed that gender has statistically significant differences on student satisfaction, since, $t=-3.641$, $p=0.000<0.001$. The mean score of student satisfaction for females are 3.90 and for males were 3.31 on the six point scale, which show that female students are more satisfied with their respective university experiences than males who seem less satisfied.

Table 1: Analysis of Gender Differences in Student Satisfaction

Gender	N	Mean	Standard Deviation	Mean Deference	T-Value	df	Significance (2-Tailed)
Male	775	3.313	0.7359	-.58965	-	1354	0.000
Female	581	3.902	0.7462		14.513***		

Note: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$

Analysis of Parent's Monthly Income Differences in Student Satisfaction

The results of t-test reveal that parents' monthly income less than Rs. 60,000 and having income more than Rs. 60,000 have a statistically significant differences on student satisfaction, since, $t=-10.414$, $p=0.000<0.001$. The mean scores of monthly income less than Rs. 60,000 showed ($M=3.72$) and more than Rs. 60,000 ($M=3.26$). Students' whose parent's income is less than Rs. 60,000 are more satisfied with their respective universities than students having the income of more than Rs. 60,000.

Table 2: Analysis of Parents Monthly Income Differences in Student Satisfaction

Parents Monthly Income	N	Mean	Standard Deviation	Mean Deference	T-Value	df	Significance (2-Tailed)
Less than Rs. 60,000	891	3.7222	.78262	-.45625	-	1354	0.000
More than Rs. 60,000	465	3.2659	.73239		10.414***		

Note: *** $p < 0.001$; ** $p < 0.01$, * $p < 0.05$

Analysis of Age Groups Differences in Student Satisfaction

The F-value of ANOVA between the age groups, $F=14.704$, $p=0.000<0.001$, indicate that there is statistically significant different between the age groups of students. The mean scores related with student satisfaction across the four age groups of students suggest that the students' older students having age of over 22 years are linked with the numerically minimum mean level of student satisfaction ($M=3.44$) followed by '21-22 years' ($M=3.46$), '19-20 years' ($M=3.51$), and '18 years or less' ($M=3.80$). It points out that younger students are more satisfied than older students in their respective universities.

Table 3: Analysis of Age Groups Differences in Student Satisfaction

Age Groups	N	Mean	Standard Deviation	F Value	Significance (2-Tailed)
18 Years or Less	351	3.8004	.91928	14.704***	0.000
19 to 20 Years	447	3.5184	.67885		
21 to 22 Years	405	3.4619	.74253		
Over 22 Years	153	3.4404	.83686		

Note: ***p < 0.001; **p < 0.01, *p < 0.05

Analysis of Previous Grade Differences in Student Satisfaction

The F-value of ANOVA between the previous grade groups, $F=225.247$, $p=0.000<0.001$, indicate that there is statistically significant different between the age groups of students. The mean scores related with student satisfaction across the six groups of students' previous GPA suggest that the students' self-reported previous GPA, i.e. 'very poor' is linked with the numerically minimum mean level of student satisfaction ($M=2.30$) followed by 'poor' ($M=2.39$), 'relatively poor' ($M=2.94$), 'relatively good' ($M=3.31$), 'very good' ($M=3.85$) and the group of 'good' is linked with the numerically maximum mean of student satisfaction ($M=3.90$). It points out that students, who get previously greater GPA, are more satisfied than those who have get less GPA in their previous intermediate colleges.

Table 4: Analysis of Previous Grade Differences in Student Satisfaction

Previous Grade	N	Mean	Standard Deviation	F Value	Significance (2-Tailed)
Very Poor	72	2.3011	.45719	225.247***	0.000
Poor	98	2.3982	.55397		
Relatively Poor	85	2.9407	.35823		
Relatively Good	171	3.3199	.53219		
Good	607	3.9074	.51741		
Very Good	323	3.8545	.79161		

Note: ***p < 0.001; **p < 0.01, *p < 0.05

Discussion

To achieve the first objective of this research was about what is the current student level of satisfaction in public sector universities of Pakistan. It can be concluded from the results of mean, standard deviation and percentages that mostly students are satisfied with respect to two factors such as peer relationships, and teachers' support in learning. Students are moderately satisfied regarding five factors include administrative support, cafeteria, transportation, and safety, library services, orientation and elective course offered, and accommodation and classroom facilities. Students are dissatisfied with respect to three factors including career and psychological support, campus facilities, and extra-curricular and financial support services. Previous investigation point out that student are not satisfied (Malik et al., 2010; Abbasi et al., 2011; Saleem et al., 2012; Qiheng & Bukhari, 2015; Bukhari, 2018). The results of this study indicate that student satisfaction has been improved, but still there are some loopholes that should be plugged. University management should take initiatives towards those areas especially administrative support, cafeteria, transportation, and

safety, library services, orientation and elective course offered, and accommodation and classroom facilities, career and psychological support, campus facilities, and extra-curricular and financial support services. These areas need to immediate attention to improve.

