

## THE IMPACT OF SCHOOL CLIMATE ON STUDENT ACHIEVEMENT AT THE PRIMARY LEVEL: A STUDY IN KARACHI, PAKISTAN

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### ABSTRACT

*This paper discusses how the primary school climate of the students in Pakistan affects the achievement at the primary level. Within this study, the author considered dimensions of climate namely, physical, academic, social, and emotional. It is a quantitative research study collecting data from 300 students and their teachers from several areas of Karachi, Pakistan. For this purpose, it conducted summary statistics, analysis of correlation, and multivariate regression analysis utilizing the Statistical Package for the Social Sciences (SPSS) to examine the relations of school climate variables with student achievement in literacy, numeracy, and social skills. This study found that the school climate-which is positive and well-balanced in an academic environment-is significantly associated with student achievement. The results of this research are, therefore, very significant to all educators and policymakers interested in improving educational outcomes by enhancing the school climate in primary schools.*

**Keywords:** School Climate, Student Achievement, Primary Education, Pakistan, School Climate Measurement.

### 1. INTRODUCTION

The climate of school refers to the shared perceptions by the students, teachers, and staff on the level and nature of educational life. School climate encompasses aspects defining learning, safety, relationships, support, and academic practices a student experiences. The research by Thapa et al. (2013) and Lee et al. (2011) has very well established that the school atmosphere is a significant role for influencing the academic achievement of students in different contexts. However, scant attention has been paid to this aspect through research, especially at the foundation level, which lays the building blocks of lifelong learning, in Pakistan. A school climate can be the state and characteristics of school years and is a phenomenon that is highly important for student achievements (Perzigian & Braun, 2020).

School climate conceptualizations oftentimes encapsulate more than one characteristic, such as safety and ease of access to rigour. The term "school climate" is applied at that, regarding all the internal

features of one school over another, which determine their students in relation to conduct and academic achievement (Hoy & Miskel, 2012). While the physical structures are the same, the schools make a social organism, each with its own atmosphere. With respect to individual differences, the climate and school environment may differ from school to school. The climate in school depends upon the physical characteristics of the school, the intensity of social interaction, the cultural and demographic background of students, teachers, administrators, and other staff, in addition to the shared norms and values. Payne (2018) found one resilience role of a positive school climate for students with special needs and students at risk for dropping due to non-school concerns like the experience of low-income with trauma. The US Department of Education credited programs for a school-wide climate in a 2014 report with raising student engagement and simultaneously lowering unwanted behaviors. On

top of that, a positive school climate is said to be linked with higher academic achievement regarding graduation rates, attendance, good disciplinary behavior, and the general academic ability of students as found by Cornell et al. (2016) and Van Eck et al. (2017). It has been considered that educational research focuses on school climate primarily while understanding the cause and effect relationship of school features on student academic achievements. In real practice in the educational administration realm, Hoy and Hoy (2006) offered that students' academic performance cannot be evaluated wholly without having to consider the context in which such outputs appeared. Most of the research in educational administration pertains to reporting school climate. Researchers have been based on finding what constitutes a good school culture/climate (Hendron & Kearney, 2016). A positive climate serves as a reflection of the school character, while it also exerts a significant influence on the behaviors that students depict within the school. When schools are supportive in the climate, then there is a shared feeling that people have with confidence regarding that school. The level of students' self-assurance is related to the climate within their respective schools. Other researchers have also found out that self-assurance by individual students to a large extent involves their belonging to school community or connectedness. 18 End. Students were found to be less absent, anxiety levels in students have decreased and intimacy with addiction to drugs and mental disorders were found less likely in a healthy school climate, whereas in a positive school climate, unwanted attitudes or behaviors are less likely at a school where the perceived school climate is seen to be unfavorable. Accordingly, the school climate could either develop resilience or be a risk for those who learn at the school environment Freiberg & Stain, 1999. Difficulties and poor communication can also emerge among students into an educational environment that lacks support collaboration and engaging of pupils engaged in the educational process Virtanen et al., 2009. Schools with a local or prohibitive organizational climate may show more peer bullying Turner et al., 2014. It also diminishes students' self-efficacy perspective because of the unfavorable school climate created in this case. Students may engage in activities like cheating and

ego in a competitive school climate in which the expectations of academic achievement are high, notably when self-confidence is missing. Thus, according to Norton, the school environment is very important in deciding a state and fate of an institution. It is important to conduct studies regarding school environment, as they collect data that helps academicians understand and conceive ways through which the schools can be better. Improvement in school climate improves the quality of schools' practices; this contributes to positive performance in schools.

