



**RESEARCH PAPER**

**Assessing the Students Satisfaction towards the Educational Provision  
/ Environment at a Public School**

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**ABSTRACT**

It is important to know and understand students' satisfaction level towards the education resources provided them for learning. This survey study was carried out at a unique school affiliated with three different examination boards. The survey aimed to assess students' satisfaction towards the educational provisions/environment with respect to the eight (08) dimensions of the instrument. The 8 dimensions of the tool are: Educational Guidance (EA), Studying Arrangements (SA), Nature of Studying (NA), Teaching and Learning (TL), Assessment (A), Attitude towards Students (ATS), Premises (P) and Library (L). The researchers conducted the survey from all present students studying in 5 different programs such as; XII AKUEB, XII BISE, XI EB, XI BISE and O' level. Different statistical tests such as; descriptive for reliability, correlations, T-Statistics, Mann-Whitney, ANOVA and regression were used to determine various aspects of students' satisfaction. Results and interpretation of each test are presented and discussed below in the paper. Overall results indicated a subtle satisfaction of the students towards various dimensions of educational environment. The study recommends facilitating students towards quality education resources for learning.

**Keywords:** Educational Guidance, Quality Education, Students Responsibilities, Teaching and Learning

**Introduction**

Education plays a crucial role in the development of a nation, as it is a basic and essential need for all. The effectiveness of teaching and learning is greatly impacted by the resources and facilities provided in the classroom (Butt & Rehman, 2010). To enhance the quality of the educational environment, educational institutions must implement long-term strategies and plans aimed at achieving organizational goals, while also engaging students in quality assurance activities (Virtanen et al., 2017). Quality in education can be defined in various ways, including aligning curriculum with instructional practices, clear responsibilities, and availability of resources, effectiveness of practices, accountability and satisfaction of students. Among all, the satisfaction of students towards the educational environment is a key aspect in the learning environment (Jung, 2014). According to DeShields et al. (2005), educational institutions are focused on identifying and satisfying the basic needs and expectations of students, which include the classroom environment, faculty performance, student academic achievement, learning facilities, and institution reputation. Various researchers define student satisfaction as satisfaction with the institute experience, instruction quality, advising, teaching courses, assessment, campus environment, and academic department.

One key element that has a significant impact on students' academic progress is how satisfied they are with their learning environment. Researchers' interest in examining student happiness in higher education institutions has grown in recent years. According to

research, academic success and other educational outcomes are positively correlated with students' happiness with their educational experience (Kitsantas, 2009). It is important to take into account a variety of aspects that affect how students perceive their educational experience in order to get a thorough grasp of their satisfaction. They could include the standard of instruction, the accessibility of resources and assistance, the setting of the institution, and the chances for social and personal growth (Garrido et al., 2018). In contrast to students who are unsatisfied with their educational experience, who are more likely to discontinue their studies or performing poor academically, satisfied students are more likely to continue their studies and graduate from their programmes (Astin, 1984; Kitsantas, 2009). Consequently, it is clear that a key element in a student's academic achievement is their level of satisfaction with their learning environment. In order to promote students' growth both academically and personally, institutions must adopt a comprehensive strategy for comprehending and addressing the elements that affect students' happiness.

Aldridge and Rowley (1998) assert that from a student's perspective, good quality education provides better opportunities for learning, and that the level of satisfaction or dissatisfaction has a significant impact on students success or failure in learning. Additionally, a student's level of satisfaction with their learning environment has a big impact on their academic performance. According to experts, a student's contentment with their educational experience is positively connected with their academic progress and overall educational results (Kitsantas, 2009). It is crucial to take into account many factors that have an impact on how students perceive their educational experience if one wants to have a thorough grasp of student happiness. The quality of education, the availability of resources and help, the location of the institution, and the chances for social and personal development are some examples of these factors (Garrido et al., 2018).

Research has demonstrated that students who are happy with their educational experience are more likely to continue their studies and finish their degrees. Students who dislike their educational experience, however, are more likely to give up on their studies or perform badly in class (Astin, 1984; Kitsantas, 2009). In recent years, the higher education sector in Pakistan has undergone significant changes, with the Higher Education Commission (HEC) encouraging students to pursue education and preparing universities to provide quality education. These education reforms have led to substantial growth and competitiveness in Pakistan's higher education sector. Additionally, due to industrialization in the country, institutions are meeting the demand for skilled professionals in various fields, which is a positive sign for Pakistan.

