# A COMPARATIVE INVESTIGATION OF INSTITUTIONAL LEARNING CLIMATE AND ITS IMPACT ON STUDENT EMOTIONAL HEALTH: PUBLIC AND PRIVATE COLLEGES

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**Abstract**

Learning climate is a crucial factor in influencing the emotional state of the student and academic achievement, especially at the secondary level where the students are being put under more academic and social pressure. This research will set out to explore how the learning climate can impact on the emotional well-being of students and their academic performance in both the colleges of the public and the private sectors. The key elements of learning climate that are considered in the current research include physical features, teacher-student interactions, peer associations, classroom atmosphere and institutional backup. Quantitative research design was used and the data were gathered using structured questionnaire that was administered to students studying in secondary level colleges. The sample used included both the students of the public and the private colleges. Data was analyzed with the help of statistical methods that were to help identify the correlation of the learning climate, emotional well-being, and academic performance. The results of the research indicated that there is a strong positive correlation between a positive learning climate and emotional well-being of students. Besides, students who were emotionally healthy presented improved performance in academics. The outcomes also showed a favorable teacher support, safe classroom climate, and productive peer interaction are the factors in reducing anxiety and improving motivation and academic engagement of students. The research finds that the positive learning climate is required to facilitate the emotional stability of the students and the academic success. It is also advisable that the educational institutions should work on generating positive, inclusive and student-centered learning conditions to improve emotional health as well as achievement.

**Keywords** Academic performance, Teacher student relationship, Learning climate, emotional well being, College students.

## INTRODUCTION

The learning climate concept has been tremendously changed in the past few decades as researchers have been investigating how different learning, psychological, and social climates influence the learning experience of students. In

a wider sense, the learning climate is the general condition, physical setting, social factors, emotional atmosphere, and teaching habits that affect the process of learning among the students (Fraser, 2015). It does not only cover the physical attributes of the classroom, but also the psychological, pedagogical and relational aspects that influence student engagement, motivation and academic performance.

Moos (1979), one of the most ancient theorists to research the educational climate, defines a learning climate as a social-ecological system that is typified by three dimensions namely: (a) relationship dimension, that contains interactions and involvement between students and teachers; (b) personal development dimension, which is typified by learning and growth opportunities; and (c) system maintenance dimension, typified by structure, order, and organization. This framework underscores the fact that learning takes place within a system that is integrated wherein social and structural characteristics predetermine the outcome of students.

On the same note, the Ecological Systems Theory by Bronfenbrenner (1994) argues that students learn in systems of varied hierarchies (microsystem, mesosystem, exosystem, and macrosystem) that imply that the classroom walls are not the only source of the education climate, but also the school policy, community, and cultural challenges. This theory emphasizes that wider educational climate brings emotional well-being and academic performance.

Besides, instructional dimension is part of the learning climate and this can be defined as the mode of pedagogical strategies, assessment practices, and teaching methods used. According to Gagné (1985), instruction is an important aspect of the climate since it aligns the learning climate in a manner that makes it facilitative to the cognition processes like attention, retention, and problem solving. Digital and virtual learning space is another part of the instructional climate in modern context and has altered the interaction and engagement.

According to Pianta, Hamre, and Allen (2012), emotionally supportive classrooms have been identified to improve students feelings of safety, anxiety and facilitate academic participation, which are characterized by warmth, responsiveness and sensitivity. Emotional climate is of particular concern in the college level, where students are exposed to a lot of academic pressure and psychological stress.

Besides, the learning climate is also considered in terms of student perception which plays a central role in their emotional and academic responses. Tobin and Fraser (1998) state that point of view on support, autonomy, fairness, and respect have a strong effect on the motivation and well-being of students. Engagement in and academic stress levels are higher and lower respectively in students who feel that their climate is supportive.

The learning climate in modern research becomes more and more determined by the concept of technology-enhanced learning when multimedia tools, online

collaboration, and digital platforms become the inseparable elements of the latter. This is an indication that this concept has now grown beyond physical classroom climate to hybrid and virtual learning climates.

As a whole, the learning climate can be viewed as a multidimensional construct and entails:

Physical climate- classroom design, lighting, resources, sound levels.

Social climate- interpersonal, feelings of belonging, teamwork.

Emotional climate -safety, support, encouragement, stress levels.

Instructional climate- teaching strategies, feedback, and classroom management.

Technological climate - online resources, online learning opportunities, blended learning.

Positive learning climate is associated with motivation, less anxiety, emotional regulation and improved cognitive functioning, whereas negative climate can result in lack of engagement, stress and poor performance.

**Emotional Well-Being**

Emotional well-being (EWB) is an established concept in the overall mental health and high-performance. It is the capacity to adaptively comprehend, handle, and express feelings by an individual that improves the living and functioning in day-to-day situations.

According to Diener et al. (2010), emotional well-being is the existence of positive emotion (happiness, interest, and satisfaction) and the relative lack of negative emotion (sadness, anger, and anxiety). This school of thought considers emotional experiences to be the focus on subjective well-being.

**Dimensions of Emotional Well-Being**

There are different models suggested by different scholars to interpret the dimensions of emotional well-being. The most common dimensions that are accepted in educational and psychological research are as follows:

- **Positive Affect**

Positive affect is defined as the pleasant affect like joy, enthusiasm, contentment, and interest (Watson, Clark and Tellegen, 1988). High positive affect increases the motivation, engagement, and academic persistence of students. Students with positive emotions more often tend to have positive attitude to studying and continue having high academic performance.

- **Negative Affect**

Negative affect encompasses anxiety, sadness, anger and stress. Although negative emotions are a normal aspect every now and then, negative affect can affect cognitive functioning, motivation to study, and mental health (Diener et al., 2010).

In the case of students, the main cause of chronic negative affect is usually the high academic pressures and unfavorable learning climates.

- **Emotional Regulation**

Emotional regulation can be described as the capability of individuals to realize, interpret, and control their emotions. According to Gross (1998) the strategies include cognitive reappraisal, emotional suppression, which are the major mechanisms.

- **Self-esteem and Self-Acceptance.**

Self-esteem is the general feeling that the student has about him/herself, and self-acceptance is a feeling that implies the ability to recognize personal strengths and weaknesses without being too critical of them. According to Ryff (1989), emotional well-being is highly based on the aspect of self-acceptance

- **Social Connectedness**

The quality of social relationships greatly influences the level of emotional well-being. Keyes (2006) is of the view that emotional functioning is improved. Positive interpersonal relationships lessen the feeling of loneliness, enhance coping skills and add to a favorable learning experience.

- **Stress Management and Coping Skills**

Coping can be defined as thinking and action plans applied to manage stress. There are positive coping skills like problem-solving, search of social support, and time management, which lead to emotional well-being (Folkman and Moskowitz, 2004). Avoidance or rumination are poor coping strategies that contribute to distress and well-being, as well as poor performance in school.

- **Resilience**

Resilience is the capacity to recover when something wrong and adverse happens or when one becomes upset. Highly resilient students will be better receptive to academic failure, transition, or personal challenges (Masten, 2014). Positive teacher-student relationships, positive learning climates, and autonomy opportunities make people resilient.