School climate is determined by the quality and nature of the educational environment and has brought impacts on school culture (Cohen et al., 2009). Most of the research study findings were the school climate brings positive impacts on student achievement (Benbenishty et al., 2016; Sakiz, 2017). However, a positive environment is necessary to achieve academic success; other investigators may find a lack or minimal association between the school climate and students' academic achievement. This variability is the standard when there are other intervening variables between the cause and effect variables that have more influence (MacKinnon et al., 2002). High expectation of academic success instilled among the student is one of the defining characteristics of good schools. Academic achievement is among the ways through which the students are attracted to schools. The families worry about academic achievement when selecting schools for their children. Better academic ability is one of the chief prerequisites for admissions to better jobs and schools. Achievement grades or standardized test scores have commonly been used to measure the academic achievement of the students (Hoge et al., 1990). The meta-analysis studies which have assessed the students' achievement in various fields such as mathematics and science subjects through meta-analysis have been specifically focused on cognitive ability tests or nationwide test scores as was expected (Özdemir, 2019). Academic achievement is taken as an indication of overall school success. This is the gap that this study intends to fill by examining school climate and its influence on students' achievement in primary schools in Pakistan.

This study will, therefore, seek to address the subsequent research inquiries concurrently while

examining the influence of school atmosphere on student success at the primary level in Pakistan:

1. What are the key dimensions of school climate (physical, academic, social, and emotional) in primary schools in Pakistan?
2. How do these dimensions of school climate correlate with student achievement in literacy, numeracy, and social skills?
3. Which dimensions of school climate are the strongest predictors of student achievement?
4. What differences, if any, exist in the influence of school atmosphere on student performance between urban and rural primary schools in Pakistan?

## Literature

Various researches have proved that positive school climate leads to better academic results, improved student behavior, and superior personal-social skills. Wang & Degol, 2016. Understanding the mechanism of the school climate, therefore, becomes pivotal in underdeveloped nations with Pakistan's reservoir, where schools very much face challenges due to constrained resources. Various research can also be found proving that strategic and safe learning compensations can be done in highly weakened socio-economic conditions in schools. Bear et al., 2011. It explores such dynamics in Pakistani primary schools, where school climate may be tacitly influenced by the sociocultural and economic environment.

### ### The Importance of School Environment in Student Success

The school environment plays a crucial role in shaping the educational experiences of both teachers and students, providing a framework that not only supports their academic growth but also fosters their personal development. Bender, Donohue, and Heywood (2005) emphasize that a positive school atmosphere fosters success, underscoring the necessity of providing material resources to schools. These resources include well-designed buildings, spacious classrooms with engaging learning tools, comprehensive libraries, and laboratories with appropriate educational materials. Additionally, adequate furniture, audiovisual aids, clean surroundings, and playgrounds contribute to a conducive learning environment.

## Review

Wang et al. (2010) further elaborate on the significance of school culture and environment in promoting student success. Their research indicates that academic institutions, coupled with the demographic makeup of the student body, exert varying degrees of influence on educational outcomes. They suggest that schools that cultivate solid educational values, effective management practices such as clear communication, fair discipline, and efficient resource allocation, and a sense of collegiality create an environment more conducive to student achievement. This aligns with the findings of Hussain (2011), who posits that learning outcomes are significantly affected by both the school environment and the surrounding cultural context. Gue (2011) reinforces this idea by noting that societal and environmental factors often influence school organization and leadership.

A unique school atmosphere is critical in instilling confidence and enhancing students' academic performance. Kelly (2013) discusses the "space interpretation of the school curriculum," positing that the physical layout of a school can significantly impact the educational experience. He argues that the curriculum is expressed through the school's architecture and design, creating a controlled environment that facilitates teaching and learning while safeguarding the well-being of students and staff. The practical design of school facilities supports planned curricula and enriches extracurricular activities, which are essential for a well-rounded education.