In conclusion, a key component of a student's academic achievement is how satisfied they are with their learning environment. In order to assist students' academic and personal growth, schools and higher institutions must adopt a comprehensive strategy to comprehend and address the elements that affect student satisfaction.

## **Literature Review**

The educational sector in Pakistan is rapidly expanding, with a significant number of students enrolled in schools, colleges and universities across the country. However, the satisfaction of students towards the educational provision and environment has become an important topic of research. Overall educational provision and environment play a crucial role in shaping the satisfaction level of students. Thus, student satisfaction is one of the critical areas that researchers and institutions have emphasized for decades. To better assess students' satisfaction in the educational system, research has also been done outside of Pakistan. For instance, a research done in Saudi Arabia found that the reputation of the university, the learning environment, and the quality of the teaching all have a big impact on how satisfied students are (Alotaibi et al., 2024). Another Malaysian study discovered that the standard of facilities, educational services, and instructors had a substantial impact on students' satisfaction (Ahmad, Azman, & Shah, 2020).

Several internal and external factors influence students' satisfaction with the educational provision environment. Internal factors include individual needs, interests, and expectations, while external factors encompass institutional support, teaching quality, and social interactions. Ibrahim et al. (2023) highlighted the influence of environmental factors and satisfaction on student learning motivation, emphasizing the interplay between external conditions and internal drive (Wong and Chapman 2023). Due to the correlation of students' satisfaction with a number of outcomes, including student retention, academic performance, and employability, educational institutions have been investing in a variety of strategies and resources to increase student satisfaction. This review of the literature aims to examine the literature on student satisfaction with educational environments and provisions from a variety of perspectives, including educational guidance, study habits, the nature of studying, teaching and learning, evaluation, student responsibility, and quality education.

### **Educational Guidance (EG)**

Student satisfaction with educational opportunities and environments is significantly influenced by educational guidance, which is a critical factor. It is offering counselling and support services to students so they may decide on their academic and personal futures with knowledge. Several research have demonstrated that educational counselling significantly affects students' satisfaction (Alzahrani, 2020; Redwan, 2020; Akhtar, 2020). Ngeno (2022) conducted a study on students' satisfaction in Kenya and found strong connection between educational guidance and counseling to student's satisfaction. The study recommended a permanent counselor at schools for students and continuous guidance programmes. The above-cited studies reveal students' satisfaction levels are increased when they are given timely and pertinent information about their classes, academic requirements, and career options. Educational guidance, according to Cheng and Tam (2017), has a good impact on students' satisfaction since it improves their academic performance and personal growth leading to their socio-economic development. In contrast, insufficient instructional supervision causes uncertainty, tension, and a sense of separation in students, which results in their discontent (Ghaffari et al., 2019).

### **Studying Arrangements (SA)**

The term "studying arrangements" (SA) refers to the actual setting in which students learn, such as a classroom, a lab, and study areas. According to studies, the standard of the learning environment significantly affects students' contentment (El-Fishawy, 2019; Balamurugan & Gowthaman, 2021). (Ishak & Abdulahsani, 2018) found significant relationship between the services provided to the students and their level satisfaction and performance. They recommended that heads of the institutions should maintain quality services at institutions for the satisfaction and improved performance of the students. According to these researches, providing students with relaxing and well-equipped study facilities that include air conditioning, comfy seats, and tidy work areas increases their level of pleasure. Additionally, according to Wang et al (2021). research, pleasant classrooms, easy access to study materials, and appropriate lighting all contribute to improved student happiness. The adaptability and flexibility of study schedules have a considerable impact on student happiness, according to Nohria and Groysberg (2018).

### **Nature of Studying (NS)**

The sort of learning experiences that students have as part of their academic programmes are referred to as the "nature of studying" (NA). According to studies, the type of learning has a big influence on how well students are performing (Sulaiman et al., 2021; Khoso et al., 2021). According to these findings, giving students opportunity for study and investigation as well as practical, hands-on learning experiences increases their level of happiness. Moreover, according to Zhang et al. (2018), a supportive classroom atmosphere

and a demanding curriculum have a good impact on students' satisfaction because they encourage academic engagement, critical thinking, and problem-solving abilities. On the other hand, student dissatisfaction is instead caused by a lack of intellectual challenge and a bad learning environment, which breeds boredom, apathy, and disengagement.

