

# Applications of Non-Parametric Techniques on Factors Associated with the Life Satisfaction of students: A case study of the University of Sindh Jamshoro

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## **KEYWORDS**

*Chi-square test.  
Family status  
Life satisfaction  
Mental health  
Quality of teaching  
Recreation  
Skills development  
Sports facilities*

## **ABSTRACT**

Satisfaction is a well-documented subject in the academic setting; student satisfaction data helps colleges and universities to make their curriculum more relevant to the needs of a development forum. The life satisfaction of students could be related to several factors that affect the satisfaction of the students. This research aimed to determine the influence of specific factors on the life satisfaction of students in the university. The survey was conducted at the University of Sindh Allama I.I. Kazi Campus, Jamshoro, in 2019. The sample size of the study consists of 400 samples and students at the University of Sindh Jamshoro were taken as research samples. The response of students was measured through a questionnaire on a 3-point Likert scale through stratified sampling. Using the Chi-Square test, Spearman rank correlation and the data analysis indicate that the variable of life satisfaction is associated with the variables: quality of teaching, skills development of students and recreation and sports facilities. In addition, the Spearman rank correlation indicates the positive relationship of life satisfaction with family status and the mental health of students. Furthermore, the last Mann-Whitney, U- Test result reveals that male students are more satisfied than female students at university. The findings of the study reveal that the quality of teaching that students acquire at their institutions/departments, skills development that students learned through their studies, and recreation and sports facilities have a significant effect on the satisfaction of students in the university. It is also found that there is a strong and positive relationship of the life satisfaction of students with their family status and mental health. Furthermore, it is also concluded that male students are more satisfied as compared to female students.

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## **Introduction**

Life satisfaction is the way by which people express their emotions, moods, and feelings about their directions and opportunities for the future. It is a measure of comfort estimation in terms of mood; satisfaction with relationships, goals achieved, and self-reported skills to manage one's day-to-day life. Satisfaction is a well-documented subject in the academic and non-academic setting. In an academic setting, student satisfaction data helps colleges and universities to make their curriculum more relevant to the needs of a development forum (Eyck, Tews & Ballester, 2009;

Witowski, 2008). People with a high level of life satisfaction are happier and more successful in their relations with other people, in terms of their physical functions and the workplace. Moreover, they live longer, earn more money, and look after diseases better (Lewis, 2010).

Education plays a vital role in the progress and satisfaction of students. In education, higher education is even more essential as all the professionals are created by higher education. Every country is struggling to develop such institutions which

produce high-quality professionals in every department. The achievement of higher education institutions depends upon the satisfaction of their students and this satisfaction is used by these institutions to find out their durability and flaws. The satisfaction of students does not depend only on the teaching but also depends upon a large analysis of the factors that influence the satisfaction of the students with their institutions as well as their programs.

Satisfaction of students with their university is very essential and for this purpose, several types of estimations are taking place in universities. Students at university are a significant part of the young adult population, they feel an unfamiliar environment that usually includes increased workload and stress and changes the method of life, which are significantly involved of unhealthy lifestyles or low life satisfaction. Graduate students have many tasks and hold multiple responsibilities, they are faced with academic pressure from their tough workloads and multiple challenges related to a unique environment, so they struggle to “balance” their lives (Evans & Kelly, 2004). Satisfied students put more effort into their studies by attending regular classes and becoming more engaged in their courses and institutions and continue their studies than unsatisfied students, who are likely to be less willing to attend their courses regularly and are more likely to leave their studies (Jamelske, 2009; Borden, 1995).

Students with a high level of life satisfaction benefit from numerous positive results, including a higher level of social support from all sources, a lower level of stress compared to those with normal satisfaction, and low life satisfaction (Suldo and Huebner 2006).

Gilman and Huebner (2006) found that the high level of life satisfaction among youth is positively related to the grade point average (GPA), social relationships, paternal relationships, and hope and to be negatively associated with immoral behavior about institutions and teachers, social stress, anxiety, and depression. Given the importance of satisfaction levels of students in higher education institutions, there is a growing focus on the factors that affect satisfaction of the students. Life satisfaction of students could be related to several factors, including grades achieved, friendships grew, school facilities and opportunities to take part in extracurricular activities. Satisfaction of students is conversely related to the complaints of students regarding counseling, career preparation, and the demand for innovative studies or the effectiveness of current courses. Some factors of life satisfaction among university students are customs, gender, and social demographic factors such as financial worries, worries about future careers and personal illness, which are more generally influence life satisfaction of students. Secondary school students who are more satisfied with their lives have a positive perspective on their teachers and school (Mok & Flynn, 2002). Perceptions of students about the quality of the classroom environment play an essential role in their perceptions of school life satisfaction, as supported by scientific studies (Gilman & Huebner, 2006). Engagement of students in school plays a vital role in influencing succession and results, including academic achievements and confidence in the classroom can positively influence the life satisfaction of students. Additionally, relationships with other classmates also affect a student's life satisfaction. Students study more effectively and feel secure in a free and lenient environment (Sahin &

Ozbay, 1999). According to the opinion of students, education with superior quality contributes to better learning opportunities and the levels of satisfaction or dissatisfaction influence the student's success or failure of learning (Aldridge and Rowley, 1998).