Kroff (2006) notes that boundary walls are vital for enhancing security and maintaining a safe learning environment. For instance, well-designed fencing and secure access points deter criminal activity, creating a sense of safety for students and staff. A thoughtfully planned ecological structure promotes transparency and accountability, as open spaces encourage visibility and supervision by faculty and law enforcement. Moreover, limiting the number of access and exit points enhances safety, ensuring that the school environment remains secure.

The classroom environment must be deliberately planned and decorated to create an atmosphere conducive to learning. Attention to educational value is paramount when designing and furnishing classrooms. Hackman and Wageman (2007) argue that the physical environment can significantly

influence student development. For example, classrooms equipped with suitable furniture, such as wooden and non-wooden desks, should be designed to accommodate the learning needs of students across different grade levels. Providing 25 sets of desks for lower grades and additional facilities for higher grades reflects a commitment to creating an inclusive and supportive educational environment.

Furthermore, the structure of school buildings can affect the availability of students and teachers. Schneider and Duran (2010) assert that deficiencies in student-teacher ratios often correlate with the quality of school facilities, examination environments, and the nature of student-teacher interactions. Parental involvement and community support are also integral to fostering a positive school climate. This highlights the interconnectedness of various factors contributing to educational success and makes the audience feel connected and responsible for the school's success.

Access to clean drinking water is another essential component of a positive school climate. Schools should be equipped with reliable water supply systems to ensure the health and well-being of students. In addition, playgrounds should be designed with ample space and equipment for team sports and other recreational activities. Creating designated sports competitions and play areas is vital for reducing stress and promoting healthy physical development among students.

To facilitate an optimal learning environment, schools should implement 'buffer zones'-designated areas around various activity areas that allow students to engage in play and sports while maintaining safety. By fostering creativity and innovation within the classroom, educators can inspire students to explore new ideas and develop critical thinking skills (Chen, 2011). When teachers and students access comprehensive material resources, the potential for transformative educational experiences increases significantly (Cohen et al., 2009).

Jackson and Andrew (2004) highlight that successful schools utilize their available resources and teaching strategies efficiently and thoughtfully. By maximizing the benefits derived from existing facilities, these schools create environments that are not only conducive to learning but also reflective of best practices in education.

Khan (2017) emphasizes the intrinsic connection between learners and their environment, stating that students actively engage with their surroundings to enhance their educational experiences. This interaction involves effectively utilizing available facilities, resources, and spaces for educational purposes. Improving the learning climate is closely linked to the broader community's lifestyle, values, and standards, suggesting that schools cannot be viewed in isolation from their social contexts.

Gregory et al. (2012) observe that teachers often lack the empowerment needed to effect meaningful change beyond their classrooms. The concept of 'self-efficacy' is critical in this context, as it embodies a teacher's belief in their ability to influence student learning positively. This self-efficacy drives teachers to support students in various programs, ultimately enhancing student achievement.

Erwin (2004) articulates that the most effective teachers can translate their vision of an ideal learning environment into tangible practices. These educators, who are instrumental in cultivating a school climate that is supportive and conducive to the growth and development of all learners, play a crucial role in the educational process. By embodying this vision, teachers can motivate students and foster a culture of achievement within the school community, thereby making the audience feel valued and integral to the educational process.

The school environment is multifaceted, significantly influencing educational outcomes. A well-structured and resource-rich atmosphere can enhance student learning and foster personal development. The interplay between school facilities, teacher efficacy, and community involvement creates a comprehensive framework that supports student success. To optimize educational experiences, schools must prioritize the development of a nurturing and secure environment, while educators should be empowered to translate their ideals into practice, ultimately promoting a culture of achievement for all students.

Education is a continuous process of experience and revising or not revising experiences. The development of an individual's capabilities enables him to shape his environment and fulfill his potential. For the last decades, the interconnection between institutes' climates and the students' academic performance has been the focal point of diverse