### **Teaching and Learning (TL)**

Teachers employ a variety of strategies to help pupils learn. These strategies defined teacher quality, teaching quality and learning outcomes. Dali et al., (2017) found through the survey that students marked teaching quality among top variables influencing their learning, performance and satisfaction. According to studies, the effectiveness of instruction and learning has a big impact on how happy students are (Aslam et al., 2020; Badenhorst & Mertova, 2020). According to these researches, students' satisfaction levels are raised when engaging and interactive teaching strategies including group discussions, problem-based learning, and multimedia presentations are used. According to research, engaging and interactive pedagogies that focus on the individual student are successful teaching and learning strategies that increase student satisfaction (Ghaffari et al., 2019; Wang et al., 2021). Also, the quality of the relationship between the instructor and the students has a big impact on how satisfied the students are since it fosters a feeling of belonging and boosts their motivation and academic performance (Nohria & Groysberg, 2018).

### **Assessment (A)**

Assessment describes the procedures used to assess students' academic performance and advancement. Research have demonstrated that the effectiveness of evaluation significantly affects student satisfaction (Alzahrani, 2020; Ngeow et al., 2021). According to these research, giving students fair and open evaluation procedures, such as specific grading guidelines and prompt feedback, raises their level of satisfaction. Moreover, assessment procedures that are appropriate and fair have a good impact on students' satisfaction because they increase motivation and academic performance (Zhang et al., 2018). As a result of their worry, demotivation, and sense of unfairness, insufficient and unjust evaluation techniques, on the other hand, cause students to perform low (Ghaffari et al., 2019).

### **Attitude towards Students (ATS)**

The term "attitude towards students" (ATS) relates to how educators treat students and how they approach learning in general from a student-centered perspective. Suyatno et al. (2019) through multivariate analysis found significant impact of classroom atmosphere (relationship of teacher with students) on students learning. According to studies, the way people treat students significantly affects how satisfied those students are (El-Fishawy, 2019; Khoso et al., 2021). According to Wang et al. (2021), having supporting and encouraging attitudes towards students' increases their sense of learning because they feel more motivated, included, and engaged in their studies. As a result of their fear, frustration, and demotivation, students are less satisfied when teachers have unfavorable or unsupportive attitudes towards them. Therefore, students' satisfaction levels are increased when they engage with instructors and staff in a courteous and encouraging manner.

### **Premises and Library (P&L)**

The term "premises" refers to the actual buildings and infrastructure that make up an educational institution, such as the administrative offices, labs, and classrooms. Library provides comfortable reading environment to the students and motivates them towards achieving their academic targets (Li et al., 2018). According to studies, the condition of the facilities significantly affects how satisfied students are (Balamurugan & Gowthaman, 2021; Aslam et al., 2020). These findings demonstrate that giving students' access to up-to-date

and well-maintained facilities, such as cutting-edge labs and sound classrooms, increases their level of satisfaction.

According to research, having suitable classroom and library amenities, including good study areas, updated reading materials, and cutting-edge technology, has a beneficial impact on students' contentment (Cheng & Tam, 2017; Nohria & Groyberg, 2018). According to a research by Anwar et al. (2019), students perform well and are satisfied with their educational experiences when they have access to clean facilities and sufficient library resources.

In conclusion, it should be noted that student satisfaction is a critical factor that affects a variety of outcomes, such as student retention, academic achievement, motivation to learn, and employability. According to the literature review, a number of factors, such as educational guidance, studying arrangements, the nature of studying, teaching and learning, assessment, teacher and student attitudes, facilities, and libraries, have a big impact on how satisfied students are with the educational options and environment. Excellent teaching and learning strategies, comfortable study environments, demanding curriculum, fair assessment procedures, a favorable attitude towards students, and enough resources for classrooms and libraries favorably impact student satisfaction. Contrarily, poor educational opportunities and unkind treatment of students result in student unhappiness, which breeds tension, worry, and disengagement. Future studies should concentrate on examining practical methods to raise student satisfaction with educational offerings and atmosphere

## Material and Methods

The survey from all 204 present students studying in 5 different programs such as; XII AKUEB, XII BISE, XI AKUEB, XI BISE and O' level was conducted. The researchers were assigned five questions to carry-on this study. Moreover, the research was conducted from the students of a unique college/school affiliated with 3 different examination boards (BISE= Board of Intermediate and Secondary Education, AKUEB= Aga Khan University Examination Board, and O' level = Cambridge International Examination).

