

Impact of Emotional Intelligence and Learning Environment on Academic Achievement of Secondary School Students

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Abstract

Purpose of the study was to find out impact of emotional intelligence and learning environment on academic achievement of secondary school students of Dehradun district. This study was conducted using analytical research method. For this purpose, 912 secondary school students were selected from 10 private, 5 central and 3 Atal Utkarsh schools of three blocks namely Doiwala, Raipur and Shadpur of Dehradun District, Uttarakhand. District, blocks and schools were selected using purposive sampling technique. Wholea, students were selected using simple random sampling. Emotional intelligence Scale constructed and standardized by Dr. V. K. Rai (2006) was used to measure emotional intelligence. To measure learning environment, Learning Environment Scale developed by Rai (2007) was used. To analyse data, two-way analysis of variance was used. Findings of the study revealed that there is significant impact of emotional intelligence and learning environment on academic achievement of secondary school teachers, Therefore, secpndary school teachers can enhance academic achievement of their students through developing their emotional intelligence and learning environment in school system.

Introduction

Education is crucial in shaping an individual's future. Academic achievement serving as a major contribution in learner's progress and life. Historically, intelligence quotient (IQ) has been viewed as a primary determinant of academic performance. Nevertheless, recent studies indicate that some psycho-social factors are also playing significant role in academic success of learners. In these factors emotional intelligence and learning environment are playing vital role in academic success. Recently, emotional intelligence was considered as a major factor in development of academic success of learner. According to Deniel Goleman, who popularise emotional intelligence, emotional intelligent contribute more than intelligence not only in learners academic success also in their success each field of life. Emotional intelligence encompasses the capacity to perceive, comprehend, regulate, and effectively manage emotions, which subsequently affects social interactions, motivation, and cognitive performance. It is an ability of learners to manage emotions is equally as vital as cognitive intelligence. Students exhibiting higher levels of emotional intelligence are more adept at managing stress, resolving conflicts, maintaining motivation, and sustaining focus, all of which are critical for achieving academic excellence. Consequently, educational institutions must recognize the significance of emotional intelligence in promoting the holistic development of learners. Emotional intelligence enhances academic and success in other field of life through affecting motivation, perseverance, stress management, self-awareness, self-regulation, social skills, and thereby mental health. These factors are integral to academic achievement and success in life. Additionally, it fosters the development of leadership skills, which are increasingly valued in today's workforce. Previous researches indicate that emotional intelligence is a significant predictor of numerous positive outcomes, including academic success, mental well-being, and social relationships. By gaining insights into the emotional intelligence of secondary school students, educators and parents can more effectively support their emotional and academic growth.

Second important factor is learning environment which not play significant role in only development of academic achievement but development of several psycho-social factors that play major role in learner success in most field of life. A learning environment is a setting where learners feel at ease, motivated, and inspired by their surroundings. The learning environment (LE) encompasses the psychological, social, cultural, and physical contexts in which learning takes place and where experiences and expectations are collaboratively shaped among its participants (Rusticus et al., 2020; Shochet et al., 2013). This encompasses a diverse array of settings, ranging from conventional classrooms and online platforms to outdoor spaces, while also

incorporating the culture, interactions, and methodologies employed to enhance education. An effective learning environment strives to be comfortable, supportive of learning, and devoid of distractions, ultimately influencing a student's motivation and success. Learning environments serve as venues for individuals to acquire knowledge. These can consist of physical locations such as classrooms, educational institutions, or workplaces; virtual environments like digital platforms; or hybrid spaces that integrate both physical and digital components. It is essential for learning environments to offer a safe and supportive atmosphere for education. Additionally, they should facilitate opportunities for learners to engage with one another and access resources that aid in diverse learning approaches. Although a learning environment is typically identified as a classroom, it more broadly represents a space where students can feel secure and supported in their quest for knowledge, drawing inspiration from their surroundings. Beyond aesthetics, educators can influence a learning environment through their teaching methods and the ambiance they cultivate within the classroom. They can enhance student learning by promoting participation and engagement, which fosters positive and constructive feedback that encourages exploration, peer community, and diversity.