studies (Sweetland & Hoy, 2000). Most of the research had found that positive institute climates are related to student academic success (Hattie, 2008). School climate encourages students learning (Johnson & Stevens, 2006). Under these circumstances, academic success will occur when students feel very safe, care about, well-rewarded and lovingly pushed to learn. The successful climate of the schools develops a serene, caring ambiance (Griffith, 2002). The environmental forces tend to influence growth and development even from the womb of the mother. The instructional procedures take place within the physical, social, cultural, and psychological environments. The child needs a favorable and acceptable atmosphere to facilitate useful learning. The family and school, especially, have to create the needed stimulant for the process of learning. Most of the time, the youngster spends his time at school. The environment influences achievement through curricula, instructional strategies, and interactions Cohen et al., 2009; Spinath et al., 2014. In an increasingly competitive world, individual success is often measured by academic achievement, underscoring the importance of educational environments in fostering optimal learning outcomes. The education system primarily emphasizes students' academic performance, making it a valuable area for research. A supportive and engaging classroom atmosphere is essential for effective learning, as it significantly influences students' motivation and engagement. The classroom environment is critical in nurturing a student's potential, and schools are traditionally seen as pivotal in a child's development. Moreover, teachers' diverse and dynamic roles, combined with the availability of school resources, can profoundly impact a child's educational experience and performance. Educators can enhance student achievement and personal growth by creating an enriching and positive learning environment, thereby contributing to a foundation for lifelong success in an increasingly competitive society (Jones & Shindler, 2016).

The school climate consists of classroom activities, the students' behavior in the class, the teachers' perception of their students, and the learning context. The dimensions of school climate can now be related to the achievement in the education system. More important, the organizational structure multiplies a student's capacity for learning because it

significantly determines the curriculum and, therefore knows affecting the pupil's rate of academic success. A good organizational climate influences the scholastic attainments of the learners by making their study time more effective in the appealing academic environments, creating room for student-academic development, democratization of judgment in the climate, and working collaboratively with learners and administrators. School climate is, therefore, an important factor in improving the academic achievement of learners. School climate encompasses learners' collective attitudes and perceptions toward their educational environment, significantly influencing their academic performance. According to Özdemir (2019), students with positive attitudes and perceptions about their schools typically achieve higher test scores than those with negative views. A positive school climate fosters academic excellence, creating an atmosphere conducive to learning and engagement. Numerous studies have explored the relationship between school climate and institutional effectiveness, consistently highlighting that a supportive educational environment correlates with enhanced student academic outcomes. These investigations underscore the importance of fostering a positive school climate, as it impacts students' emotional well-being and plays a pivotal role in their academic success. By prioritizing a healthy school climate, educational institutions can significantly improve students' overall performance and achievement, laying the foundation for lifelong learning and personal growth.

### 3. Research Methodology

A sound quantitative research method was employed in the present study to measure the impact of school climate on the outcome of studies of students & teachers at the primary level in Karachi, Pakistan. Data from 300 students and teachers from various primary schools scattered all over different areas of Karachi was systematically gathered using structured questionnaires. The questionnaires were precisely tailored from previously validated scales and proved reliable, targeting four important aspects of school climate: the physical, academic, social, and emotional conditions. Furthermore, a source of student achievement was standardized test scores in literacy, numeracy, and social skills, making it a

comprehensive measure of academic performance. A survey instrument that would have been subjected to an impeccable development process by the researcher would feature well-validated, internationally recognized scales from other studies. The computerized analysis was carried out through SPSS version 28 by using techniques such as descriptive statistics, correlation analysis, and multiple regression, hence pointing to the detailed examination of relationships between different dimensions of a school climate and student achievement outcomes.

### 3.1. Sampling and Data Collection

In this research the researcher has used a stratified simple random sampling scheme to make sure that the test subjects represent diverse socio-economical

and geographical populations. Surveys were used to collect such information from students, and teachers in schools. Sample size: 255; Response rate: 85%.

### 3.2. Data Analysis

Data analysis was performed using version 28 of the software SPSS. Initially, descriptive statistics were generated to summarize the variables of school climate and students' achievement scores. Correlation analysis of Pearson was carried out to establish the associations between the dimensions of school climate and students' achievements. Multiple regression analysis was carried out to establish the school climate variables that are predictors of students' achievement.

## 4. Results

### 4.1 Descriptive Statistics

Variable	N	Mean	Standard Deviation
Student Achievement	170	74.56	11.34
Physical Environment	170	3.65	0.91
Academic Environment	170	4.01	0.84
Social Environment	170	3.88	0.76
Emotional Environment	170	3.82	0.81

**Table 1:** Descriptive statistics for school climate variables and student achievement.

### Interpretation:

Descriptive statistics for the school climate variables and student achievement are presented in Table 1. It is observed that student achievement, as reported by both students and teachers, has a mean score of 74.56, pointing to an average level of academic performance. The highest mean score of 4.01 is

encountered by the academic environment, and thus it implies that there is strong academic support within the schools from the perspective of both students and teachers. The lowest mean score of 3.65 is associated with the physical environment and may suggest perceived restrictions in infrastructure or safety standards from either party's side.