To determine the satisfaction of students at the university level, numerous studies have been performed in established parts of the world. A range of factors have been discovered that can influence the students' satisfaction with numerous education services offered by the universities. In an academic department, the satisfaction of students is a short-term approach based on an estimate of their experience with the educational service offered (Elliott et al. 2001). School environment and school friendships are the key factors that influence the life satisfaction of students (Mok and Magdalena Mo Ching (2002). Grayson and J. Paul (2004) indicate in findings that professor's satisfactory performance over time and good GPA of students are factors enhancing the academic program satisfaction and, in the results, good grades and academic performance has an influence on the satisfaction of students. The most key factors that affect the satisfaction levels of students are academic work, time management, and university relationships (Grace et al., 2005). Social support, optimism, balances in life, and spirituality played a significant role in life satisfaction (Sturhahn Stratton et al., 2006). Sari et al. (2007) concurred that the greatest measure of life satisfaction of students is a safe environment of educational institutions, this leads to a high level of life satisfaction. The positive feelings of students towards the school and teachers increase their life characteristics and thereby the satisfaction with the school increases. Positive physical

conditions also affect their life satisfaction as it involves the students in school (Sari, 2007).

The female recorded a high level of psychological distress in comparison to their male fellows, some factors such as stress, and social and emotional aloneness significantly predict mental health in both male and female students (Grace and Engen, 2008). Sapri et al. (2009) examine that among the accommodation and social facilities, support facilities, teaching and learning facilities, and environmental services, the teaching and learning factors are the most significant factors influencing levels of satisfaction in students. Students are satisfied with higher education in Pakistan, but the degree of satisfaction varies between men and women. According to this study, the most affecting factor on the life satisfaction of students is the expertise of teachers, the next principal factors are courses provided, and the learning environment, and the smallest of all variables is school facilities (Kashif Ur Rehman and Babar Zaheer Butt, 2010). The quality of the academic structure is a crucial factor for satisfaction of students in Turkey. In addition, the responsiveness of staff to requirements of students influenced strongly on satisfaction of students (Zineldin et al. (2011).

Willcoxson et al. (2011) noted subjective factors, such as lack of school or social integration, institutional factors, such as the quality of teaching and interactions between staff and students are most influential and important in determining satisfaction of students. The failure of administrative support, dissatisfaction of students with provided resources like the laboratories, internet, libraries, medical services, banking, and other facilities have

an impact on life satisfaction of students (Muhammad Nauman Abbasi et al., 2011). The main motivating factors of the students are courses division between several semesters, group work, brainstorming exercises during the semesters, and assessment of the personality of the students. Communication between teacher and student is an effective positive factor in life satisfaction of students. However, some of the discouraging factors, according to this research, the lack of teacher training, and the misuse of teacher's power (Hassan Danial Aslam et al., 2012). Hasnain Manzoor (2013) imposed that the sports and transport facilities have a significant impact on satisfaction of students in universities. The students from urban areas or wealthy families were certainly not more satisfied with current life than students from rural or low-income families (Jie Zhang et al., 2014). The schools with physical attraction, functional administrative groups and teachers, safe atmosphere and, the confidence level of the students lead to greater satisfaction in the lives of students (Ugur DOGAN and Eyup CELIK, 2014). Transport facility, the medical facility, examination system, teacher's expertise, library facility and learning environment are found to be affecting factors for satisfaction of students (Saeed Hussain et al., 2014).

By using the National Student Survey for UK universities Lenton (2015) has shown in his study that satisfaction of students varies with the field of study. Significantly, factors such as staff-to-student relations were found to have a strong influence on the satisfaction of students. Engineering, medical, and social sciences students are at risk for depression, anxiety and stress, and life satisfaction has a highly significant negative correlated with depression, anxiety, and stress (Haresh

Kumar et al., 2016). The students in Australia are well supported by the university and are satisfied with most of the characteristics of their educational experience. But, students of non-English speaking circles, or who are handicap are found to have lower levels of life satisfaction beyond most dimensions (David R. Carroll and Ian W. Li, 2017). Ezenna Michael Agwu et al. (2017) indicate that the relationship between health status and psychological behavior in the sample varies between male and female students (primary effect). The health of female students is not good compared to that of male students. There is a link between life satisfaction and self-esteem in female and male students.