Undoubtedly, schools and educators are essential to a child's long-term success. In addition to a comprehensive curriculum and access to advanced educational methods, the most significant factor influencing a student's success in both academics and life is a positive learning environment. It should be a primary objective for educators to foster an engaging atmosphere within their classrooms. A supportive learning environment is vital for academic achievement as it enhances student motivation, confidence, and involvement, resulting in improved performance. Elements such as a nurturing social environment, a comfortable physical setting, and effective teacher-student interactions contribute to better focus, social abilities, and information retention. The learning environment includes comfort, psychological, social, and cognitive elements that collectively shape the overall educational experience and their academic success.

In present time several researches have been conducted related to academic achievement of secondary school students. But few researches available related to learning environment and academic achievement of secondary school students. There is lack in researches related to emotional intelligence and learning environment simultaneously, particularly in India. Therefore, investigators decided to study emotional intelligence and learning environment of secondary school students.

Review of Related Literature

Studies Related to Emotional Intelligence and Academic Achievement

Abisamra (2000) conducted a study examining the connection between emotional intelligence and academic success. The findings indicated that students with higher grade point averages exhibited greater emotional intelligence compared to those with lower grade point averages. This suggests a positive correlation between emotional intelligence and academic achievement. Manhas (2004) carried out a study involving a sample of 400 11th-grade students to explore the relationship between academic success and emotional intelligence. The results of this research revealed a strong positive correlation between academic achievement and emotional intelligence.

Mathur, Dube, and Mallhotra (2005) explored the link between emotional intelligence and academic performance among school students. For this study, a sample of 83 adolescents (both boys and girls) from public schools was selected. The findings indicated a significant positive correlation between emotional intelligence and academic achievement.

Aremu et al. (2006) examined the relationship between emotional intelligence and academic performance among senior secondary school students in Ibadan, Nigeria. The results demonstrated that both emotional intelligence and parental involvement could account for 55 percent of academic achievement. Additionally, significant positive relationships were found between emotional intelligence and academic achievement, as well as between parental involvement and academic success.

Subramanyam et al. (2008) conducted a study on the relationship between emotional intelligence and academic achievement among secondary school students. Their findings indicated that there was no correlation between academic achievement and emotional intelligence.

Ogundokun and Adeyerno (2010) examined emotional intelligence and academic achievement, considering the moderating effects of age and motivation within a sample of 1563 secondary school students from Oyo State, Nigeria. The results from hierarchical regression analysis demonstrated that emotional intelligence alone accounted for 54.20% of the variance in academic achievement, while the combination of emotional

intelligence, intrinsic motivation, extrinsic motivation, and age collectively contributed to 57.20% of the variance in academic achievement.

Nwadinigwe and Azuka-Obieke (2012) explored the impact of emotional intelligence on the academic achievement of senior secondary school students, utilizing a sample of 240 students, both female and male. The study concluded that there was a positive and significant correlation between emotional intelligence skills and academic achievement. This suggests that enhancing students' emotional intelligence can lead to improved academic performance.

Bhadouria (2013) investigated the influence of emotional intelligence on students' academic achievement. The findings revealed a positive relationship between emotional intelligence and academic motivation. Additionally, the study indicated that students with varying levels of academic motivation—high, moderate, and low—differed in their emotional intelligence levels.

Chaudhury (2020) examined the relationship between emotional intelligence and academic achievement among higher secondary school students, utilizing a sample of 200 students. The results of the study indicate that there is a significant and positive correlation between emotional intelligence and the academic success of these students.

Revathy and Arasi (2021) explored the need for cognition and trait emotional intelligence in relation to academic achievement, based on a sample of 313 higher secondary students selected from various schools in Chennai, Tamil Nadu. The findings revealed a significant and positive relationship between trait emotional intelligence and the academic achievement of the students.

Ghosh and Paul (2022) investigated the impact of emotional intelligence on academic achievement among 100 secondary school students in the Sundarbans Region of West Bengal. The findings of this study demonstrated a significant positive correlation between emotional intelligence and academic performance.

