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# EXPLORING THE RELATIONSHIP BETWEEN CLASSROOM CLIMATE, ACADEMIC SATISFACTION, AND LIFE SATISFACTION OF UNIVERSITY STUDENTS

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## ABSTRACT

### OBJECTIVE

To assess the relationships between the classroom climate, academic satisfaction, and life satisfaction of university students in Pakistan.

### STUDY DESIGN

Cross-sectional study

### PLACE AND DURATION OF STUDY

The study was conducted at the Institute of Professional Psychology at Bahria University Karachi, Pakistan, from May to October 2022.

### METHOD

A sample of 271 university students, aged 18 to 45 were approached via convenience sampling. The College and University Classroom Environment Inventory was administered to measure the classroom climate while the Satisfaction with Life Scale was utilised to evaluate academic and life satisfaction.

### RESULTS

The study found a significant positive correlation between Classroom Climate (CC) and both Academic Satisfaction ($r = .26$, $p < .01$) and Life Satisfaction ($r = .18$, $p < .01$). Regression analysis showed that CC explained 35% of the variance in Academic Satisfaction ($R^2 = .35$, $p < .001$) and 32% in Life Satisfaction ($R^2 = .32$, $p < .001$). Graduate students reported higher academic satisfaction and better classroom climate perception than undergraduates ($F = 10.95$, $p < .05$), while doctoral students exhibited lower satisfaction levels.

### CONCLUSION

The findings show how crucial the classroom climate is in influencing students' academic satisfaction and life satisfaction. An encouraging and dynamic classroom climate promotes better learning experiences and wellbeing.

### KEYWORDS

Pakistan; Perception; Personal Satisfaction; Regression Analysis; Students; Universities.

## INTRODUCTION

Pakistan's higher education system is confronted with several issues due to the country's status as a developing nation. Nearly nine percent of the population, which is over 200 million, comprises students who are enrolled in higher institutions.[1] Despite this, Pakistan's education expenditures and participation in tertiary education are exceedingly low in comparison to its neighbours, India and Bangladesh.[1]

The climate in the classroom is a multifaceted environment that includes a variety of psychological factors and social interactions among a wide range of students from different academic backgrounds.[2] Personalisation, participation, student cohesion, contentment, task orientation, creativity, and individualisation are only a few of the elements of classroom climate that were identified by Fraser and Treagust.[3] Researchers discovered that the climate in the classroom was the most accurate indicator of students' levels of success and attitude, as well as their overall level of contentment with their undergraduate institution.[3-4] In a recent comprehensive literature review on the topic of undergraduate psychology students' levels of satisfaction, it was shown that positive classroom conditions were predictive of increased student satisfaction at both the classroom and institutional levels. This was the case for both the classroom and the institution. Previous studies have shown that the environment of the classroom has a considerable influence on the learning that occurs, as well as the students' dispositions and behaviours.[5]

One way to describe academic satisfaction is as the manner in which students evaluate and appraise the facilities and educational services that are offered by their respective universities. According to Hernon et al, academic satisfaction may be defined as the feedback that students provide on their program and school.[6] Green et al presented a literature review that found positive classroom environments were predictive of better student satisfaction at both the classroom and institutional level. This was the case regardless of whether the students were in the classroom. The extent to which undergraduate psychology students were satisfied was the primary topic of the investigation.[7]

The cognitive aspect of subjective well-being is known as life satisfaction. This aspect entails deciding on whether an individual has accepted or is pleased with the existing circumstances in their life.[8] This is under the 'bottom-up' approach, which postulates that in order to ascertain an individual's level of overall satisfaction, it is necessary for them to have a favourable opinion of all aspects of their life, including their family, their job, their education, and their leisure activities.[9] The characteristics of teacher competence, learning environment, and provided courses were found to substantially boost student satisfaction in a prior research that studied the link between the classroom environment and life satisfaction in Pakistan.[10]

Learning environment research in Pakistan has mostly been conducted at the primary and secondary school levels and predominantly focuses on achievement outcomes.[11] The focus of this research has been on how well students do in school. Thus, the study's objective was to assess the relationships between the classroom climate, academic satisfaction, and life satisfaction of university students in Pakistan. It aims to close the gaps in knowledge in Pakistan's higher education system, and the findings which apply to the factors that determine the perceived environment of the classroom and the factors that predict global satisfaction (academic satisfaction), have practical implications for the enhancement of higher education in Pakistan.