**Theoretical Foundations**

Bronfenbrenner and his Ecological Systems Theory is one of the most prominent models, which makes a significant contribution to human development and states that immediate contexts, i.e. classroom, peer groups, and teacher interactions, are crucial determinants of emotional and academic success (Bronfenbrenner, 1979). The learning climate in this ecological perception is not just a physical place but an ever-changing social climate, which constantly enters into interactions with the inner processes of students.

The Social Cognitive Theory by Bandura is also an important approach towards analyzing the interaction between the climate and performance. Bandura (1997) observes that individual factors, behavior and climateal factors interact to give rise to learning which a triadic reciprocal determinism concept. Emotional states of students such as self-efficacy and stress mediate the influence of climate cues on their interpretation of the climateal cues which consequently impact their academic behaviors and performance. Positive learning conditions contribute to the level of beliefs among the students in their potentials whereas negative or unfriendly atmosphere can destabilize the emotions and the academic endeavors.

The Achievement Goal Theory also helps in the understanding of the way motivational orientations are formed as a response to the particular climateal stimuli. Classrooms that advance mastery goals, such as understanding, improvement and effort, were more likely to have healthier emotional experience and better academic performance than those classrooms that excessively emphasized competition and performance goals (Ames, 1992). This theory puts emphasis on the instructional practices and assessment means that influence the emotional reaction of the students towards learning tasks.

Combined, these theoretical lenses offer a thorough basis with which the intricate mechanisms through which the learning climate influences the emotional well-being and their academic performance are understood. They highlight that the internal experiences of students cannot be detached of the educational settings on which they grow hence justifying the need to explore the multidimensional nature of the learning climate in higher education settings.

**Relevance to learning climate and Student Emotional Health**

The microsystem, which in the case of schools consists of classes, peer groups, and teacher-student interactions, directly influences the emotional processes of students, their feelings of security, motivation, and psychological adaptation in general. A positive microsystem that is featured with constructive communication, inclusive classroom methods, as well as emotionally responsive teachers contributes to student emotional well-being by developing a sense of belonging, ability, and stability. On the other hand, a stressful climate with too much pressure, conflict, or absence of support can increase anxiety and confidence, which eventually leads to emotional and academic performance. The mesosystem also strengthens the well-being by emphasizing the significance of consistency and positive associations between school and home; in cases when parents and teachers have positive relationships and expectations, students feel more emotionally stable and encouraged to study. The exosystem level is the level where the institutional policies, community resources and parental work conditions have an indirect effect on the learning climate, which is determined by school climate, access to counseling services and extracurricular activities, which leads to emotional support. The macro system is the broader cultural norms and expectations that have been incorporated into emotion, learning and achievement

that condition the valuing of the emotion, learning and achievement and thus the perceptions of students towards stress, success and well-being. The chronosystem further introduces a new level by appreciating that change over time in terms of educational reforms, technological change, or individual transition, alters the relationship between students and their learning climates, which impact on emotional growth at various levels. The ecological view emphasizes the fact that Student Emotional Health is not an individual characteristic but the result of the ongoing interaction between learners and their multi-layered climates by considering the complexity of the interactions..

Review was structured on the major concepts such as learning climate, emotional well-being, academic performance and interrelationships between these variables in the international and local educational settings.

The literature confirmed that learning climate is a multidimensional phenomenon, which includes physical, social, and instructional dimensions of learning climates. It was shown repeatedly that positive learning climates, defined by positive teacher-student relationships, positive classroom management, student-centered teaching strategy, and sufficient physical facilities, are important factors contributing to better academic engagement and performance of students. On the other hand, learners were observed to be dis-motivated and have poor learning experiences in negative and stressful learning climates.

The review also emphasised emotional well-being as an important factor that has an impact on the success of students in school. Positive teacher conduct and supportive classroom climate were seen to be the major factors contributing to better emotional well-being and also examination pressure and authoritarian instruction methods were allied to more emotional distress.

Students who perceived their learning conditions as being emotionally supportive had high chances of exhibiting increased academic performance and resilience. Nevertheless, where international research has been quite thorough in studying these relationships in an integrated model, local studies especially in the Pakistani context have mostly looked at academic performance as an outcome, but little empirical emphasis has been given to emotional well-being as a construct.

The review also indicated contextual variations in terms of the provision of better learning climates between the public and the private educational institutions, where the private institutions were usually offering better learning conditions in the institution compared to the public institutions. Furthermore, gaps were established in the local literature such as shortage of longitudinal research studies, lack of emphasis on emotional well-being and absence of combined studies on learning climate, emotional well-being and academic performance.

To sum up, the examined literature is rather convincing in its argument that the learning climate is a major factor affecting the emotional state and academic results of students. Nevertheless, the determined gaps are the reason why the

given work is necessary and the purpose of the present study is to research those relations in a comprehensive way in the context of the local school climate. The research results will be useful in the literature and teaching practice to enhance the learning conditions in higher education institutions. A Comparative Investigation of Institutional Learning Climate and its Impact on Student Emotional Health: Public and Private Colleges

**Objective**

**1.** To comparatively investigate the institutional learning climate of public and private colleges and examine its impact on the emotional well-being of students.

**Research Design**

This study ast a quantitative, comparative-correlational research design with a cross-sectional survey approach. The rationale for selecting this design is that the study aims to (a) compare two naturally occurring groups—public and private college students—on existing variables, and (b) examine the relationship and predictive impact of the institutional learning climate on student emotional well-being. Since the variables was not be manipulated and data was collected at one point in time, a cross-sectional survey design is most appropriate.

**Population of the Study**

The study population comprised of the entire population of all the public and the private college in Lahore at the secondary level.

| Tehsil | Public Colleges | Private Colleges |
|---|---|---|
| Cantt | 3 | 5 |
| Iqbal town | 2 | 5 |
| Qasoor | 2 | 4 |
| Total | 7 | 14 |

**Sample**

The population of the present study consisted of 293 students selected from 21 colleges in District Lahore, including 14 private colleges and 7 government colleges. To ensure diversity in educational background and learning experiences, the sample included both male and female students from different academic years and programs.

**Instrument of the Study**

In the present study, a structured questionnaire was used as the primary data collection instrument. The instrument was designed to obtain data concerning students' learning climate, emotional well-being, and academic performance. The development of the questionnaire was guided by the research objectives and

supported by a review of related literature to ensure its appropriateness and content relevance. The questionnaire consisted of closed-ended items based on a 5-point Likert scale. The scale enabled respondents to indicate their level of agreement with each statement using five response options: Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree. The use of a Likert scale allowed for concise responses and facilitated the measurement of the degree of agreement with each statement.

**Data Analysis**

This section describes the statistical methods used to analyze the quantitative data collected through the survey. Before analysis, the dataset was screened for accuracy, missing values, and outliers. Normality of distribution was assessed to ensure that the assumptions for descriptive and inferential statistics were met.