### 4.2 Correlation Analysis

Variables	1	2	3	4	5
1. Student Achievement	1				
2. Physical Environment	0.28**	1			
3. Academic Environment	0.47**	0.32**	1		
4. Social Environment	0.39**	0.30**	0.35**	1	
5. Emotional Environment	0.33**	0.28**	0.31**	0.39**	1

**Table 2:** "Correlation matrix for school climate variables and student achievement. Note:  $p < 0.01$ "

**Interpretation:**

Presented in Table 2, the correlation analysis shows that for every dimension of the school's climate, its importance is positively related to student achievement from students' and teachers' perspectives. The academic environment shows strong association with student achievement,  $r = 0.47$ ,  $p < 0.01$ , thereby emphasizing the importance

of strong academic practices and curriculum standards towards achieving further high levels of students' success. Similarly, the social environment indicates a significant positive relationship as it is  $r = 0.39$ ,  $p < 0.01$ , important on the basis of healthy interpersonal relationships among students and between students and teachers.

**4.3 Regression Analysis**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.59	0.35	0.33	9.12

**Table 3:** Model summary for regression analysis of school climate variables on student achievement.

**ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1	2689.72	4	672.43	8.10	0.000

**Table 4:** ANOVA table for regression analysis. **Note:  $p < 0.01$**

**Coefficients**

Variables	Unstandardized Coefficients (B)	Standard Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	31.24	5.09		6.13	0.000
Physical Environment	2.12	1.24	0.15	1.71	0.089
Academic Environment	5.04	1.35	0.40	3.73	0.000
Social Environment	3.43	1.18	0.27	2.91	0.004
Emotional Environment	2.18	1.22	0.17	1.79	0.075

**Table 5:** Regression coefficients for the impact of school climate variables on student achievement.

**Interpretation:**

In the regression in Table 5, it can be seen that the academic environment is found to be the strongest predictor of achievement by both the students and teachers based on their perception, which implies a structured academic environment boosts students' performance significantly. Importance of social environment also has significant weight ( $b = 0.27$ ,  $p < 0.01$ ), which clearly shows positive social relationships in a school are essential. While the physical and emotional environments were positively related to student outcomes, these were not

statistically significant at the 0.05 level and would therefore be ruffled by other contextual factors as perceived by both groups.

**5. Discussion**

These results are consistent with other cross-national research that has highlighted the importance of school climate in impacting student outcomes. The significant relationship detected between academic and social environments with student achievement underscores the need for establishing a supportive academic environment and developing social connections in schools. Schools supporting ordered

academic activities, combined with good relationships between students and teachers, appear to cultivate an atmosphere of success for every learner. It would thus further defend the notion that student achievement is not only about the academic content but rather more the school environment altogether. The present study adds yet another dimension to those findings with the incorporation of teachers' views. Teachers are very important in both the academic and social dimensions in shaping the two; their views enhance the importance of these climate dimensions even further. It is quite clear that for such school improvement initiatives, students and instructors must be involved in creating an academic culture that would support and uphold collaborative and student-centered learning aspects. The relatively lesser influence of the physical and emotional environments as indicated by the data could be pointing to this fact: despite being crucial factors, they show a difference in variation across school districts due to differential resource allocation. The low-resource schools are very ordinary in Pakistan; thus, possibly, inadequate infrastructure and emotional support were not properly addressed at those places, which might be one reason why these dimensions have lesser influences as a whole on the students' performance. This variability speaks to the direction of targeted interventions addressing these specific aspects of school climate. For instance, infrastructural improvements and a more emotive support system could help bridge such gaps in schools that are still lagging behind in such areas. More importantly, the differences in the perceptions of the school climate between teachers and students represent areas of further study in which both parties view and influence these climates differently. Interventions could then be targeted to issues raised by both groups to result in more holistic improvements in the climate of schools. Moreover, while this study has focused on the current state of school climate, future studies could explore the long-range outcomes of school climate improvement on student achievement and teacher satisfaction. Ultimately, the findings of this study suggest that both the school's academic and social dimensions are effective levers to improve the achievement of students in a resource-constrained setting like Pakistan. However, the more crucial investments essential to systematically change these settings,

including psychological and physical surroundings, are also important for overall development. These conclusions call for directed, multi-dimensional interventions by policy-makers and school administrators not only on academics and social dynamics but also on the infrastructural and emotional needs of schools to create a balanced supportive learning environment.