Kour (2025) conducted research on emotional intelligence in relation to academic achievement, focusing on a sample of 200 higher secondary school students in the Jammu district, located in the Union Territory of Jammu and Kashmir. The findings of this study indicate a positive and significant correlation between emotional intelligence and the academic performance of students. The investigator recommended enhancing emotional intelligence by integrating it into educational programs to promote both academic achievement and overall personal development.

Matharkar and Prabha (2025) investigated relationship between emotional intelligence and academic achievement of secondary school students. As a sample, 150 secondary school students were selected with 100 from government schools. The Emotional Intelligence Scale developed by Dr. Meena Jain and Dr. Madhu Jain was used to collect data. Recent academic performance of students were gathered from school office. Significant and positive relationships were found of academic achievement with total emotional intelligence and its dimensions like Life Event, Satisfaction, Emotional Self Awareness, Emotional Expression, Emotional Awareness of others, Intention, Creativity, Resilience, Interpersonal Connections, Constructive Discount, Compassion, Outlook, Intuition, Trust Radius, Personal Power, Integrity and Quality of Life.

Studies Related to Learning Environment and Academic Achievement

Nuhu (2015) carried out a quasi-experimental research design that included pre-tests, post-tests, and a non-equivalent design group to investigate the effect of the learning environment on student performance in public secondary schools in Taraba State, Nigeria, using a sample of 200 students. An independent t-test was employed to analyse the data and test the hypotheses. The findings of this study indicated a significant difference in the performances of the Experimental and Control groups, favouring the students in the experimental group. This indicated that factors such as a well-constructed classroom, adequate furniture, a smaller class size, and the use of instructional materials positively influenced the performance of students in Junior Secondary schools in Taraba State.

Malik and Rizv (2018) examined the impact of the classroom learning environment on the academic achievement of secondary school students in mathematics, focusing on a sample of 516 tenth-grade students studying the subject. The findings indicated that among the nine subscales of the Classroom Environment Instrument, six (Teacher Support, Cooperation, Student Cohesiveness, Involvement, Personal Relevance, and Emphasis on Understanding) showed a positive and significant correlation with students' academic achievement in mathematics. Conversely, two subscales (Equity and Investigation) were found to have a negative and significant correlation with academic achievement in mathematics. Additionally, one subscale, Autonomy, did not demonstrate a significant correlation with students' academic performance in mathematics.

Melaiye et al. (2021) investigated the effect of the learning environment on the academic performance of students in rural secondary schools, utilizing a sample of 198 students from the rural area of Jalingo Local Government Area, Taraba State, Nigeria. The study's results indicated that the learning environment significantly influences students' academic performance as perceived by teachers in the Jalingo local government area.

Aneke & Akpusugh (2022) explored the influence of the learning environment on the academic performance of secondary school students, using a sample of 399 randomly selected students from 30 secondary schools in Makurdi. The findings revealed that students with adequate infrastructure tend to learn more effectively, resulting in better academic achievement, while those facing poor and inadequate physical facilities, outdated teaching methods, and overcrowded classrooms experience lower academic performance. Furthermore, unattractive school buildings and overcrowded classrooms contribute to the poor academic achievement of secondary school students. It was also discovered that the environment outside of school impacts learning progress, with students from homes equipped with educational resources performing better in school compared to those from homes lacking such facilities. This study further indicated that indiscipline among teachers is also a contributing factor to poor academic performance among students. Students instructed by trained professional teachers tend to perform better than those taught by untrained teachers. The investigators concluded that the learning environment significantly influences student performance.

Kate (2023) examined the impact of the learning environment on academic performance. This reviewed article suggests that a school with a suitable learning environment plays a crucial role in achieving the desired learning outcomes, thereby enhancing students' academic performance through the promotion of effective teaching and learning.

Khan (2023) explored the effect of the learning environment on the academic performance of secondary school students, using a sample of 1,070 tenth-grade students selected through convenience sampling. The findings of this study revealed a significant and positive relationship between the learning environment and students' academic achievement.

Robert et al. (2024) investigated the academic achievement of secondary school learners in physics in relation to the learning environment, using a sample of 121 learners from two government-aided secondary schools in Kira Municipality, Wakiso district. The findings of this study demonstrate a positive correlation between academic achievement and the learning environment.