The study aimed to compare the influence of the institutional learning climate on students' academic performance and emotional well-being. Each item in the questionnaire was treated as an important indicator for interpreting the relationship between climateal dimensions and student outcomes. A detailed analysis was conducted to assess the role of physical, social, emotional, instructional, and technological aspects of the learning climate in relation to student performance and well-being.

Data collected through the structured questionnaire were coded and entered into IBM SPSS Version 24 for analysis. The final sample consisted of 293 students from 14 private and 7 public colleges in District Lahore.

Descriptive statistics, including mean (M) and standard deviation (SD), were used to summarize the data. The Pearson product-moment correlation coefficient was computed to examine relationships between dimensions of the learning climate and student outcomes. An independent samples t-test was used to compare students from public and private institutions, while one-way ANOVA was employed to analyze differences across age groups and academic classes.

**Table 1 Demographic Information of Students Selected for the Study (N = 293)**

| Variables | Levels | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 146 | 49.8% |
| | Female | 147 | 50.2% |
| College Type | Public | 140 | 47.8% |
| | Private | 153 | 52.2% |
| Class | 1st Year | 150 | 51.2% |
| | 2nd Year | 143 | 48.8% |

| Variables | Levels | Frequency | Percentage |
|---|---|---|---|
| Age | 14–15 | 82 | 28.0% |
| | 16–17 | 138 | 47.1% |
| | 18 & Above | 73 | 24.9% |

Table 1 ample size was 293 students who were chosen in various colleges and classes. In terms of gender, complete equality existed in the sample. The number of male students was 146 (49.8 percent) and those of female students were 147 (50.2 percent), which means that both genders were equally represented in the research. This overall distribution leads to the overall increased generalization of the results in male and female students.

With regard to type of college, 140 students (47.8%), were picked in the public colleges and 153 students (52.2%), in the private colleges. This indicates a slight violation in the representation of the students of private institutions, although the gap is insignificant, which means that there will be a fair representation of both sectors.

With respect to the class level, 150 students (51.2) were 1 st year and 143 students (48.8) were 2 nd year. The fact that the percentage of students in the two academic years is almost equal implies that the study results would apply to intermediate level students in both classes. Regarding the age distribution, most of the students were aged 1617 years (47.1%), then 1415 years (28.0%), and 18 years and above (24.9). It means that the majority of participants were in their middle adolescence which is the age of the average intermediate level college student.

Generally, the demographic profile is well balanced in terms of gender, class and college type with most of the students being in the 1617 years age bracket. This even spread of the samples improves the validity and representativeness findings.

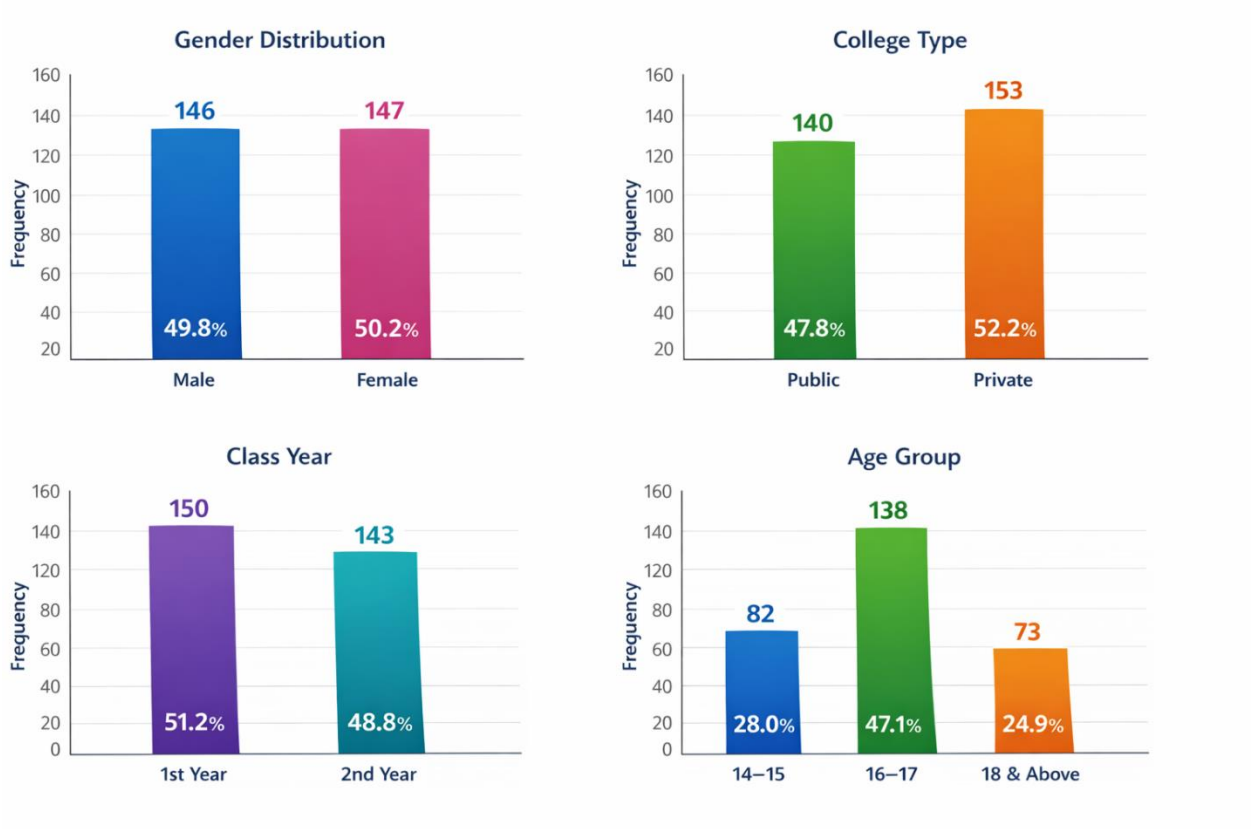



Figure 1 Gender distribution of students in the sample

**Table 2 Summary Statistics of Subscales (N = 293)**

| Scale | Min | Max | Mean | SD | Skewness | Kurtosis |
|---|---|---|---|---|---|---|
| Physical Learning Climate | 2.10 | 4.90 | 3.71 | .65 | -.41 | -.78 |
| Social Learning Climate | 2.45 | 4.95 | 3.89 | .59 | -.52 | -.64 |
| Emotional Learning Climate | 2.30 | 4.85 | 3.76 | .61 | -.47 | -.70 |
| Emotional Well-being | 2.00 | 4.90 | 3.68 | .68 | -.36 | -.59 |
| Academic Performance | 2.40 | 4.88 | 3.82 | .63 | -.49 | -.73 |

In physical learning climate, the scores were between 2.10 to 4.90 and the mean score stood at 3.71 (SD = 0.65). This means that the physical learning climate was perceived to be moderate by the students. The value of the skew (-0.41) is a slight negative one indicating that the responses were slightly skewed towards a higher score range. The value of the kurtosis (-0.78) is showing a slightly flatter distribution than normal. The Social Learning Climate scores were in the range of 2.45-4.95 with mean = 3.89 (SD =.59), indicating that students reported fairly positive conditions of social learning. The skewness ( -0.52 ) is negative which means that more students chose upper response categories. The value of kurtosis (-0.64) is also an indication of a platykurtic (slightly flat) distribution.