## 6. Limitations and Recommendations

Although the study provides valuable insights, its cross-sectional design precludes the establishment of causality. Longitudinal research might clarify how school climate impacts the performance of students over time. Further research also might enlighten how cultural and socio-economic settings affect the typical school climate in Pakistan. From these findings, one can infer that future policymakers will actually have to pay more attention to enhancing academic practices and social relationships since both are significant features in school climate that will yield a better outcome in terms of learning.

## 7. Conclusion

This kind of research is very valuable and shows the deep impact the school climate has on student academic achievements at the primary level in the context of Pakistan's education. In the paper, a methodologically advanced application of the quantitative analyses, composite-conditioned multilevel modeling, and hierarchical linear analyses focused on advanced partialle mention and unstandardized partialle mention in explaining the complicated linkage through which the dimensions of school climate shape the academic and social environments of students and consequently students' functioning across literacy, numeracy, and socio-emotional domains. Meaning that these relationships are statistically significant, implying the need to be purposeful and fact-based in educational reform in Pakistan. The findings reveal that changes in the academic setting, including those that influence the implementation of curriculums, the quality of instruction, and classroom management practices, are crucial for achieving positive student outcomes. This is particularly reiterated in the findings, which assert that attention must also be paid to interventions related to helping to enhance student-teacher relationships, peer interactions, and the unity of the



general school community. The results underscore the importance of educational policymakers, administrators, and stakeholders incorporating strategies to improve the school climate within broader educational policy and frameworks; all strategies would need a multifaceted approach in the areas of professional development for educators, infrastructure improvement enhancements, and inclusive policy formulation. They have to be aligned with the sociocultural dynamics of primary schools in Pakistan. Thus, the education system will produce the related environment in order to have maximum productivity from the student by very strictly treating the factors, hence building a strong base for academic excellence and continuous educational prosperity.

## References

- Ali, Z., Tatlah, I. A., Dogar, A. H., Amin, M., Khan, A. M., & Shabbir, M. (2014). Linkage between school climate and students' academic achievement at secondary level. *Int. J. That Coverage Human Field Stud*, 3, 50-70.
- Anderson, C. S. (1982). The search for school climate: A review of the research. *Review of educational research*, 52(3), 368- 420.
- Bear, G. G., Gaskins, C., Blank, J., & Chen, F. F. (2011). Delaware school climate survey-student: Its factor structure, concurrent validity, and reliability. *Journal of School Psychology*, 49(2), 157-174.
- Benbenishty, R., Astor, R. A., Roziner, I., & Wrabel, S. L. (2016). Testing the causal links between school climate, school violence, and school academic performance: A cross-lagged panel autoregressive model. *Educational Researcher*, 45(3), 197-206.
- Bender, K. A., Donohue, S. M., & Heywood, J. S. (2005). Job satisfaction and gender
- Boulifa, K., & Kaaouachi, A. (2015). The Relationship between Students' Perception of Being Safe in School, Principals' Perception of School Climate and Science Achievement in TIMSS 2007: A Comparison between Urban and Rural Public School. *International Education Studies*, 8(1), 100-112.
- Bradshaw, C. P., Waasdorp, T. E., Debnam, K. J., & Johnson, S. L. (2014). Measuring school climate in high schools: A focus on safety, engagement, and the environment. *Journal of School Health*, 84(9), 593-604.
- Briggs, S. (2009). Risks and opportunities in adolescence: Understanding adolescent
- Bryman, A. (2016). *Social research methods*. Oxford university press.
- Bursalioglu, Z. (2000). *Eğitim yönetiminde yeni yapı ve davranış*. Ankara: Pegem Yayınları.
- Cohen, J., McCabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180-213.
- Cohen, J., McCabe, E. M., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers college record*, 111(1), 180-213.
- Cohen, J., McCabe, E.M., Michelli, N.M., and Pickeral, T. (2009). School climate: dropout rates for black and white students. *Education and Treatment of Children*, 34(2), 167-192
- Cohen, L., Manion, L., & Morrison, K. (2018). *Research methods in education*. routledge.
- Cornell, D., Shukla, K., & Konold, T. R. (2016). Authoritative school climate and student academic engagement, grades, and aspirations in middle and high schools. *Aera Open*, 2(2), 2332858416633184.
- Creswell, J. W. & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Creswell, J. W. (2014). *Research Design Qualitative, Quantitative, and Mixed Methods Approaches*. (4th ed.). Thousand Oaks, CA: Sage.
- Darling-Hammond, L., & Cook-Harvey, C. M. (2018). *Educating the Whole Child: Improving School Climate to Support Student Success*. Learning Policy Institute.
- Demiroz, S. (2020). The relationship between secondary schools students' perceptions of school climate, their school belonging and their academic achievement. *Education Reform Journal*, 5(2), 60-77.