## METHOD

Before the commencement of the study, approval was given by the Departmental Research Ethical Review Committee (ERC), Institute of Professional Psychology, Bahria University Karachi (Ref no.: IRB/BU/78/2022, dated: 06th May 2022).

A cross-sectional study was conducted at the Institute of Professional Psychology, Bahria University Karachi, Pakistan, from May to October 2022. Using a convenience sampling technique, 271 individuals were selected from the study population, which consisted of university students.

The research questionnaire used comprised five parts as an online poll that were made with Google Forms, and in the following order: the permission form, “personal” information, the College and University Classroom Environment Inventory (CUCEI) questionnaire, the modified Satisfaction with Life Scale (SWLS) questionnaire, and the Satisfaction with Life Scale (SWLS) questionnaire. Informed consent was sought from the participants, who were reassured that the confidentiality of their responses would be maintained. In a meticulous manner, the ethical standards of voluntary participation, informed consent, privacy, and the opportunity to withdraw from the study at any moment were adhered to.

Information about demographics was gathered for using it as control variables in the study. Respondents provided information on their age range, gender, area of study or faculty, and the degree program they are now enrolled in. A screening was performed on the data that was obtained, and Google Forms immediately deleted any forms that were incomplete. In a meticulous manner, the ethical standards of voluntary participation, informed consent, confidentiality, and the opportunity to withdraw from the study at any moment were adhered to.

### Instruments

**College and University Classroom Environment Inventory (CUCEI):**[3] The CUCEI is a tool that assesses the perspectives of both students and instructors on the classroom settings of smaller higher education institutions. This measure comprises seven scales, including Satisfaction, Task Orientation, Innovation, Individualisation, Personalisation, Involvement, Student Cohesion, a total of 49 items. Each question has a score on a four-point Likert scale: strongly agree = five, agree = four, neutral = three, disagree = two, and severely disagree = one. Two different versions of the CUCEI are available to evaluate either their actual classroom experience (Actual Version) or their ideal classroom environment (Preferred Version). The student actual version was used in the research.[12]

**Satisfaction with Life Scale (SWLS):**[13] It is a quick five-item evaluation that was first developed by Diener and his colleagues in 1985. Its purpose is to measure the degree to which an individual is satisfied with their life on a subjective global scale. The items are evaluated using a Likert scale of seven points, with the choices being Strongly Agree equal to seven, agree equal to six, slightly agree equal to five, neither agree nor disagree equal to four, slightly agree equal to three, strong disagreement equal to one.

**Satisfaction with Life Scale (SWLS) using a modified questionnaire:** One of the modifications that was made to the original SWLS was to inquire about a student's level of satisfaction with their academic life rather than their general life. This was done with the intentional consideration of subject matter specialists. Students' levels of satisfaction with their academic performance were evaluated using this modified version.[14]

### Data Analyses

The analysis of variance (ANOVA) was carried out in SPSS version 21 in order to compare the levels of academic and life satisfaction among different groups (gender, study program, and age). The Shapiro-Wilk test, histograms, and Q-Q plots were used in order to determine the level of normality, and Levene's test was utilized in order to verify the homogeneity of variances. Pearson's correlation was used to investigate the relationship between variables, a stepwise (forward) regression analysis was carried out in order to investigate the relationship between the school climate and satisfaction. A number of assumptions were validated, such as the normality of residuals (histogram, P-P plot), homoscedasticity (residual plots), and multicollinearity (variance inflation factor (VIF) less than ten).