In the case of the Emotional Learning Climate, the average score was 3.76 (SD = 0.61), with the range of scores being 2.30-4.85. This implies a rather favorable emotional climate in colleges. The value of skewness (-0.47) and kurtosis (-0.70) are negative and slightly skewed and moderately flat with a value of -0.70.

In terms of Emotional Well-being, the scores were between 2.00 and 4.90 while the mean score was 3.68 (SD = 0.68). This demonstrates that the students have moderate to high levels of emotional well-being. The value of skewness (-0.36) is a small inclination towards the higher values of the well-being, whereas the value of kurtosis (-0.59) is a more or less normal distribution (although a little flat). The scores of Academic Performance were between 2.40 and 4.88 that showed a mean of 3.82 (SD = 0.63), which implies that students had above-average perceived academic performance. The skewness value (-0.49) is slightly negative and the kurtosis (-0.73) indicates that the distribution is platykurtic.

In general, mean scores of all variables are moderate to high, and they imply a positive attitude towards students and their outcomes in general. Both the skew and the kurtosis are within the acceptable range (outside the ±1 range) which indicates that the data is fairly normally distributed and can be used in the subsequent parametric statistical tests.

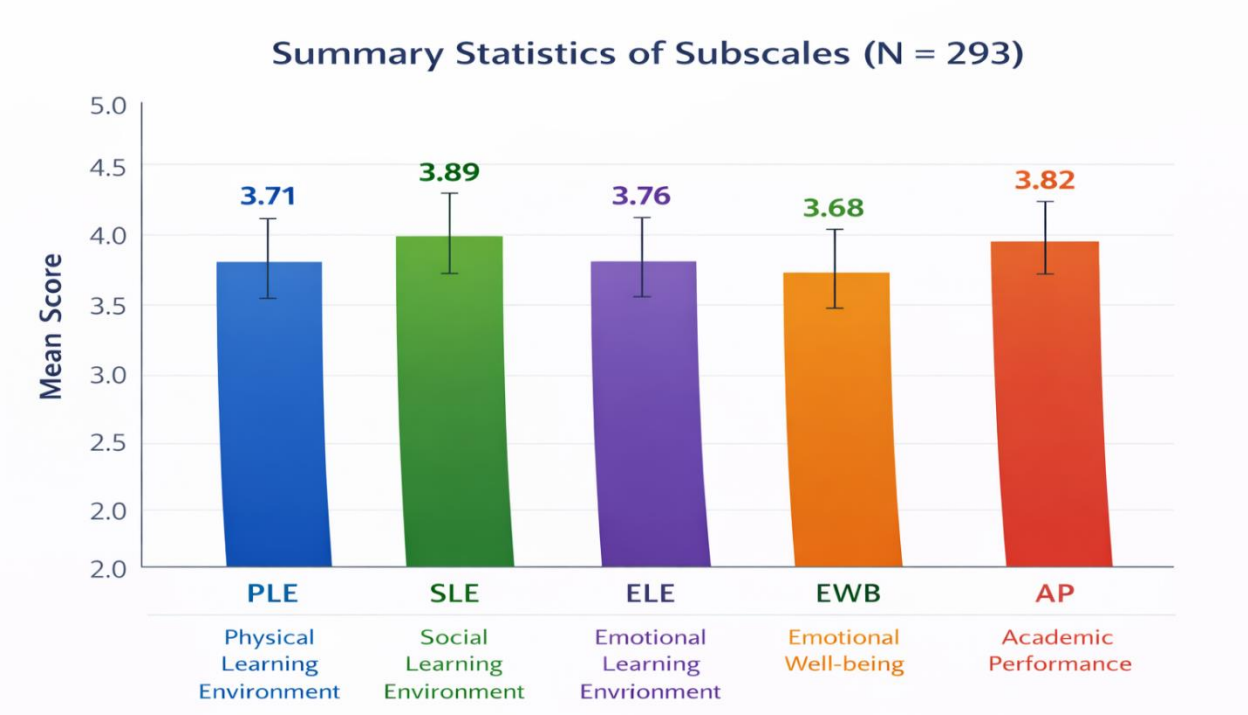



**Table 2 Tests of Normality**

| Scale | Kolmogorov-Smirnov | p-value | Shapiro-Wilk | p-value |
|---|---|---|---|---|
| Physical | .173 | <.001 | .902 | <.001 |

| Scale | Kolmogorov-Smirnov | p-value | Shapiro-Wilk | p-value |
|---|---|---|---|---|
| Social | .162 | <.001 | .914 | <.001 |
| Emotional | .181 | <.001 | .897 | <.001 |
| Well-being | .169 | <.001 | .905 | <.001 |
| Academic Performance | .158 | <.001 | .918 | <.001 |

In the case of the Physical Learning Climate, the Kolmogorov-Smirnov value was.173 (p =.001) and the ShapiroWilk value was.902 (p =.001). The p-values are below.05, which means that both tests reveal that the deviation of normativity is statistically significant.

On the same note, in the case of the Social Learning Climate, the K -S value was -.162 ( p ), and the S -W value was -.914 ( p ) indicating non-normal distribution once again.

The S–W value was found to be.897 (p<.001) and the KS value was found to be.181 (p<.001) which indicates that the data is not normally distributed.

In the case of Emotional Well-being, K-S and S-W had.169 (p <.001) and.905 (p <.001) respectively, which are comparable.

Finally, KS value of Academic Performance was found to be 0.158 (p =001), SW value was found to be 0.918 (p =001), and this means that it is also not distributed perfectly normally.

Though the results obtained in all variables are statistically significant ( p <.001), it is noteworthy that test of normality is very sensitive to large sample sizes. Since the sample size (N = 293) is rather large, the slightest violation of the normality assumption can result in great p-values. In addition to this, skew and kurtosis values of the past were acceptable (±1), indicating that the distributions are close to normal.

Hence even with the high results of the normality test, the data may be taken as normal enough to perform the parametric statistical tests including correlation and regression.

