



Home Environment as a Determinant of Emotional Intelligence: A Study among University Students

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ABSTRACT

The study provides the influence of the home environment on the emotional intelligence of undergraduate students. It plays a crucial role in one's attitude formation, interpersonal skills and emotional development through parental response, support and sensitivity. Emotional intelligence on the other hand helps an individual to know oneself and other, to manage the emotions, regulate it and use these emotions effectively for oneself and other. A sample of 60 undergraduate university students has been taken for the study. Total 120 questionnaires were filled by them 60 (HES) and 60 (EIS) respectively. Data were collected with standardized tools HEI and EIS. Descriptive and inferential statistical methods are used for the data analysis including mean, standard deviation, t-test and Pearson correlational methods. The findings highlight that there is a significant relationship between Home Environment and Emotional Intelligence, indicating that if an individual's home setting is good then it has a good impact on one's emotions, attitude towards one self and others; whereas if home setting is not good due to and internal or external factors it may impact one's thinking pattern, lack empathy, trustworthiness and interpersonal relationship would also impact.



1. INTRODUCTION

Home environment is the complex and continuous process shaped by the interaction of bio psychosocial factors. Among these the home environment represents the most immediate and influential contexts. The family plays a crucial role in shaping various psychological patterns. The quality of parent - child interaction, parenting practices, and the emotional climate of the home significantly influence an one's capacity to know one's and others' emotions and regulate it accordingly. The home environment extends beyond physical surroundings to psychological factors such as communication pattern, disciplinary practices, and relaxation warmth. Bronfenbrenner (1979) conceptualized family as a central microsystem in which the direct interaction shapes the environment. Similarly Bandura (1977) says that children acquire emotional behaviors through imitation, while Bowlby (1969) highlight the importance of emotional intelligence in secure attachment. Parenting style has always been identifies as a determinant with supportive and authoritative parenting in both positive and negative manners. (Baumrid 1967, 1971). To systematically access the psychosocial environment of home, the home environment inventory provides a multidimensional framework, with 10 dimensions: Control, Protectiveness, Punishment, Conformity, Social Isolation, Reward, Deprivation of Privileges, Nurturance, Rejection, and Permissiveness. The empirical evidences show that supportive and emotionally stable responses promote resilience, emotional regulation and social competencies. Whereas, adverse conditions such as excessive control, isolation, and rejection shows emotional distress and poor adjustment negative impact within home environment.

Emotional intelligence is defined as the ability to perceive one's emotions, manage and regulate properly in one self and others (Mayor and Salovey, 1997). (Goleman, 1995) further expanded this concept by emphasizes competencies such as Self Awareness, Motivation, Empathy, and Relationship Management. Emotional intelligence is considered as a dynamic and developable construct influenced by both individuals and environmental factors. It plays an important role in academic, social and psychological well-being, particularly among university students who faced increasing academic and social challenges. Despite various researches on parent style and emotional intelligence, relatively less focus on home environment dimensions and emotional intelligence comparison among university students. This gap is mostly seen in Indian contexts, where cultural norms , family structure and parenting style is different from western cultures.

The present study examines the relationship between home environment and emotional intelligence among university students. Specially, it seeks to explore the various dimensions of home environment



influence overall emotional intelligence dimensions. The findings of this study are expected to contribute to the existing body of knowledge and provide practical implications in fostering supportive environments that enhance emotional competence and overall well – being.

Objectives of Study:

1. To analyze the impact of control in home environment on emotional intelligence.
2. To analyze the impact of protectiveness in home environment on emotional intelligence.
3. To analyze the impact of punishment in home environment on emotional intelligence.
4. To analyze the impact of conformity in home environment on emotional intelligence.
5. To analyze the impact of social isolation in home environment on emotional intelligence.
6. To analyze the impact of reward in home environment on emotional intelligence.
7. To analyze the impact of deprivation of privileges in home environment on emotional intelligence.
8. To analyze the impact of nurturance in home environment on emotional intelligence.
9. To analyze the impact of rejection in home environment on emotional intelligence.
10. To analyze the impact of permissiveness in home environment on emotional intelligence.
11. To analyze the impact of overall home environment on emotional intelligence.