To determine the differences between student satisfaction and student backgrounds factors, statistically significant differences between gender groups on student satisfaction were found. Female students were more satisfied than male students. This study confirms previous study conducted by Saleem et al. (2012) in Azad Kashmir Pakistan. These differences may be due to socioeconomic values of Pakistan, because some male students have more responsibilities to support their families in term of finance by doing part time jobs. Statistically significant differences between parents' monthly incomes on student satisfaction are also found. Parents' income less than Rs. 60,000 are more satisfied with their respective universities than having more than Rs. 60,000 income. Interestingly, findings are controversial according to previous suggested studies that student having high socioeconomic background including parents' income become successful more than the ones with low socioeconomic background (Tinto, 1987; Bean, 1981; Pascarella, 1985; Astin's, 1991; Qiuheng & Bukhari, 2015; Bukhari, 2018). These results might be fair regarding student satisfaction according to socioeconomic background of Pakistan. Because low earning parents always encourage their children to do better in universities so that they can change their status in future as well as support their parents. Another possible reason might be related to student expectations. Prior to entering universities, low income students have low expectations from their institutions that are easily met as compared to high income students who have high expectations that are difficult to meet (Elliott & Healy, 2001; Qiuheng & Bukhari, 2015; Bukhari, 2018). Statistically significant differences among student previous GPA on student satisfaction are also found in this study. Students, who get previously greater GPA, are more satisfied than those who have get less GPA in their previous colleges. The present findings of study confirm many previous studies (Pace, 1984; Astin, 1991; Kuh, et al., 2006; Tessema et al., 2012; Qiuheng & Bukhari, 2015; Bukhari, 2018) that GPA has a strong relationship with student satisfaction. These results also fit well according to Astin (1991) IEO model. Similarly, statistically significant differences between students' age groups on satisfaction are also found. These findings align with the study of Liu and Lung (1980) who confirm that students' age has a moderate impact on student satisfaction.

Conclusion

Results of this study conclude that most students are generally satisfied with respect to peer relationships and teachers' support in learning while averagely level of satisfaction is shown with respect to administrative support, cafeteria, transportation, and safety, library services, orientation and elective course offered, and accommodation and classroom facilities. In opposition, student are dissatisfied with respect to three factors include career and psychological support, campus facilities, and extra-curricular and financial support services. In terms of students' background factors, study discovers that there are very much imperative for student satisfaction. Results reveal that there are many differences existing among student background due to the socioeconomic differences of the country. For example, support is found for the hypothesis that there are gender differences, parents' monthly income, age of students, and pervious GPA on student satisfaction. The IEO model has demonstrated that students' background factors influence students' output, i.e. satisfaction. Therefore, this model fits well with respect to Pakistani circumstances. Mostly input variables are well fit

according to the requirement of the model. The findings of this study offer valuable responses of students. Therefore, these findings can serve as the part of planning for policy makers to re-engineer the universities in Pakistan to get higher output in the shape of student learning, development, and satisfaction.

Recommendations

This research has some limitations, since only three general universities located in Sindh were selected. While student satisfaction may differ in other universities of Pakistan. Regarding the use of the IEO model, there are also several other perspectives which are not included in this study. For example, in this study universities are considered as entire unit of observation, whereas university size, student's choice of university selection, university controls and university location are not considered here. Another limitation of this study is the nature of data. This data are sought at one point in time therefore longitudinal studies are needed to confirm the results of this study. Keeping in view these limitations of the study and in the context of our findings, some suggestions are provided to government, HEC, and university management to strengthen educational resolutions towards practical actions to provide quality education, to satisfy students and for university change. To provide better learning environment for students, universities should concentrate on improving the performances of career and psychological centers, to increase the student financial assistance and upgrade campus facilities that may boost up the students' experiences, learning, and their development, which eventually lead them to higher satisfaction. Most importantly, universities also center their attention on students' needs and expectations according to their backgrounds and socio-economic differences so that all students benefit and become more satisfied. Due to the importance of student satisfaction, the universities must develop strong mechanisms to measure the student satisfaction on regular basis and the findings must be published and given due consideration.

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