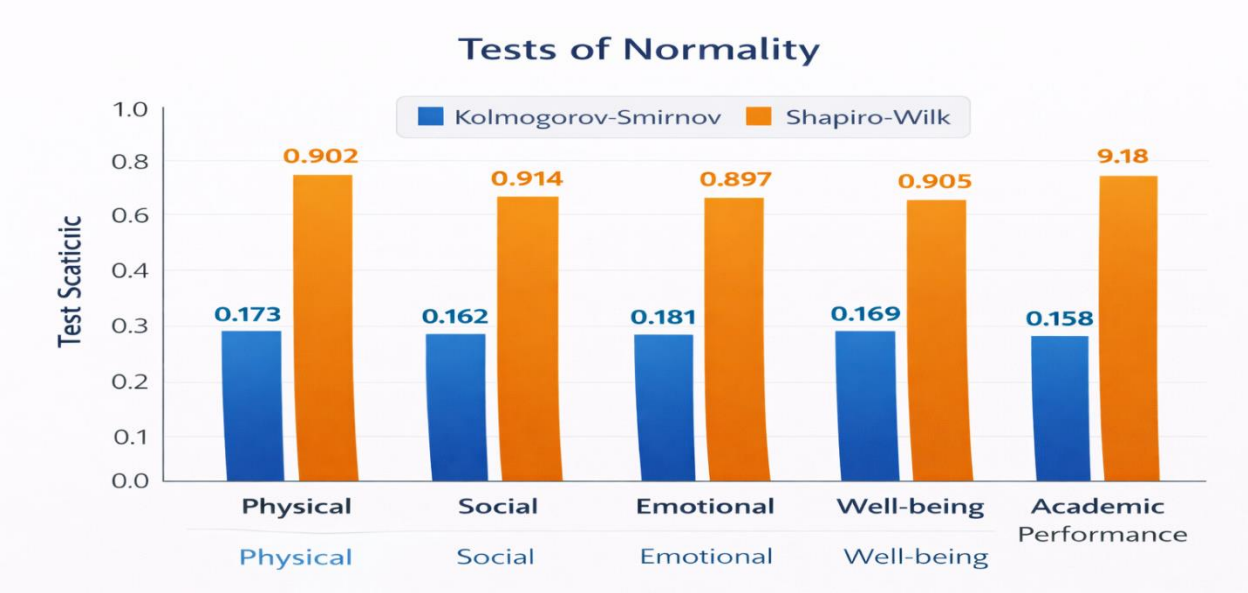



Table.**4 Comparison Between Public and Private Colleges (Mann-Whitney U Test)**

**Table .5 Mean and Standard Deviation of Learning Climate and Academic Performance (N = 293)**

| Variables | N | Minimum | Maximum | Mean | SD |
|---|---|---|---|---|---|
| Physical Learning Climate | 293 | 10.00 | 50.00 | 34.72 | 7.85 |
| Social Learning Climate | 293 | 12.00 | 60.00 | 38.45 | 8.12 |
| Emotional Learning Climate | 293 | 10.00 | 50.00 | 33.98 | 7.64 |
| Academic Performance | 293 | 15.00 | 75.00 | 41.26 | 9.04 |

This table gives a descriptive statistics of four important variables in the study considering 293 respondents. In the case of Physical Learning Climate, the minimum score of 10.00 and the maximum score of 50.00 were obtained and the mean score was 34.72 (SD = 7.85). This means that students tend to think that the physical conditions of the learning climate: classroom facilities, seating, lighting, and resources are moderately satisfactory, whereby there is some variation in the responses of students.

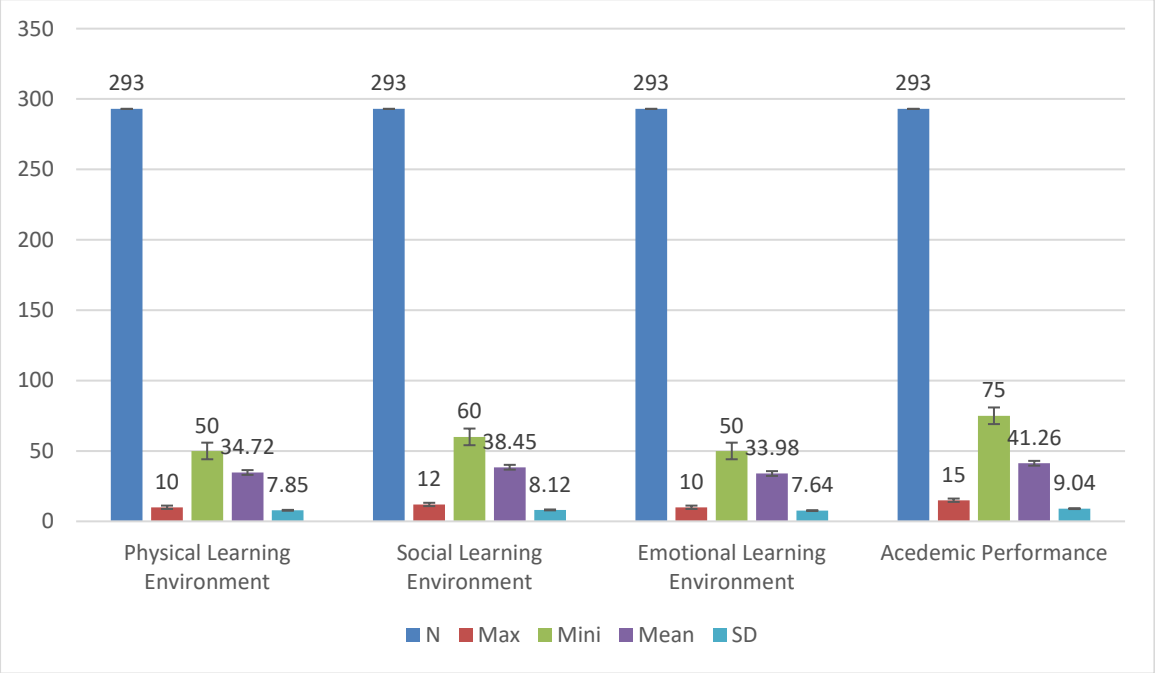
The Social Learning Climate had a score between 12.00 to 60.00 and the mean score was 38.45 (SD = 8.12). The relatively greater mean indicates that the students are relatively subject to positive social interactions in their learning climate that entail favorable teacher-student relations and peer interactions.

In the case of the Emotional Learning Climate, the highest and lowest scores were 10.00-50.00 with the mean score of 33.98 (SD = 7.64). This is an indication that

pupils have a moderate level of perception of emotional support, safety and a sense of belonging in their classes.

The scores of academic performance were between 15.00 and 75.00 with a mean of 41.26 (SD = 9.04). This reflects on the medium status of academic performance by the students. The standard deviation on the academic performance is relatively larger, indicating that there is observable variation in terms of achievement levels of students.

In general, the standard deviations of all the variables show that there is a reasonable variation in the perceptions of students regarding their learning climate and academic performance, which shows that educational experience varies among the sampled colleges.




**Correlation Analysis**

**Table 6. Pearson Correlation between Learning Climate and Academic Performance (N = 293)**

| Variables | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1.Physical Climate | 1 | | | |
| 2. Social Climate | .612** | 1 | | |
| 3. Emotional Climate | .589** | .641** | 1 | |
| 4. Academic Performance | .544** | .673** | .601** | 1 |