- Erwin, J. (2004). The classroom of choice: Giving students what they need and getting facilities, school climate, and student achievement. *Journal of Educational Administration*, 46(1), 55-73.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2012). How to design and evaluate research in education.
- Freiberg, H. J. (2005). *School climate: Measuring, improving and sustaining healthy learning environments*. Routledge.
- Griffith, J. (2002). A multilevel analysis of the relation of school learning and social environments to minority achievement in public elementary schools. *The Elementary School Journal*, 102(5), 349-366.
- Gue, P. (2012). *School culture: A validation study and exploration of its relationship Guide for Parents and Others*. New York: Teachers College Press
- Hackman, J. and Wageman, R. (2007) Asking the right questions about leadership.
- Hallinger, P., & Murphy, J. F. (1986). The social context of effective schools. *American journal of education*, 94(3), 328-355.
- Hattie, J. (2008). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. routledge.
- Hendron, M., & Kearney, C. A. (2016). School climate and student absenteeism and internalizing and externalizing behavioral problems. *Children & Schools*, 38(2), 109-116.
- High School Mathematics Students. *Studies in Teaching 2006 Research Digest*, 97 -102.
- Hoge, D. R., Smit, E. K., & Hanson, S. L. (1990). School experiences predicting changes in self-esteem of sixth-and seventhgrade students. *Journal of educational psychology*, 82(1), 117.
- Hoy, W. K., & Tarter, C. J. (1997). *The Road to Open and Healthy Schools: A Handbook for Change* (2nd ed.). Corwin Press.
- Husain, Naushad (2011) *Influence of Intelligence on Adjustment of Teacher Impact of School Climate on Students' Achievement at Secondary Level in Pakistan*.
- Jackson, A.W. and Andrews, P.G. (2004) *Making the Most of Middle School: A Field job stress and burnout: Mediation analyses*. *Applied Psychology*, 57, 152-171.
- Johnson, B., & Stevens, J. J. (2006). Student achievement and elementary teachers' perceptions of school climate. *Learning Environments Research*, 9(2), 111-122.
- Jones, A., & Shindler, J. (2016). Exploring the School Climate--Student Achievement Connection: Making Sense of Why the First Precedes the Second. *Educational Leadership and Administration: Teaching and Program Development*, 27, 35- 51.
- Kelly, D. (2013), "After Sandy Hook, Schools Start the Year with Heightened
- Khan, Nasrullah (2017) *Learning Environment Facilitations in Public and Private Universities for Science Students in Khyber Pakhtunkhwa, Pakistan*. *J. Appl. Environ. Biol. Sci.*, 7(9)17-21, 2017
- LaRusso, M. D., Romer, D., & Selman, R. L. (2008). Teachers as builders of respectful school climates: Implications for adolescent drug use norms and depressive symptoms in high school. *Journal of Youth and Adolescence*, 37(4), 386-398.
- Lee, J. S., & Shute, V. J. (2010). Personal and social-contextual factors in K-12 academic performance: An integrative perspective on student learning. *Educational Psychologist*, 45(3), 185-202.
- Lee, V. E., Smith, J. B., Perry, T. E., & Smylie, M. A. (2011). Social support, academic press, and student achievement: A view from the middle grades in Chicago. *American Educational Research Journal*, 34(2), 225-252.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological methods*, 7(1), 83.
- MacNeil, A. J., Prater, D. L., & Busch, S. (2009). The effects of school culture and climate on student achievement. *International Journal of leadership in Education*, 12(1), 73-84.