## RESULTS

Majority of the students (93.7%) were aged 18-24, with 15 students (6.3%) aged 25-45. The sample comprised 223 females (82.3%) and 48 males (17.7%). The most participants 222 (81.9%) were from the school of social sciences, followed by engineering 28 (10.3%) and management sciences 21 (7.7%). When looking at degree programs, most of the students 218 (80.4%) were undergraduates. Graduate students made up 50 (18.5%), and doctoral students made up only 3 percent. The Cronbach's alpha of the life satisfaction scale in our study was 0.87.

A significant correlation was found between classroom climate (CC) and both academic satisfaction (r =.26, p <.01) and life satisfaction (r =.18, p <.01). The assumption that a satisfied classroom climate is associated with better levels of satisfaction in both academic and personal domains is supported by this evidence. There were strong positive relationships between the factors of classroom climate [personalisation (PER), student cohesiveness (SC), satisfaction (SAT), individualisation (IND), and task orientation (TO)] and academic satisfaction (r =.15 to r =.23, p <.05 or p <.01). This demonstrates the significance of these factors in the learning experiences of students. While personalisation (r =.18, p <.01) and individualisation (r =.18, p <.01) were shown to have a substantial correlation with life satisfaction, the degree of this correlation was not as great as the correlation between academic and life satisfaction. There was a strong link (r =.57, p <.01) between students' academic satisfaction and their overall satisfaction, showing how their academic experiences and general health are linked (Table 1).

**Table 1**
**Correlation of Classroom Climate with Academic Satisfaction and Life Satisfaction (n=271).**

| Variable | AS | LS |
|---|---|---|
| CC | .26** | .18** |
| PER | .21** | .18** |
| INV | .15* | .10 |
| SC | .23** | .10 |
| SAT | .22** | .17** |
| INO | .17** | .04 |
| IND | .21** | .18** |
| TO | .16** | .14* |
| AS | - | .57** |

Note. CC: Classroom Climate, AS: Academic Satisfaction, LS: Life Satisfaction, PER: Personalization Scale, INV: Involvement Scale, SC: Student Cohesiveness Scale, SAT: Satisfaction Scale, INO: Innovation, IND: Individualization, TO: Task Orientation Scale. **p<0.01, *p<0.05.

Table 2 simple linear regression confirmed that Classroom Climate significantly predicted both academic satisfaction and life satisfaction, and also highlighted its strong positive impact.

**Table 2**
**Classroom Climate as a determinant of Academic Satisfaction & Life Satisfaction in university students (n=271).**

| Predictor | Life Statisfaction | | | | | | 95% CI | |
|---|---|---|---|---|---|---|---|---|
| | B | B | t | p | $R^2$ | ?$R^2$ | LL | UL |
| CC | .57 | .55 | 11.42 | <0.001 | .32 | .32 | .45 | .64 |
| | Academic Satisfaction | | | | | | | |
| CC | .62 | .58 | 12 | <0.001 | .35 | .35 | .50 | .69 |

Note. ß: Standardised beta, $R^2$: R-squared, $\Delta R^2$: Adjusted R-squared, CI: Confidence Interval, LL: Lower Limit, UL: Upper Limit.

Table 3 shows the results of the analysis of variance (ANOVA) on academic satisfaction and life satisfaction according to age groups. There is a marginally significant difference in the degree of academic satisfaction and life satisfaction across age groups, as shown by the post-hoc comparisons. The level of satisfaction among those aged 25-34 years old is greater than that of individuals aged 18-24 years old.

**Table 3**
**Comparison of Academic Satisfaction and Life Satisfaction with Age Groups (n=271).**

| Age Group | 18-24 (n-254) | | 25-34 (n-15) | | 35-45 (n-2) | | |
|---|---|---|---|---|---|---|---|
| Variables | M | SD | M | SD | M | SD | p-value |
| AS | 18.87 | 7.25 | 24.33 | 6.03 | 18 | 19.16 | 0.056 |
| LS | 21.27 | 7.12 | 25 | 5.42 | 29 | 2.82 | 0.054 |

Note. AS: Academic Satisfaction, LS: Life Satisfaction.