Galang and Basco (2025) studied the relationship between academic achievement and the perceived learning environment among 238 intermediate pupils. The findings of this study indicate that a significant and positive correlation exists between academic achievement and the overall learning environment, as well as its various dimensions.

Objectives of the Study

Following are objectives of the present study:

1. To study impact of emotional intelligence on academic achievement of secondary school students.
2. To study impact of learning environment on academic achievement of secondary school students.
3. To find out interaction between emotional intelligence and learning environment on academic achievement of secondary school students.

Hypotheses of the Study

1. There is no significant impact of emotional intelligence on academic achievement of secondary school students.
2. There is no significant impact of learning environment on academic achievement of secondary school students.
3. There is no significant interaction between emotional intelligence and learning environment on academic achievement of secondary school students.

Methodology

Analytical survey method was used to conduct this study. For present study, 912 students of 10th grade were selected from 10 private, 5 central and 3 Atal Utkarsh schools of three blocks namely Doiwala, Raipur and Shadpur of Dehradun District, Uttarakhand. District, blocks and schools were selected using purposive sampling technique. Whole, students

were selected using simple random sampling. Out of 912 students, 150, 258 and 504 students were selected from Atal Utkarsh, Central and private school affiliated to CBSE. Emotional intelligence Scale constructed and standardized by Dr. V. K. Rai (2006) was used to measure emotional intelligence. This scale consists 132 items related to 33 dimensions of emotional intelligence. Each dimension consist 4 items. This is Likert Type scale with five points- Strongly Agree (SA), Mostly Agree (MA), Agree (A), Partially Agree (PA), Not Agree (NA). Split-half and test-retest reliability of this scale was found to be 0.79 and 0.82 respectively. Rawat (2013) and Ramesh Kumar (2017) also calculated split-half reliability and found to be 0.84 and 0.82 respectively. To measure learning environment, Learning Environment Scale developed by Rai (2007) was used. This scale was developed on higher secondary school students of Sangrur and Mansa district of Punjab. Learning Environment Scale consists 162 items under 27 dimensions. Five options are given in front of each item. Five options are Disagree (vlgcr), Little Agree (vYi lger), Agree (lger), Mostly Agree (vf/kdr;k lger) and Completely Agree(iw.kZr;k lger). Split-half reliability of this scale was found to be 0.73, while test-retest reliability after two month was found to be 0.71. Prakash Pandey also calculated split-half reliability of this scale for 10th grade students on a sample of Kumaon region of Uttarakhand. They found that split-half reliability of this scale is 0.939. To find out impact of emotional intelligence and learning environment on academic achievement of secondary school students, two-way analysis of variance was used.

Result and Interpretation

Results of descriptive statistics for two-way analysis of variance for impact of learning environment and emotional intelligence on academic achievement are depicted in Table-1. While, results of two-way analysis of variance for impact of learning environment and emotional intelligence on academic achievement are presented in Table-2.

Table 1
Summary of descriptive statistics for two-way analysis of variance on academic achievement

Learning Environment (LE)	Emotional Intelligence(EI)	N	Mean	S.D.	S.E.
Low	Low	119	65.706	12.109	1.110
	Average	113	70.097	11.131	1.047
	High	104	72.596	10.788	1.058
Average	Low	37	67.324	8.785	1.444
	Average	121	74.926	10.610	0.965
	High	115	72.904	10.652	0.993
High	Low	115	58.052	7.595	0.708
	Average	135	69.556	10.445	0.899
	High	53	72.887	9.728	1.336

In Table 2, F value for impact of emotional intelligence on academic achievement of secondary school students is 49.752 with probability less than 0.001. It indicates that impact of emotional intelligence on academic achievement of secondary school students is highly significant. Table 1 show that mean on academic achievement of students with low emotional intelligence has low and mean on academic achievement of students with high emotional intelligence has high. It means emotional intelligence associated positively with academic achievement of secondary school students. Thus, null hypothesis that “There is no significant impact of emotional intelligence on academic achievement of secondary school students”, is rejected.