## Results and Discussion

### Reliability or internal consistency

Before attempting any test, after cleaning the data, overall reliability, and reliability of each of the eight dimension of the survey tool were checked by using Cronbach's alpha to understand whether the tool is reliable or not. So, it can be implemented and interpreted with consistency across the situations or not (Field, 2016). Below table 1 shows reliability scores.

**Table 1**  
**Reliability test scores**

| Variables           | Items     | Cronbach's Alpha |
|---------------------|-----------|------------------|
| EG                  | 3         | 0.501            |
| SA                  | 7         | 0.734            |
| NS                  | 7         | 0.679            |
| TL                  | 7         | 0.799            |
| A                   | 5         | 0.728            |
| ATS                 | 4         | 0.805            |
| P                   | 5         | 0.741            |
| L                   | 5         | 0.757            |
| Overall Reliability | <b>43</b> | <b>0.924</b>     |

Results of Cronbach's Alpha ( $\alpha$ ) show excellent overall reliability of the instrument, which is  $\alpha = .924$ . Overall reliability did not increase, if any change was made in the tool. So, all items were kept. This showed that the instrument could be interpreted consistently across the situations.

Furthermore, keeping in view the interest of QEC team, reliability of all eight dimensions or subscales were checked by using Cronbach's Alpha to understand whether the reliability of each dimension was within the acceptable range or whether any change(s) need to be made in the tool to make it more reliable. To do this, compute variables were formed for each dimensions. All the compute variables showed strong reliability except Educational Guidance (EG) with  $\alpha = .501$ , which was less but acceptable in social sciences (Field, 2016). This could be because the dimension has only three items and alpha value decreases and increases with the decrease and increase of items in the tool or subscale. However, results showed that if item number 3 of the subscale (educational guidance) "I get sufficient information about matters related to my studies from graduate office" is deleted then Cronbach's Alpha will be 5.28. This change did not have major effect to convert the dimension from unacceptable to acceptable.

Excellent overall reliability (.924) of the instrument indicated that the instrument could be replicated consistently across the situations at the similar level institutions. This high reliability could be because of more items (43) in the tool. However, the instrument was proved as standard for replica. Moreover, Cronbach's Alpha reliability depended upon number of items as reliability increases with the increase of items in the instrument (Field, 2016). This was visible in our case too because overall reliability was stronger than subscale-wise reliability. Likewise, out of 8 dimensions, 2 subscales or compute variables such as; Teaching learning and attitude towards learning showed highest reliability but the subscale "Education Guidance" showed less but acceptable reliability .501. This could be changed to .528 if item 3 of the dimension was deleted. This showed that item 2 and 1 were correlated but item 3 was not.

### Correlation

The QEC team believed that there was no significant relationship in the students' attitude with respect to their satisfaction for; teaching and learning, and assessment. This meant that students, who were satisfied with teaching and learning, may not be satisfied with the assessment provisions at the college. To check such relationship, two correlations could be performed such as; Pearson for normal data and Spearman for skewed data. In this case, data exploration through normality check showed that data was skewed. So, non-parametric correlation (spearman) was used. To do this, compute variables for both the dimensions were formed to check the correlation.

The results showed positive relationship between teaching and learning, and assessment ( $r_s = .622^{**}$ ,  $p = 0.001$ ) as shown below in table 2. This strong positive correlation showed that QEC assumption was incorrect. Thus the null hypotheses that "there is no significant relationship in the students' attitude with respect to their satisfaction for teaching and learning and for assessment", was rejected. Further, it proved that students who were satisfied with teaching and learning were also satisfied with assessment.

**Table 2**  
**Spearman Correlation.**

| Correlations  |                            |  | TL    | A      |
|---------------|----------------------------|--|-------|--------|
| Spearman' rho | TL Correlation Coefficient |  | 1.000 | .622** |
|               | Sig. (2-tailed)            |  | .     | .000   |
|               | N                          |  | 200   | 199    |

|               |                            |        |       |
|---------------|----------------------------|--------|-------|
| Spearman' rho | TL Correlation Coefficient | .622** | 1.000 |
|               | Sig. (2-tailed)            | .000   | .     |
|               | N                          | 199    | 199   |

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

In this case, Spearman correlation  $r_s = .622^{**}$  with  $p = 0.001$  showed strong positive relationship but this did not mean perfect correlation. This was because the correlation investigates whether null hypothesis was accepted or rejected. Here, correlation tells equal satisfaction of students' attitude towards both the dimensions (variables). However, in case of item-by-item analysis it may vary. Hence, it cannot be claimed as perfect correlation but strong. Also, it verified association of teaching learning and assessment

### Comparing Means (Independent Sample t-test and Mann-Whitney)

The QEC team believed that boys and girls were equally satisfied with the nature of their studies and the school community's attitude towards them. The team were particularly interested in item-by-item analysis in the two scales to understand whether their assumption was correct for all the aspects (as shown by each item in the scales) related to the nature of studies and community's attitudes or whether there existed some significant differences in the attitudes of the girls and the boys.