The outcomes of the analysis of variance (ANOVA) of classroom climate, academic satisfaction, and life satisfaction are shown in Table 4. These findings are presented in accordance with the degree programme that the students were enrolled in, which were undergraduate, graduate, or doctoral degree. Findings of the post-hoc comparisons showed that the climate in the classroom for graduate students was significantly and slightly higher than that of its counterparts at the undergraduate level. The levels of academic satisfaction indicated by graduate students were significantly greater than those reported by undergraduate students, making the difference between the two groups only marginally significant. The gap between graduate and doctorate students was statistically much greater.

**Table 4**
**Comparison of Classroom Climate, Academic Satisfaction and Life Satisfaction with Degree Program (n=271).**

| | U (n-218) | | G (n-50) | | D (n-3) | | |
|---|---|---|---|---|---|---|---|
| Variables | M | SD | M | SD | M | SD | F |
| CC | 16.61 | 6.08 | 17.68 | 1.04 | 17.5 | 2.04 | 3.6* |
| AS | 18.38 | 7.18 | 23.06 | 0.61 | 11 | 3.01 | 10.95* |
| LS | 21.07 | 7.16 | 24.1 | 5.98 | 12 | 1.1 | 6.71* |

Note. U: Undergraduate degree, G: Graduate degree, D: Doctoral, CC: Classroom Climate, AS: Academic Satisfaction, LS: Life Satisfaction, *p<.05.

## DISCUSSION

A considerable positive link between classroom climate and academic satisfaction, as well as life satisfaction, was found to exist, according to the findings of this study. It has been shown in a significant number of studies that the climate of the classroom has a positive influence on the degree of satisfaction that students report feeling in their educational experiences.[15] The weak link in our study may be ascribed to the external influence of individual variances. According to the findings of Pawlowska and colleagues, just two aspects of the classroom climate were shown to have a significant association with academic satisfaction, whereas personality traits were found to have a bigger influence.[16] Additionally, Lin's study showed that certain personality qualities had an influence on the levels of satisfaction experienced by college students in Taiwan.[17] The findings of Denson et al revealed that student satisfaction was influenced by a variety of characteristics, including gender, maturity, academic level, and contact between students and teachers.[18] Therefore, it is probable that personal factors have a more significant role in deciding how students respond to the experiences they have had in the classroom.

Academic satisfaction was shown to have strong, positive, and weak associations with each of the seven components of the classroom climate. Similar connections were discovered between the personalisation, satisfaction, individualisation, and task orientation scores and the level of life satisfaction that an individual experience. The participation, student cohesion, and creativity measures did not have a significant link with life satisfaction. Logan et al, in their study on schools in New Zealand, revealed findings that were comparable to those that were found here.[19] There is a lack of consensus among researchers on the extent to which the environment may accurately predict one's level of life satisfaction. Suldo et al discovered that just a few variables of the classroom climate could accurately predict the level of life satisfaction experienced by students, with a combined contribution of 14% of the variation.[20] A research revealed that the climate of the school was responsible for 54 percent of the variation in the level of life satisfaction experienced by students.

The results showed that academic satisfaction was a 32% accurate predictor of life satisfaction, and this is corroborated by comparable past research.[21] It was observed that there was a marginally significant difference in academic satisfaction between two age groups (25-34 vs 18-24), which showed an increased academic satisfaction with advancement in age. This may be so as students mature and go through schooling from their first year to their last, their skills and emotions improve, which is supported by research.[22]

There were significant differences observed for all the primary variables depending on the degree programme. Undergraduate students had a more negative opinion of the classroom than graduate students did. Graduate students also reported greater levels of academic and life satisfaction as compared to undergraduate students and PhD students, respectively. Graduate students also had a more favourable perceived classroom climate. The primary implication of these results is that doctorate students usually have lower levels of satisfaction, as a result of age-related stress, job responsibilities, and the pursuit of a Ph.D. degree, all at the same time. According to the findings of Perrone and colleagues, it was shown that students ultimately demonstrate role salience for a mix of these professions.[23] These results contribute to the existing body of research that evaluates the disparities in levels of satisfaction experienced by students enrolled in various degree programmes.