**Note: p < .01**

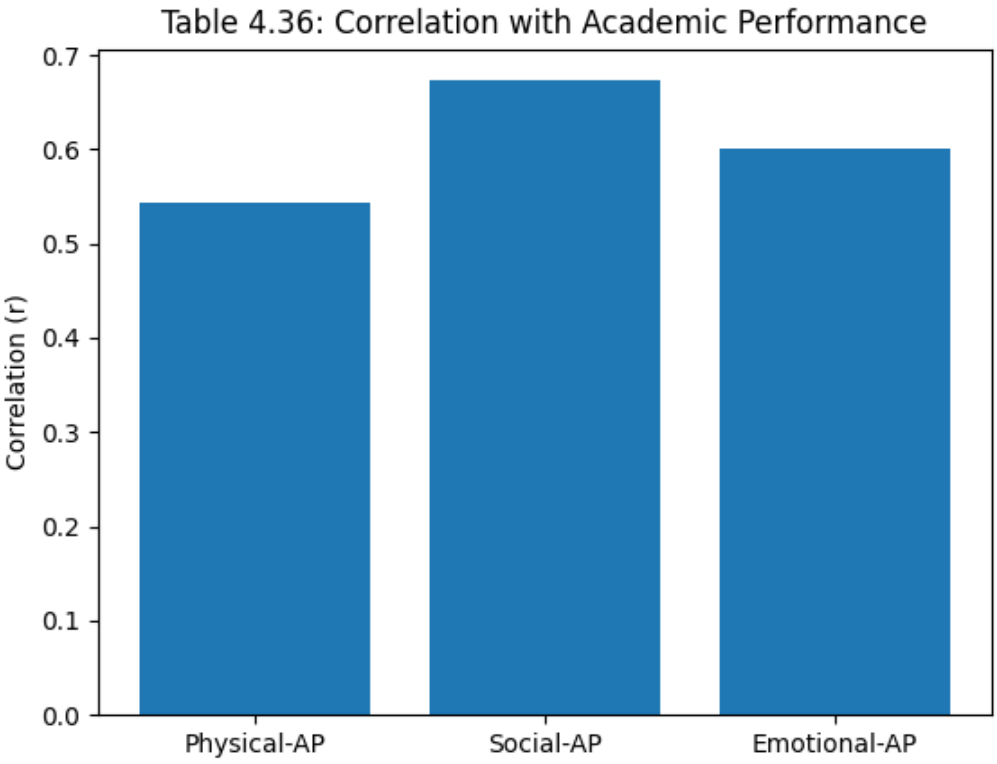
In this table, Pearson correlation coefficients analyzing the dependence between Physical Climate (PE), Social Climate (SE), Emotional Climate (EE), and Academic Performance (AP) of the participants were discussed. It can be noted that all the variables are positively and significantly related with each other at the level of 0.01 (2-tailed).

Physical Climate has a high positive correlation with Social Climate ($r = 0.612$, $p < .01$) and Emotional Climate ($r = 0.589$, $p < .01$) indicating that a favorable and well-maintained physical climate correlates with a more positive social and emotional climate. It is also positively correlated with Academic Performance ( $r = 0.544$, $p < .01$), meaning that an improved physical state of affairs correlates with an improved academic performance.

Available Responses: There is a strong correlation ($r = 0.641$, $p < .01$) between Social Climate and Emotional Climate, and between Social Climate and Academic Performance ($r = 0.673$, $p < .01$).

Climateal Factors (EM) is also significantly positively correlated with Academic Performance ($r = 0.601$, $p < .01$) implying academics emotional climate is a significant factor in academic achievement of students.

These statistically significant correlations prove that physical, social and emotional climates are closely related to each other, and the improvement of one of these areas is related to the improvement of academic performance. This observation would emphasize the significance of an integrated approach to the learning climate with positive physical, social, and emotional climate combined to have a positive impact on student outcomes.




**Independent Sample t-Test (Public vs Private Sector)**

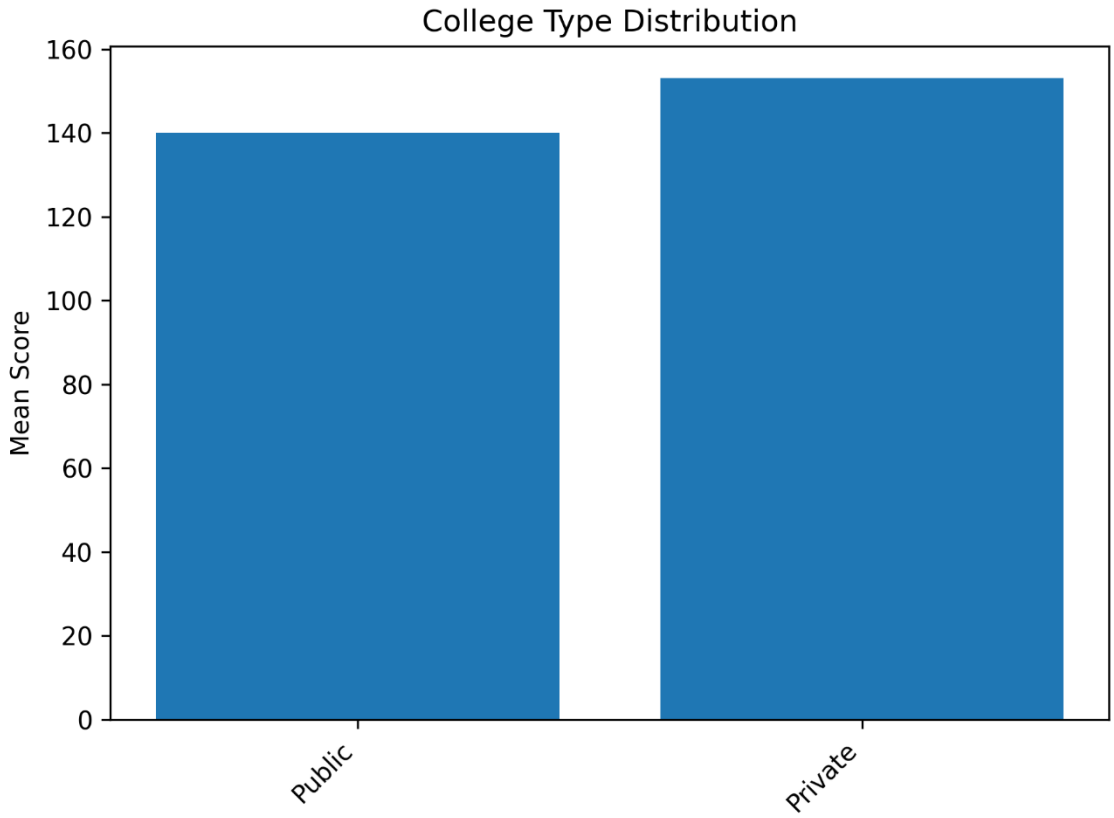
**Table .7 Comparison of Academic Performance by Sector**

| Sector | N | Mean | SD | T | Sig. |
|---|---|---|---|---|---|
| Public | 150 | 39.85 | 8.90 | -2.45 | .015 |
| Private | 143 | 42.74 | 8.96 | | |

Table .7 compares Academic Performance of the students in private and public sectors. This analysis indicates that the sample population in the private sector (M = 42.74, SD = 8.96) has a greater mean academic performance score than the sample population in the public sector (M = 39.85, SD = 8.90).

An independent samples t-test was used to test whether this difference is statistically significant or not. The findings create a strong difference between the two groups (t = -2.45, p = .015) which imply the academic performance in the students of the private sector is higher was not by chance.

These results suggest that type of sector can be linked to academic performance where students of private sector have much better performance compared to students of the public sector. This disparity can be an indicator of the difference in teaching materials, classroom atmosphere, teaching approaches, or other situational differences between the public and private education.