To do the task, normality of the data showed that all items are skewed except one as shown in the table 3 below.

**Table 3**  
**Descriptive statistics**

| Skewness  |              |             |                        |
|---|--------------|-------------|------------------------|
| Item  | Statistics   | Std. error  | Statistical Conclusion |
| I achieved the objectives that I set for my learning                            | -.653        | .173        | Skewed                 |
| <b>Teaching groups are small enough for my learning</b>                         | <b>-.363</b> | <b>.177</b> | <b>Normal</b>          |
| Various teaching methods are being used (PBL, Group work, interactive lectures) | -1.029       | .174        | Skewed                 |
| I receive sufficient feedback on my formative/summative assessment              | -.349        | .172        | Skewed                 |
| I have the opportunity to give feedback on courses                              | -.283        | .175        | Skewed                 |
| My capability to work in an international working Environment has improved      | -.250        | .184        | Skewed                 |
| The institution provides opportunities to participate in activities             | -1.001       | .174        | Skewed                 |
| I am treated respectfully by the leadership of the institution                  | -.732        | .174        | Skewed                 |
| I am treated respectfully by the faculty  | -.771        | .174        | Skewed                 |
| I am treated respectfully by the support staff                                  | -.844        | .175        | Skewed                 |
| Service at the registrar office is timely                                       | -.373        | .174        | Skewed                 |

Looking at the descriptive statistics of table 3, it seemed independent sample t-test (a parametric test) was to be used for one item only. However, for rest of the items Mann Whitney (a non-parametric test) was used.

### Independent Sample t-Test

Independent sample t-Test was performed to compare the means of two dependent variables (nature of their (boys and girls) studies and school community's attitude towards them) for two distinct groups (independent variables) that whether there was significant difference or equal satisfaction between the attitude of boys and girls against the item (teaching groups are small enough for learning). As per levene's test for homogeneity of variances result of the item is presented below in table 4.

**Table 4**  
**Independent Sample Test**

|  |                             | Levene's Test for Equality of Variances |      | t-test for Equality of Means |         |                 |                 |                       |   |       |
|--|-----------------------------|---|------|------------------------------|---------|-----------------|-----------------|-----------------------|---|-------|
|  |                             | F                                       | Sig. | t                            | df      | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|  |                             |   |      |                              |         |                 |                 |                       | Lower                                     | Upper |
| Teaching groups are small enough for my learning | Equal variances assumed     | 3.944                                   | .049 | -.074                        | 186     | .941            | -.014           | .186                  | -.382                                     | .354  |
|  | Equal variances not assumed |   |      | -.073                        | 175.761 | .942            | -.014           | .188                  | -.384                                     | .357  |

Results (mean) of independent sample t-test show that there is no significant difference between the attitude of boys ( $M=3.24$ ,  $SD=1.36$ ) and girls ( $M=3.22$ ,  $SD=1.19$ ) and the sig. 2 – tailed value is  $0.94 > 0.05$  which means that Null hypothesis was accepted. These results suggested that gender does not have influence over the satisfaction of boys and girls with respect to the item.

For rest of the items, Mann-Whitney (a non-parametric test) is used to compare differences between two dependent variables (nature of their studies and the school community's attitude) of two independent groups (boys and girls). The only assumption of Mann-Whitney was met that whether two groups are independent and dependent variables were ordinal or continuous. The test was performed for 10 items of two dependent variables. The results show that for 8 items  $p \geq 0.05$  where null hypothesis about equal satisfaction of boys and girls for both dependent variables was accepted. However,  $p < 0.05$  for item number 2 and 6 shown in the table below, where null hypothesis about equal satisfaction of boys and girls was rejected.