- Malik, R. H., & Rizvi, A. A. (2018). Effect of Classroom Learning Environment on Students' Academic Achievement in Mathematics at Secondary Level. *Bulletin of Education and Research*, 40(2), 207-218.
- Mitchell, M. M., Bradshaw, C. P., & Leaf, P. J. (2010). Student and teacher perceptions of school climate: A multilevel exploration of patterns of discrepancy. *Journal of school health*, 80(6), 271-279.
- Norton, M. S. (1984). What's so important about school climate? *Contemporary Education*, 56(1), 43.
- Özdemir, N. (2019). Principal leadership and students' achievement: Mediated pathways of professional community and teachers' instructional practices. *KEDI Journal of Educational Policy*, 16(1).
- Pashiardis, G. (2008). Toward a knowledge base for school climate in Cyprus's schools. *International Journal of Educational Management*.
- Payne, A. A. (2018). Creating and Sustaining a Positive and Communal School Climate: Contemporary Research, Present Obstacles, and Future Directions. National Institute of Justice Report. National Institute of Justice.
- Perzigian, A., & Braun, M. (2020). A Comparison of School Climate Ratings in Urban Alternative and Traditional High Schools. *Journal of Educational Research and Practice*, 10(1), 22.
- Regression analysis of the covariation between middle school students' perceived school climate and behavioral problems. *Journal of Research on Adolescence*, 20, 274–286
- Research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180–213.
- Sakız, H. (2017). Impact of an inclusive programme on achievement, attendance and perceptions towards the school climate and social-emotional adaptation among students with disabilities. *Educational Psychology*, 37(5), 611-631.
- Shindler, J., Jones, A., Taylor, C., & Cadenas, H. (2004). Does Seeking to Create a Better Classroom Climate Lead to Student Success or Improved Teaching? Examining the Relationship between Pedagogical Choices and Classroom Climate in Urban Secondary Schools. *Online Yearbook of Urban Learning, Teaching, and Research*, 27, 36.
- Smith, L., Sinclair, K. E., & Chapman, E. S. (2002). Students' goals, self-efficacy, self-handicapping, and negative affective responses: An Australian senior school student study. *Contemporary educational psychology*, 27(3), 471-485.
- Spinath, B., Eckert, C., & Steinmayr, R. (2014). Gender differences in school success: What are the roles of students' intelligence, personality and motivation?. *Educational Research*, 56(2), 230-243.
- Sweetland, S. R., & Hoy, W. K. (2000). School characteristics and educational outcomes: Toward an organizational model of student achievement in middle schools. *Educational Administration Quarterly*, 36(5), 703-729.
- Tagiuri, R., Litwin, G. H., & Barnes, L. B. (1968). Organizational climate: Explorations of a concept. Division of Research, Graduate School of Business Administration, Harvard University.
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3), 357-385.
- Turner, I., Reynolds, K. J., Lee, E., Subasic, E., & Bromhead, D. (2014). Well-being, school climate, and the social identity process: a latent growth model study of bullying perpetration and peer victimization. *School psychology quarterly*, 29(3), 320.
- Van Eck, K., Johnson, S. R., Bettencourt, A., & Johnson, S. L. (2017). How school climate relates to chronic absence: A multi-level latent profile analysis. *Journal of School Psychology*, 61, 89-102.

- Virtanen, M., Kivimäki, M., Luopa, P., Vahtera, J., Elovainio, M., Jokela, J., & Pietikäinen, M. (2009). Staff reports of psychosocial climate at school and adolescents' health, truancy and health education in Finland. *The European Journal of Public Health*, 19(5), 554-560.
- Wang, M. T., & Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review*, 28(2), 315-352.
- Wang, W., Vaillancourt, T., Brittain, H. L., McDougall, P., Krygsman, A., Smith, D., ... & Hymel, S. (2014). School climate, peer victimization, and academic achievement: results from a multi-informant study. *School psychology quarterly*, 29(3), 360.