**One-Way ANOVA Based on Age**

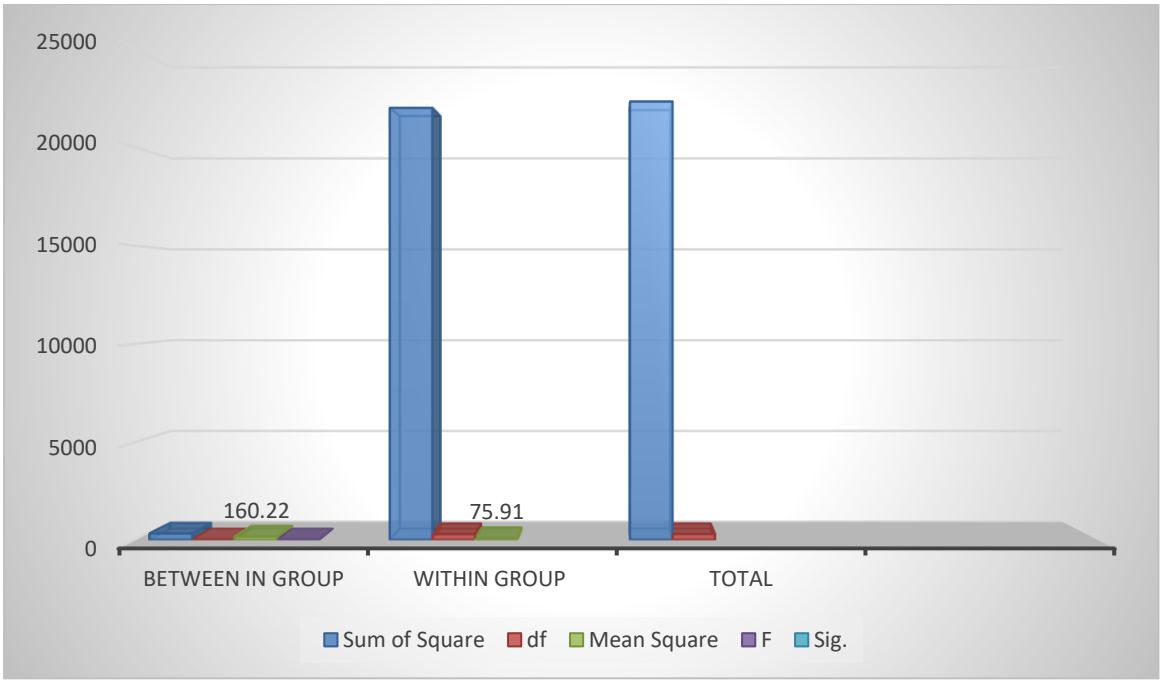
**Table .8 ANOVA for Academic Performance Based on Age**

| Source | Sum of Squares | df | Mean Square | F | Sig. |
|---|---|---|---|---|---|
| Between Groups | 320.45 | 2 | 160.22 | 2.105 | .124 |
| Within Groups | 22015.30 | 290 | 75.91 | | |
| Total | 22335.75 | 292 | | | |

The table .8. shows the findings of a one-way ANOVA which was used to compare the differences in Academic Performance between the various age groups. This comparison reveals that the difference in academic performance among the age groups (Sum of Squares =320.45, df =2, Mean square =160.22) is smaller in comparison to the difference in academic performance within the age groups (Sum of Squares = 22,015.30, df =290, Mean square = 75.91).

The F-value is obtained to be 2.105 with a p-value of 0.124 being larger than the traditional significance of 0.05. This shows that the academic performance of the various age groups is not significant.

That is, the age factor is not important in determining the performance of the students in this sample. Although some differences in the means of the scores can be observed across age groups, they are probably the results of random variation, but not of systematic age effect.




**Regression Analysis**

**Table 9. Multiple Regression Predicting Academic Performance**

Dependent Variable: Academic Performance

| Predictor | Beta | T | Sig. |
|---|---|---|---|
| Physical Climate | .214 | 3.12 | .002 |
| Social Climate | .356 | 4.85 | .000 |
| Emotional Climate | .278 | 3.96 | .000 |

$R^2$ = .52
**F** = 104.36
**p** < .001

The multiple regression was done to test the predictive validity of Physical Climate, Social Climate, and Emotional Climate on Academic Performance. The statistical significance of the overall model was 104.36 (p = -0.001) with a R 2 of 0.52 which shows that it is a strong and significant model.

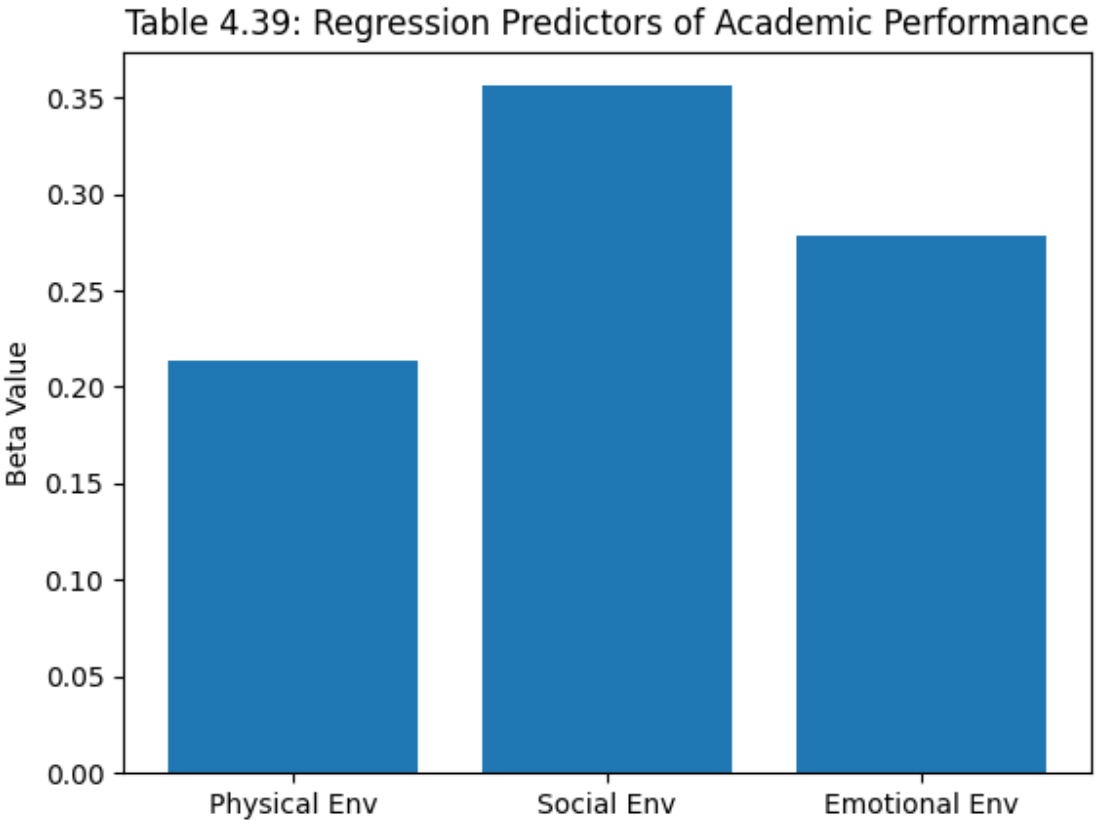
Discussing the Personal Predictors

The Physical Climate was a highly predictive factor of academic performance ( 0.214, t = 3.12, p =.002) indicating that physical conditions are better the higher the academic performance.