**Hypothesis of summary**

|   | <b>Null Hypothesis</b>   | <b>Test</b>                               | <b>Sig.</b> | <b>Decision</b>            |
|---|--|---|-------------|----------------------------|
| 1 | The distribution of I achieved the objectives that I set for my learning is the same across categories of Gender                         | Independent – Samples Mann-Whitney U Test | .183        | Retain the null hypothesis |
| 2 | The distribution of various teaching methods are being used (PBL. group work, Interactive lectures) the same across categories of Gender | Independent – Samples Mann-Whitney U Test | .004        | Reject the null hypothesis |
| 3 | The distribution of I received sufficient feedback on my formative/summative assessment is the same across categories of Gender          | Independent – Samples Mann-Whitney U Test | .348        | Retain the null hypothesis |
| 4 | The distribution of I have the opportunity to give feedback on courses is the same across categories of Gender                           | Independent – Samples Mann-Whitney U Test | .571        | Retain the null hypothesis |
| 5 | The distribution of my capabilities to work in an international working environment has improved is the same across categories of Gender | Independent – Samples Mann-Whitney U Test | .310        | Retain the null hypothesis |
| 6 | The distribution of Institution provides opportunities to participate in activities is the same across categories of Gender              | Independent – Samples Mann-Whitney U Test | .046        | Reject the null hypothesis |



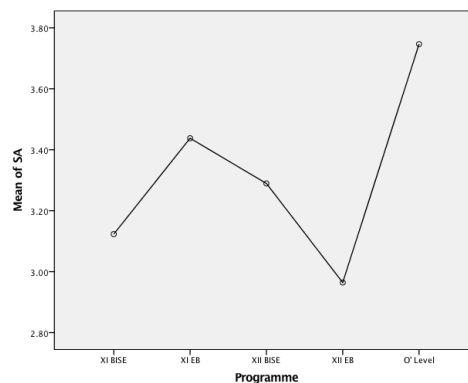
|   |  |   |      |                            |
|---|--|---|------|----------------------------|
| 7 | The distribution of I am treated respectfully by the leadership of the institution is the same across categories of Gender | Independent – Samples Mann-Whitney U Test | .195 | Retain the null hypothesis |
| 8 | The distribution of I am treated respectfully by the faculty is the same across categories of Gender                       | Independent – Samples Mann-Whitney U Test | .191 | Retain the null hypothesis |

Asymptotic significance are displayed. The significance level is .05

The results of Independent sample t-test and Mann-Whitney test about hypotheses testing show that generally boys and girls think similarly there is no significant difference across the items of both dimensions except two as per Mann-Whitney. It means boys and girls were equally satisfied with respect to nature of their studies and school community attitude towards them. Therefore, gender does not affect the attitude of the students towards the dimensions. Overall, null hypothesis could be accepted but item-by-item results show difference with respect to two items wherein the null hypothesis could be rejected.

### Analysis of Variance (ANOVA)

The QEC team was also interested in learning whether students' level of satisfaction for studying arrangements differ across the various programmes in which the students were enrolled. The question demanded One-way ANOVA because of a dependent variable (studying arrangement) and five independent variables (the programs). There was statistically significant difference among the perception of different groups as determined by one-way ANOVA ( $F(4,192) = 4.165, p = .003$ ). However, this does not tell where the difference was/were. Hence, two post-hoc tests Bonferroni and Tukey were performed to see where the difference was/were. Bonferroni indicated statistically significant difference between XI BISE ( $M=3.12, SD=0.81$ ) and O level ( $M=3.7, SD=0.68$ ) at sig value .004, and .025 between XII EB ( $M=2.96, SD=1.04$ ) and O level ( $M=3.7, SD=0.68$ ). However, Tukey tells statistically significant difference between XI BISE ( $M=3.12, SD=0.81$ ) and O level ( $M=3.7, SD=0.68$ ) at sig value .003, and .021 between XII EB ( $M=2.96, SD=1.04$ ) and O level ( $M=3.7, SD=0.68$ ). Both differences are statistically significant at  $p \leq 0.05$ . Such difference is visible from following the mean plot below. Post-hoc comparisons by using Tukey shows that mean and standard deviation scores of O' level ( $M=3.7, SD=0.68$ ) were significantly different from XII EB ( $M=2.96, SD=1.04$ ) and XI BISE ( $M=3.12, SD=0.81$ ). However, other programs do not indicate significant differences from each other. This can be seen from the descriptive below followed by mean plot.