Table 2

Summary of two-way analysis of variance for impact of learning environment and emotional intelligence on academic achievement

	Some of Squares	df	Mean Square	F	P
Learning Environment(LE)	2764.821	2	1382.410	12.673	< .001
Emotional Intelligence(EI)	10854.329	2	5427.164	49.752	< .001
LE * EI	2825.945	4	706.486	6.477	< .001
Residuals	98502.401	903	109.084		

Table 2 shows that F value for impact of learning environment on academic achievement of secondary school students is 12.673 and probability of this value is less than 0.001. This means that impact of learning environment on academic achievement of secondary school students is highly significant. It is clear from Table 1 that mean on academic achievement of students with low learning environment has low academic achievement, While mean of students with high learning environment has high academic achievement. This result indicates that learning environment is positively associated with academic achievement of secondary school students. Therefore, hypothesis that “There is no significant impact of learning environment on academic achievement of secondary school students” is rejected.

In this table, interaction effect between emotional intelligence and learning environment of secondary school student is 6.77 which is significant at 0.001 level. This means that both variables are affecting each other's on academic achievement of secondary school students. Therefore, main effects of emotional intelligence and learning environment on academic achievement are suspected. In such situation post hoc analysis is essential to know separate impact of both variables. Games Howell post hoc test was used for this purpose. Results of Games Howell test for emotional intelligence and learning environment are given in Table 4 and Table 4 respectively.

Table 3

Results of Games Howell post hoc test for difference among secondary school students with low, average and high emotional intelligence

Compare Group	Mean Difference	SE	t	df	Probability
Low-Average	8.803	0.905	10.172	635	< .001
Low-High	10.104	0.909	11.099	572	< .001
Average-High	1.301	0.907	1.522	599	0.281

Table 3 show that t value ratio for differences between secondary school students with low and average, low and high, average and high emotional intelligence on academic achievement are 10.172, 11.099 and 1.522 respectively. Probabilities of first two comparisons are less than 0.001. Hence, significant differences exist between students with low and average, and low and high emotional intelligence on their academic achievement. Only significant difference was not found between secondary school students with average and low emotional intelligence on their academic achievement. On the basis of this post hoc test it is clear that significant impact of emotional intelligence exists on academic achievement of secondary school students.

Table 4

Results of Games Howell post hoc test for difference among secondary school students with low, average and high learning environment

Compare Group	Mean Difference	SE	t	df	Probability
Low-Average	3.543	0.865	3.916	588	< .001
Low-High	7.272	0.910	7.999	541	< .001
Average-High	3.728	0.854	4.109	59	< .001

Games Howell Post hoc results for differences between groups of different level of learning environment on academic achievement of secondary school students indicate that significant differences exist between all groups of learning environment of academic achievement because t values between students with low and average, low and high. Average and high learning environment are 3.916, 7.999, and 4.109 respectively. Probabilities of all groups are less than 0.001 that are high for significance. Thus, these post hoc results also indicate that significant impact of learning environment exist on academic achievement of secondary school students.

Discussion of Results

One finding of the present study indicates that there is a significant impact of emotional intelligence on academic achievement of secondary school students. This suggests a positive correlation between emotional intelligence and academic achievement. Findings of previous study namely Abisamra (2000), Manhas (2004), Mathur, Dube, and Mallhotra (2005), Aremu et al. (2006), Nwadinigwe and Azuka-Obieke (2012), Chaudhury (2020), Revathy and Arasi (2021), Ghosh and Paul (2022) and Kour (2025) were found a positive and significant correlation between emotional intelligence and the academic achievement of students. Matharkar and Prabha (2025) study also identified significant and positive correlations between academic achievement and overall emotional intelligence, as well as its various dimensions, including Life Event, Satisfaction, Emotional Self Awareness, Emotional Expression, Emotional Awareness of Others, Intention, Creativity, Resilience, Interpersonal Connections, Constructive Discount, Compassion, Outlook, Intuition, Trust Radius, Personal Power, Integrity, and Quality of Life. Present study finding supporting these previous study findings. But a study by Subramanyam et al. (2008) findings indicated that there was no correlation between academic achievement and emotional intelligence.