Social Climate: The strongest predictor was Social Climate ( = 0.356, t = 4.85, p <.001), which means that the positive influence of supportive social interactions on the academic performance of students is significant.

Emotional Climate was also a major contributor to the model ( =0.278, t= 3.96, p=.001) where it is significant to note the role of emotional well-being in academic performance.

These findings show that academic performance is strongly and positively predicted by all three climate factors with social climate being the most influential followed by emotional and physical climate.




**FINDINGS**

- Table 1 contains demographic data of the respondents. The overall sample size was 293 students comprised of 146 males (49.8) and 147 females (50.2), thus, almost equal gender representation. On the type of college, 140 students (47.8) were students in the public colleges and 153 students (52.2) are in the private colleges. The level of classes was 150 students (51.2) and 143 students (48.8) in 1 st and 2 nd year, respectively. The mean age of the students was as follows: 47.1% aged 16 to 17 years, 28.0% aged 14 to 15 years and 24.9% aged 18 years and above.
- Table 2 shows the descriptive statistics of the variables of the study. The average score of the Physical Learning Climate was 3.71, Social Learning Climate was 3.89, Emotional Learning Climate was 3.76, Emotional Well-being was 3.68 and Academic Performance was 3.82. These findings demonstrate that learners had positive perceptions of their learning climate and had moderate to high academic performance.

- Table 3 provides the outcome of the normality tests. The Kolmogorov-Smirnoff and Shapiro-Wilcox tests showed significant values (p <.001) of all variables. Nonetheless, the skew and kurtosis were in the acceptable range, which implied that the data were approximately normally distributed, and it was possible to continue with the further statistical analysis.
- Table 4 shows that the differences between the students of the public and the private colleges are statistically significant in terms of the learning climate and the academic performance. Students of the private colleges indicated that they had higher mean scores on physical climate, social climate, emotional climate, emotional well-being, and academic performance than students of the public colleges.
- Table 5 shows the mean and standard deviation of key variables. The average score of the Physical Learning Climate was 34.72, Social Learning Climate 38.45, Emotional Learning Climate 33.98 and Academic Performance 41.26 which means that there is an average perception of learning climate and academic performance.
- Table 6 indicates that physical, social and emotional learning climates had a positive and significant correlation with academic performance (p <.01). Of these, the social climate was found to be the most related to academic performance (r =. 673).
- Table 7 shows that there was a great variation in the academic performance between students in the public and private sector. The score of students in the private colleges was higher (M = 42.74) than the students in the public colleges (M = 39.85).
- It can be seen that Table 8 indicates no significant academic performance difference in various age groups (p =.124).
- Table 9 demonstrates that the academic performance is considerably predicted by the physical, social, and emotional learning climates. Social climate was the most predictive of them, then emotional climate, and finally physical climate.

## DISCUSSION

The aim of the current research was to investigate the connection between the learning climate and the academic performance of the students in the schoo level. The research problem centered on three key aspects of the learning climate such as physical learning climate, social learning climate, and emotional learning climate and how they affected the academic performance of the students. The results of the study are also valuable information on the way various components of the classroom setting contributed to student learning and academic success.

According to the demographic data provided in Table 1, the sample population was represented by almost equal number of males and females and students of both state and private colleges. This equal representation was a chance to investigate the perception of students in different educational institutions. The descriptive

statistics provided in Table 2 and Table 5 show that students tended to express the moderately positive perception on the learning climate in their colleges. The social learning climate was found to have the mean score highest when compared to the other two dimensions, which indicated that contacts with teachers and peer have a lot of influence in facilitating learning experiences of the students.

The correlation test (Table 6) showed that there were significant positive relations between physical, social, and emotional learning climates and the academic performance of the students. Out of these variables, the correlation with the academic performance was the strongest with the social learning climate. It implies that positive relationships with teachers and peers are major causes of academic achievement. The student is better placed to be active and perform better in the classroom once they are respected, encouraged and supported in the classroom.

In addition, the results of ANOVA (Table 8) reveal that academic performance was not significantly different in the age groups. This implies that the learning climate continues to have the same impact on the academic performance of students of various ages in the intermediate level.

Lastly, the regression analysis (Table 4.39) revealed that the learning climate is a significant predictor of academic performance of the students. The social learning climate was the finest predictor among the three predictors, then the emotional learning climate and lastly the physical learning climate. The said discovery underscores the relevance of the teacher-student relationships, peer collaboration, and enabling classroom interactions in enhancing the academic performances of the students.

In general, the results of the current research confirm the fact that the positive and supportive learning climate is an important factor that promotes the academic performance of students. The physical plant, teacher support, peer relationship, and emotional encouragement all will help students to get motivated, interested, and achieve success in their academic studies. That is why schools must put efforts to enhance the physical and psychosocial characteristics of the classroom setting to establish favorable learning conditions in the classroom.

## CONCLUSION

The results of the study allow formulating several conclusions about the comparison between the study climate and the academic performance of the students of public and private schools . It was found that the learning climate is instrumental in the development of academic performance of students. Positive classroom atmosphere ensures that students are kept entertained, motivated and attentive to their studies.

The research concludes that, students in the case of private colleges have better learning conditions and higher academic performance than students in the case of

the public colleges. This implies that academic success is related to institutional resources and classroom management practices.

The findings suggest that the factors in the learning climate have a combined effect in the academic performance of students and it is imperative that educational institutions should address the issue of classroom climate enhancement, focusing on physical and psychosocial conditions.

## RECOMMENDATIONS

**1.** According to the findings and conclusions drawn in the current study, the given recommendations are offered to help to improve the learning climate and increase the academic performance of the students at the intermediate level.

**2.** Learning institutions are supposed to work towards enhancing the physical classroom learning climate. It should be adequately lighted, ventilated, seating well-furnished, and classroom space should be provided to provide good learning climate. Clean and well-kept classrooms are also beneficial to the student in that he can focus more on his or her students and enhance the whole learning experience.

**3.** The teaching aids and learning facilities like multimedia equipment, projectors, and current learning materials should be available in the colleges. Modern teaching devices can be used to improve the comprehension of lessons and the learning process among students, as well as make it more interesting and efficient.

**4.** The teachers should also be motivated to make positive and supportive relationships with students. When the teachers treat the students in a manner that helps them to feel respected, listen to their ideas, and promote their participation, they feel more confident and motivated to learn. The teacher training programs need to focus on good communication and supportive teaching practices.

**5.** The learning activities that should be encouraged in institutions include group discussions, teamwork, and peer learning. These activities aid the students to build their social skills, better cooperation and have greater knowledge of the academic material by interacting with fellow students.

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