All assumption of ANOVA such as; homoscedasticity, independence of cases were met. The analysis shows that O' level appears as an outlier with respect to satisfaction for studying arrangements ( $M=3.7$ ). Also, XI EB is moderately satisfied with  $M=3.43$ . On the other hand, XII EB was most unsatisfied. Hence, significant difference regarding studying

arrangements was reported between O' level and XII EB. This raised question about satisfaction of O' level and dissatisfaction XII EB. Why such students think like that? School administration should explore further to improve environment of the school.

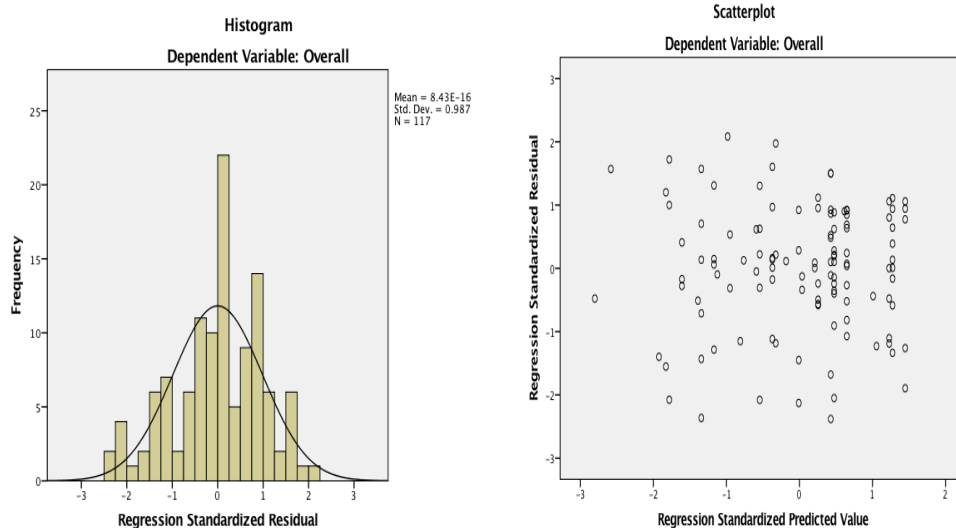
## Regression

Having obtained information about the overall satisfaction of students, the QEC team would have also liked to know how much variation in the satisfaction scores is explained by students' perception regarding their college's reputation controlling for gender and 'pre-admission quality rating'.

Simple linear regression was performed to examine the relationship between dependent variable (overall satisfaction) and independent variables (perception of students regarding their college's reputation controlling for gender and 'pre-admission quality rating'). The below scatter plot and histogram show strong positive linear relationship between the both variables. Pearson coefficient confirmed that this relationship was because of the variable "pre admission quality rating" with coefficient .508 and  $p = .001$ . Simple linear regression indicated significant relationship between dependent and independent variables ( $p < 0.001$ ). The scatterplot and histogram showed that residuals were normally distributed and data meet the basic assumptions of simple linear regression like homoscedasticity, normality of residuals, no or little multi-co-linearity and no autocorrelation.

Furthermore, value of  $R^2$  was .343, which indicated the strength of model that three independent variables "college's reputation", "gender and "pre-admission quality rating" could explain 34% variation. However, this means that 66% is still unexplained. Addition of other independent variables could improve model fit.

Additionally, this along-with sig value .001 and Durbin Watson 1.928 is high so it can be said that predications from regression equation were reliable.



The results of different tests such as; ANOVA, R square, coefficients, histogram and scatter plot showed that it was good model fit. 34% variation could be explained by only three variables. The histogram and scatter plot showed almost normal distribution, which was confirmation of the reliability of the instrument and data. In conclusion, ANOVA was carried out which shows significant relationship between dependent variables and independent variables. This shows contribution of IVs to DV, which means a good model fit.

## Discussion

This study discusses the results of the reliability test, correlation analysis, and means comparison for the QEC team's survey tool.

### **Reliability and Internal Consistency**

Cronbach's alpha was used to evaluate the survey tool's reliability; the results showed a strong overall dependability score of 0.924. This implies that institutions of comparable calibre (Kesavaraj & Felisiya, 2024) can consistently understand the instrument. The majority of the variables exhibited strong reliability; however, the Educational Guidance dimension (Cronbach's alpha score of 0.501) was somewhat below acceptable. However, taking just one particular item raised the score to 0.528, suggesting that it may be better. This result is consistent with earlier studies by Pellas (2020), which showed comparable correlations between the variables.