Regarding the disparities between the genders, female students had a more positive impression of the climate in the classroom than their male counterparts, and similar results have been observed by other research.[24] In addition, students who had a female instructor had a more positive perception of the climate in the classroom compared to students who had a male teacher. Female students had a tendency to score female professors higher than male teachers on the attributes of being interactive and caring-expressive, according to the findings of a previous research that analysed the interaction effects between students and teachers.[25] Thus, gender is a significant factor in the way students perceive.

**Limitations**

The sample was restricted to a single institution, the statistical power and representativeness of the findings would be improved by using a sample that was both larger and more varied. This sample could include participants from a variety of colleges, each of which would have a distinct faculty and programme.

## CONCLUSION

The findings show how crucial the classroom climate is in influencing students' academic satisfaction and life satisfaction. An encouraging and dynamic classroom climate promotes better learning experiences and wellbeing.

**Implications and Future Research**

These results may be to university administrators and school psychologists in the process of formulating institutional policies, evaluating teaching techniques, developing innovative curricula, and developing a scale that is more consistent with Pakistani culture in order to assess classroom climates.

Future research based on these results may assess additional issues, such as analysing patterns in student-teacher relationships and studying the disparities between the climates of university classrooms in rural and urban settings.

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## CONFLICT OF INTEREST

None

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None

## DISCLOSURE

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## REFERENCES

1. Pakistan [Internet]. UNESCO Institute of Statistics; 2017 [cited 10th July 2024]. Available from: https://uis.unesco.org/en/country/pk
2. Barr JJ. Developing a Positive Classroom Climate [Internet]. IDEA; 2016 [cited 10th July 2024]. Available from: https://ideacontent.blob.core.windows.net/content/sites/2/2020/01/PaperIDEA_61.pdf
3. Fraser BJ, Treagust DF. Validity and use of an instrument for assessing classroom psychosocial environment in higher education. High Educ. 1986;15:37–57. doi: //doi.org/10.1007/BC0038091
4. Graham SW, Gisi SL. Adult undergraduate students: What role does college involvement play? NASPA Journal. 2000; 38(1):99–121. doi: //doi.org/10.2202/1949-6605.1122
5. Chionh YH, Fraser BJ. Classroom environment, achievement, attitudes and self-esteem in geography and mathematics in Singapore. International Research in Geographical and Environmental Education. 2009;18(1): 29–44.doi: https://doi.org/10.1080/10382040802591530