Another finding of the present study shows that there is a significant impact of learning environment on academic achievement of secondary school students. This means that learning environment associated positively with academic achievement of secondary school students. Findings of previous studies are also in line of finding of this study. Nuhu (2015) study indicated that factors such as a well-constructed classroom, adequate furniture, a smaller class size, and the use of instructional materials positively influenced the performance of students in Junior Secondary schools in Taraba State. Malik and Rizv (2018) findings indicated that among the nine subscales of the Classroom Environment Instrument, six (Teacher Support, Cooperation, Student Cohesiveness, Involvement, Personal Relevance, and Emphasis on Understanding) showed a positive and significant correlation with students' academic achievement in mathematics. Conversely, two subscales (Equity and Investigation) were found to have a negative and significant correlation with academic achievement in mathematics. Additionally, one subscale, Autonomy, did not demonstrate a significant correlation with students' academic performance in mathematics. Melaiye et al. (2021) results indicated that the learning environment significantly influences students' academic performance as perceived by teachers in the Jalingo local government area. Aneke & Akpusugh (2022) findings revealed that students with adequate infrastructure tend to learn more effectively, resulting in better academic achievement, while those facing poor and inadequate physical facilities, outdated teaching methods, and overcrowded classrooms experience lower academic performance. Furthermore, unattractive school buildings and overcrowded classrooms contribute to the poor academic achievement of secondary school students. Khan (2023) study revealed a significant and positive relationship between the learning environment and students' academic achievement. Robert et al. (2024) findings demonstrate a positive correlation between academic achievement and the learning environment. Galang and Basco (2025) findings show that a significant and positive correlation exists between academic achievement and the overall learning environment, as well as its various dimensions. Finding of present study supporting findings of these previous studies.

Educational Implication

In the present study, a significant impact of emotional intelligence and learning environment on the academic achievement of secondary school students was identified. Consequently, the researchers recommend that school teachers enhance their students' emotional intelligence by developing their emotional skills. School administrators and teachers should foster a supportive learning environment within the classroom and the school, allowing students to consult them freely whenever necessary. They should also ensure the availability of adequate learning resources, encourage a desire to learn, and instill a strong work ethic in the students. Teachers' ought to positively reinforce students' efforts and responses during instructional sessions, thereby strengthening academic relationships with them.

Furthermore, school administration should provide technological resources to students to ensure they acquire proper knowledge regarding the use of information technology. Students should be encouraged to utilize computer labs within the schools to gain conceptual understanding not only in technology but also to seek assistance from the internet for their science subjects. Additionally, school administrators should enhance the learning environment by beautifying the school campus.