The level of self-esteem influences the satisfaction of life because high self-esteem enhances a high level of satisfaction in life. The residence (rural & urban) effect was considered to have a significant effect on satisfaction of life. Urban students find themselves more satisfied because they consume more resources and facilitate than rural students (Ashok Kumar Patel et al., 2018). Achkar et al. (2019) described in study that students with more social skills and social support from friends, family, teachers, and the community achieve better academic results. Satisfaction of international students studying in China is certainly influenced by the quality of the courses provided, the major use of English language to communicate at all levels, development of support services, and services of counselling (Jiang et al., 2020).

Analysis of life satisfaction of students is important in discovering whether university authorities are completing their duties properly regarding satisfaction of students. The main reason for conducting this research is that this kind of research has

not been executed before in this area. The present research focused on some factors which are: the quality of teaching, skill development learned through studies, recreation, and sports facilities, family status, and mental health to investigate whether these factors influence the life satisfaction of students or not. Study also includes the comparison of satisfaction levels of male and female students.

### Methodology

To examine the relationship between students' satisfaction and factors like quality of teaching, skills development, recreation and sports facilities, family status, and mental health questionnaire were designed to collect primary data. The reliability of the questionnaire was checked through Cronbach's Alpha ( $\alpha$ ) which proved the questionnaire excellently reliable. In the process of collecting samples, the 400 samples are distributed in eight faculties of university according to population of each faculty by using weighting method. The stratified sampling technique is used to select representative samples of respondents from each faculty. For calculating the results of questionnaire simple means, standard deviation, and frequencies were considered. To find out the relationship between variables, Spearman rank correlation was applied. Mann Whitney U-Test was also used to compare the satisfaction level of male and female students. For testing hypotheses Chi-Square test of independence was applied. The statistically significant test is considered at  $P < 0.05$ .

### Results And Discussions

The purpose of this research is to explore the association of various factors with the life satisfaction of students. Moreover, the level of satisfaction between and female

students is also studied. To achieve the objectives of the research various tests are performed and results are summarized below:

**Table 1: The association of variables with life satisfaction of students (Chi-Square test).**

Variables	Chi-square test	df	P-value
Life satisfaction and quality of teaching	54.262	2	0.001
Life satisfaction and skills development	35.507	2	0.001
The life satisfaction and Recreation and Sports facilities	3.690	2	0.471

A Chi-Square Test of Independence was performed to assess the relationship between life satisfaction and quality of teaching. There was a significant relationship between the two variables,  $\chi^2(2) = 54.262$ ,  $p = 0.001 < 0.05$ . Chi-square test also found a significant association between life satisfaction and skills development,  $\chi^2(2) = 35.507$ ,  $p = 0.001 < 0.05$ . Test also revealed a non-significant relationship between life satisfaction and recreation and sports facilities,  $\chi^2(2) = 3.690$ ,  $p = 0.471 > 0.05$ .

**Table 2: Results of Correlation between study variables.**

Variables	Correlation Coefficient	P-value
Life satisfaction and family status.	0.925	0.001
Life satisfaction and mental health.	0.977	0.001

The above table reveals the results of rank correlation for student satisfaction. It is clear from the results that there is a strong correlation between Life satisfaction and family status,  $r = .925$ ,  $p < .005$ . This study also found a strong correlation between Life satisfaction and mental health,  $r = .977$ ,  $p < .005$ . Both variables are positively related to student's satisfaction. The results support the developed hypotheses therefore we accept these hypotheses.

**Table 3:** Table 2: level of satisfaction between male and female students (Mann-Whitney U test).

Level of satisfaction	Test value	P-value
	377.5	0.14

Mann Whitney U-test is applied to measure the satisfaction level of male and female students. A statistically significant difference was found between the two categories. The male has a higher mean rank (40.40) than the female with a mean rank (28.60), it indicates that the male students are more satisfied at university as compared to the female students.

### Conclusion And Recommendations

The present study concludes that the quality of teaching and skills development that students learned through their studies has influence on the life satisfaction of students while the recreation and sports facilities have not significant effect on the satisfaction of students. It is also concluded that there is a strong and positive relationship of life satisfaction with family status and mental health of students. This study also indicates that the level of satisfaction of male students is higher than the female students at university. University authorities should pay particular attention to the recruitment of more trained, skilled, and knowledgeable teachers to promote quality education. Teaching techniques and methods should be up-to-date, and courses should be planned to confirm the current challenges and demands of the marketplace. Efforts should be made to improve learning possibilities, and sound and interactive communication should be demonstrated between students and teachers/administration to provide them with all the necessary information about the program, offers and possibilities. University authorities should pay attention to facilitating students with seminars/ libraries and computer laborites and they should be well-equipped and up to date so that students get help for their studies. The environment of university should be comfortable for female students also, so that their level of satisfaction will increase.

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