### **Correlation**

A correlation research was conducted to examine the relationship between teaching and learning and assessment, and the QEC team found a significant association between these two factors. The results showed a strong positive correlation between students' satisfaction with assessment and teaching and learning ( $r_s = .622^{**}$ ,  $p = 0.001$ ). When the null hypothesis was disproved, it became clear that there is a significant correlation between students' attitudes towards evaluation and teaching and learning.

### **Comparing Means (Independent Sample t-test and Mann-Whitney)**

The purpose of the means comparison was to examine if the school community's perception of boys and girls' attitudes towards their academics was the same. It was discovered that there were no appreciable disparities between males and females in any area pertaining to their academic pursuits or the opinions of the school community after dissecting each thing independently.

The QEC team's survey instrument demonstrated dependability and consistency. However, the reliability test, correlation analysis, and means comparison disproved several of the presumptions on the connection between instruction, learning, assessment, and student satisfaction. The QEC team may use these results to pinpoint the institution's advantages and disadvantages as they seek to raise academic standards. It is essential to acknowledge that these results are situation-specific and that caution should be exercised when extrapolating them to other circumstances.

The high degree of dependability and the correlations among many components of the instrument indicate that it may be used effectively in comparable scenarios. In an effort to improve the environment, the findings also make it necessary for college and school administrators to investigate the reasons for the high levels of satisfaction among O level students and the low levels of XII EB students. It's interesting to note that gender had no effect on the relationships under investigation—both boys and girls expressed similar happiness. In a research on student happiness and gender disparities in the classroom, Dang (2016) came to similar results.

### **Key findings from Regression**

The significant positive linear relationship between students' perception of institutional reputation and their satisfaction levels, particularly driven by the pre-

admission quality rating variable. The model demonstrated significant explanatory power, with 34% of the variation in satisfaction scores explained by the included independent variables of college reputation, gender, and pre-admission quality rating.

## Conclusion

The findings of this research shed light on the multifaceted nature of students' satisfaction towards educational provisions and environment. Through a comprehensive survey encompassing eight dimensions of educational experience, namely Educational Guidance, Studying Arrangements, Nature of Studying, Teaching and Learning, Assessment, Attitude towards Students, Premises, and Library, this study aimed to gauge the perceptions and preferences of students enrolled in various programs.

Overall, the results indicate a nuanced understanding of student satisfaction, with variations observed across different dimensions and examination boards. Educational Guidance emerged as a crucial aspect, indicating that students highly value clear guidance and support in navigating their educational journey. Studying Arrangements, Teaching, and Learning were also significant factors influencing satisfaction, emphasizing the importance of well-organized learning environments and effective teaching methodologies.

Furthermore, the study revealed noteworthy differences in satisfaction levels among students enrolled in different examination boards. While similarities were observed in certain dimensions, such as Assessment and Premises, variations were evident, underscoring the impact of institutional policies and practices on student satisfaction. These differences highlight the need for tailored approaches to address the specific needs and preferences of students within each examination board.

The reliability analysis demonstrated the robustness of the survey instrument, providing confidence in the validity of the results. Correlation analyses revealed associations between various dimensions of student satisfaction, offering insights into the interrelated nature of educational experiences. Additionally, inferential statistical tests, including T-Statistics, Mann-Whitney, ANOVA, and regression, provided valuable insights into the factors influencing students' perceptions and satisfaction levels.

In conclusion, this research contributes to our understanding of students' satisfaction towards educational provisions and environments, offering valuable insights for educators, administrators, and policymakers. By addressing the identified areas of concern and leveraging the strengths of each examination board, educational institutions can enhance the overall quality of educational experiences and better meet the needs of their diverse student population. Future research endeavors may delve deeper into specific dimensions of student satisfaction and explore innovative strategies for improving educational outcomes in the digital age.

The Overall excellent reliability showed that the tool could be implemented consistently at similar level institutions with similar population. There is strong correlation between teaching, learning, and assessment which means student, which are satisfied with teaching and learning are satisfied with, practices. Mean results: Showed that no significant change between attitude of the boys and girls (boys ( $M=3.24$ ,  $SD=1.36$ ) and girls ( $M=3.22$ ,  $SD=1.19$ )). It was concluded that, O level student were more satisfied with respect to BISE. All assumption of ANOVA such as, homoscedasticity, independence of cases were met. The analysis shows that O' level appears as an outlier with respect to satisfaction for studying arrangements ( $M=3.7$ ). In addition, XI EB is moderately satisfied with  $M=3.43$ . On the other hand, XII EB was most unsatisfied. The results of this study confirmed the reliability of the instrument used and data.



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