References

- Abisamra, N. (2000). The relationship between emotional intelligent and academic achievement in eleventh graders. *Research in Education*, FED.661. <https://nadabs11.tripod.com/Montgomery/Nadal/Research/research-intell2.htm>
- Aneke, Jude and Akpusugh, R. A (2022). Influence of learning environment on the academic performance of secondary school students in Makurdi. <https://www.scienceopen.com/hosted-document?doi=10.14293/S2199-1006.1.SOR.PPFNKIF.v1>
- Aremu, Oyesoji A.; Tella, Adeyinka and Tella, Adedeji (2006, Fall). Relationship among emotional intelligence, parental involvement and academic achievement of secondary school students in Ibadan, Nigeria. *Essays in Education*, Vol 18. <http://www.usca.edu/essays/vol182006/tella1.pdf>
- Bhadouria, Preeti (2013). Role of emotional intelligence for academic achievement for students. *Research Journal of Educational Sciences*, 1(2), 8-12. https://www.isca.in/EDU_SCI/Archive/v1/i2/2.ISCA-RJES-2013-006.ph
- Chaudhury, Basudeb Roy (2020). Emotional intelligence and academic achievement of higher secondary school students. *Maharshi Dayanand University Research Journal*, 19 (1), 27-36.
- Galang, B. R., & Basco, J. G. (2025). Relationship between academic achievement and perceived learning environment among elementary pupils. *International Conference on Contemporary Education, Psychology and Health*, 1–15. <https://icceph.com/wp-content/uploads/2025/03/PERCEIVED-LEARNING-ENVIRONMENT.pdf>
- Ghosh, Sanat Kumar and Paul, Debaprasad (2022). Emotional intelligence - Its effect on the academic achievement of the secondary students in the Sundarbans Region of West Bengal. *International Journal for Multidisciplinary Research*, 4 (4), 458-463.
- Kate, Okello Immaculate (2023). Impact of learning environment on academic performances. *Eurasian Experiment Journal of Humanities and Social Sciences*, 4 (2), 38-42.
- Khan, Erum (2023). Impact of learning environment on academic performance of students at secondary level. *Sir Syed Journal of Education & Social Research*, 6 (1), 187-195.
- Kour, Navroop (2025). A study of emotional intelligence in relation to academic achievement among higher secondary school students. *International Journal of Advanced Multidisciplinary Scientific Research*, 8 (5), 13-20.
- Malik, Riaz Hussain and Rizvi, Asad Abbas (2018). Effect of classroom learning environment on students' academic achievement in mathematics at secondary level. *Bulletin of Education and Research*, 40(2), 207-218.
- Manhas, K.D. (2004). *Cognitive and non-cognitive correlates of emotional intelligence of adolescents*. Unpublished Ph.D. Thesis in Education, P.U. Chandigarh.
- Matharkar, Kanchan and Prabha, Mani (2025). Relationship between emotional intelligence and academic achievement of secondary school students. *International Journal of Childhood and Development Disorders*, 6(1), 04-06.
- Mathurs, M., Dube, S. and Malhotra, B. (2003) Emotional intelligence: Interrelationships of attribution, taking responsibility and scholastic performance in adolescents. *Indian Psychological Review*, 60,4,175-180.
- Melaiye, O. Rufus, Iorshaer, M.J., Cephas, Z.K., Kuru, M.J., Bulba, I.B., Chuboh, Jonah Victor., Galadima, Anthony Ishaku & Sylvanus, Ibrahim (2021). Impact of learning environment on the students' academic performance in rural secondary schools in Jalingo Local Government Area, Taraba State, Nigeria. *African Scholars Journal of Contemporary Education Research*, 21 (8), 96-120. https://www.africanscholarpublications.com/wp-content/uploads/2021/10/AJCER_Vol21_No8_June_2021-7.pdf.

- Nuhu, Adamu (2015). Impact of learning environment on the performance of students in social studies in junior secondary schools in Taraba state, Nigeria. Thesis. <https://kubanni.abu.edu.ng/items/961c09ea-5249-4c23-b10f-dc8d00bdf105/full>.
- Nwadinigwe, I.P and Azuka-Obieke, U. (2012). The impact of emotional intelligence on academic achievement of senior secondary school students in Lagos, Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 3(4), PP. 395-401.
- Ogundokun, M.O. and Adeyemo, D.A. (2010). Emotional intelligence and academic achievement: The moderating influence of age, intrinsic and extrinsic motivation. *The African Symposium: An online Journal of the African Educational Research Network*, Vol. 10 (2), 127-141.
- Revathy.P, & N. Kalai Arasi. (2021). Need for Cognition and Trait Emotional Intelligence in Relation to Academic Achievement of Higher Secondary Students. *MIER Journal of Educational Studies Trends and Practices*, 11(1), 30–48. <https://doi.org/10.52634/mier/2021/v11/i1/1753>.
- Robert, Lugolole, Dorothy, Ntongo, Batiibwe, Marjorie S K, John, Sentongo and Kibirige, Israel (2024). Investigating secondary school learners' academic achievement in physics in Uganda. *International Journal of Educational Spectrum*. 6 (1), 18-42.
- Rusticus, S. A., Wilson, D., Casiro, O., & Lovato, C. (2020). Evaluating the quality of health professions learning environments: development and validation of the health education learning environment survey (HELES). *Evaluation & the health professions*, 43(3), 162–168. 10.1177/0163278719834339.
- Shochet RB, Colbert-Getz JM, Levine RB, Wright SM. Gauging events that influence students' perceptions of the medical school learning environment: Findings from one institution. *Academic Medicine*. 2013;88:246–252. doi: 10.1097/ACM.0b013e31827bfa14
- Subramanyam S., Sreenivasa Rao K. (2008). Academic achievement and emotional intelligence of secondary school children. *Journal of Community guidance and Research*, 25(2), 224-228.

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