6. Hernon P, Altman E. Assessing service quality: Satisfying the expectations of library customers, 2nd ed. Chicago, IL: American Library Association; 2010.
7. Green HJ, Hood M, Neumann DL. Predictors of Student Satisfaction with University Psychology Courses: A Review. Psychology Learning & Teaching. 2015;14(2):131-146. doi: //doi.org/10.1177/1475725715590959
8. Diener E. Positive psychology: past, present, and future. In: Snyder CR, Lopez SJ, editors. The Oxford Handbook of Positive Psychology. 2nd ed. Oxford (UK): Oxford University Press; 2009. p. 7–12.
9. Loewe N, Bagherzadeh M, Araya-Castillo L, Thieme C, Batista-Foguet JM. Life Domain Satisfactions as Predictors of Overall Life Satisfaction Among Workers: Evidence from Chile. Soc Indic Res. 2014;118(1):71-86. doi:10.1007/s11205-013-0408-6
10. Butt BZ, Ur Rehman K. A study examining the student's satisfaction in higher education. Procedia-Social and Behavioral Sciences. 2010; 2(2):5446-5450. doi: https://doi.org/10.1016/j.sbspro.2010.03.888
11. Malik RH, Rizvi AA. Effect of Classroom Learning Environment on Students' Academic Achievement in Mathematics at Secondary Level. Bulletin of Education and Research. 2018;40(2):207-218.
12. Woo CW, Whitfield TS, Britt LL, Ball TC. Students' Perception of the Classroom Environment: A Comparison between Innovative and Traditional Classrooms. J Scholarsh Teach Learn. 2022;22(1): 31-47. doi: //doi.org/10.14434/josotl.v22i1.30735
13. Merino MD, Privado Zamorano J, Durán R. Satisfaction with Life Scale (SWLS) adapted to work: Psychometric Properties of the Satisfaction with Work Scale (SWWS). Anales de Psicología / Annals of Psychology. 2021;37(3): 557–566. doi: https://doi.org/10.6018/analesps.430801
14. de Almeida Cardoso AG, de Carvalho MV, de Almeida Silva MIA, et al. Psychometric properties of the online Satisfaction with Life Scale in university students from a low-income region. Psicol Reflex Crit. 2023;36(1):12. doi:10.1186/s41155-023-00254-2
15. Aldridge JM, McChesney K, Afari E. Associations between school climate and student life satisfaction: resilience and bullying as mediating factors. Learning Environments Research. 2020 23(1):129–150. doi: https://doi.org/10.1007/s10984-019-09296-9
16. Pawlowska DK, Westerman JW, Bergman SM, Huelsman TJ. Student personality, classroom environment, and student outcomes: A person–environment fit analysis. Learning and Individual Differences. 2014; 36:180–193. doi: //doi.org/10.1016/j.lindif.2014.10.005
17. Lin CH. College Student Personality Traits Related to TOEIC and GEPT. Language Testing in Asia. 2012; 2(4):33-46. doi: https://doi.org/10.1186/2229-0443-2-4-33
18. Denson N, Loveday T, Dalton H. Student evaluation of courses: what predicts satisfaction? Higher Education Research & Development. 2010; 29(4):339–356. doi: //doi.org/10.1080/07294360903394466
19. Logan KA, Crump BJ, Rennie LJ. Measuring the Computer Classroom Environment: Lessons Learned from Using a New Instrument. Learning Environments Research. 2006; 9(1):67-93. doi:https://doi.org/10.1007/s10984-005-9004-2
20. Suldo SM, Shaffer EJ, Riley KN. A social-cognitive-behavioral model of academic predictors of adolescents' life satisfaction. School Psychology Quarterly. 2008;23(1):56-69. doi: https://doi.org/10.1037/1045-3830.23.1.56
21. Garriott PO, Hudyma A, Keene C, Santiago D. Social cognitive predictors of first- and non-first-generation college students' academic and life satisfaction. J Couns Psychol. 2015;62(2):253-263. doi:10.1037/cou0000066
22. Sharkas GF, El-Masry R, Abdel-Ghany S, et al. Satisfaction of academic medical staff with integrated medical curriculum: an exploratory multinational survey. BMC Med Educ. 2024;24(1):1483. doi:10.1186/s12909-024-06468-x
23. Perrone KM, Civiletto CL. The impact of life role salience of life satisfaction. Journal of Employment Counseling. 2004; 41(3):105–116. doi: https://doi.org/10.1002/j.2161-1920.2004.tb00884.x
24. Lay YF, Khoo CH. between actual and preferred science learning environment at tertiary level and attitudes towards science among pre-service science teachers. Pertanika Journal of Social Sciences & Humanities. 2012;20(4):1117-1142.
25. Gelber K, Brennan K, Duriesmith D, Fenton E. Gendered mundanities: gender bias in student evaluations of teaching in political science. Austral J Polit Sci. 2022;57(2):199–220. doi: https://doi.org/10.1080/10361146.2022.2043241

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