2. REVIEW OF LITERATURE:

The recent studies focus on the growing importance of emotional intelligence in relation to environmental and technological factors. **Kumar (2020)** says that ‘the demographic variable such as gender and background does not effects emotional intelligence, also female has higher levels of emotional intelligence in comparison to males’. **Bhattacharya (2021)** says that ‘the dimensions of the home environment such as nurturance, protectiveness, reward, and control provides a positive emotional intelligence’. From a technological perspective **Kim and Park (2020)** and **Ahmed and Banerjee (2021)** emphasized ‘the role of effective technology and multimodal emotion recognition in enhancing emotional understanding within digital era’. Addressing the privacy concern, **Li and Chen (2022)** ‘proposed the federated learning model which helps in securing emotional recognition’. Recent research by **Thacker and Rathi (2024)** demonstrated that ‘the positive home environment and fictional environment significantly influence emotional intelligence and moral judgments, in which girls show higher than boys’. **Shashank et al. (2024)** introduced ‘an emotion aware smart system, which supports emotional wellbeing in home settings’.



Research Gap:

- The above literature only focuses on university students or else at student level. The above literature does not take overall home environment inventory dimensions within one paper.
- There is a lack of interdisciplinary study among home environment and emotional intelligence. There is an inconsistent finding regarding gender differences.
- There is less number of studies related to socio-cultural and higher cultural contexts. There is a limited connection between technological advancements and real life emotional development.

3. RESEARCH METHODOLOGY:

1. **Problem Statement** This study aims to examine the influence of the home environment on emotional intelligence among university students.

2. **Hypotheses of Study:**

1. There is no significant relationship between control in the home environment and student's emotional intelligence.
2. There is no significant relationship between protectiveness in the home environment and student's emotional intelligence.
3. There is no significant relationship between punishment in the home environment and student's emotional intelligence.
4. There is no significant relationship between conformity in the home environment and student's emotional intelligence.
5. There is no significant relationship between social isolation in the home environment and student's emotional intelligence.
6. There is no significant relationship between reward in the home environment and student's emotional intelligence.
7. There is no significant relationship between deprivation of privileges in the home environment and student's emotional intelligence.
8. There is no significant relationship between nurturance in the home environment and student's emotional intelligence.
9. There is no significant relationship between rejection in the home environment and student's emotional intelligence.
10. There is no significant relationship between permissiveness in the home environment and student's emotional intelligence.



11. There is no significant difference between overall home environment and student’s emotional intelligence.

3. **Variables:** The variables of this study are as follows:

Independent Variable: Home Environment Inventory

Dependent Variable: Emotional Intelligence Scale

4. **Sample and Sampling Method:**

In the current investigation the sample of 120 individuals (60 HEI; and 60 EIS) were taken by using the random sampling technique from a premier university situated in Roorkee (Uttarakhand).

5. **Tools of Study:**

The Home Environment Inventory developed by Karuna Shankar Misra and Emotional Intelligence Scale by Arun Kumar Singh were used for data collection. The HEI has 100 items with 10 dimensions such as Control, Protectiveness, Punishment, Conformity, Social Isolation, Reward Deprivation of Privileges, Nurturance, Rejection, and Permissiveness, while the EIS measures overall emotional intelligence of an individual subject.

6. **Strategies of Data Collection:**

Data for the present study were collected using a structured survey method. The HEI and EIS were administered to Quantum University Students. The participants were selected by using the random sampling techniques. Prior permission was obtained from the concerned participants and only interested one are selected for the study. The questionnaire was clearly instructed to the respected participants and ensures confidentiality and anonymity to ensure honesty and trust between participants and instructor. The collected data then structured, statistically measured and then analysis is done on the basis of the scores of the participants.

4. DATA ANALYSIS & INTERPRETATION

TABLE 1: CONTROL VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Control X Emotional Intelligence)

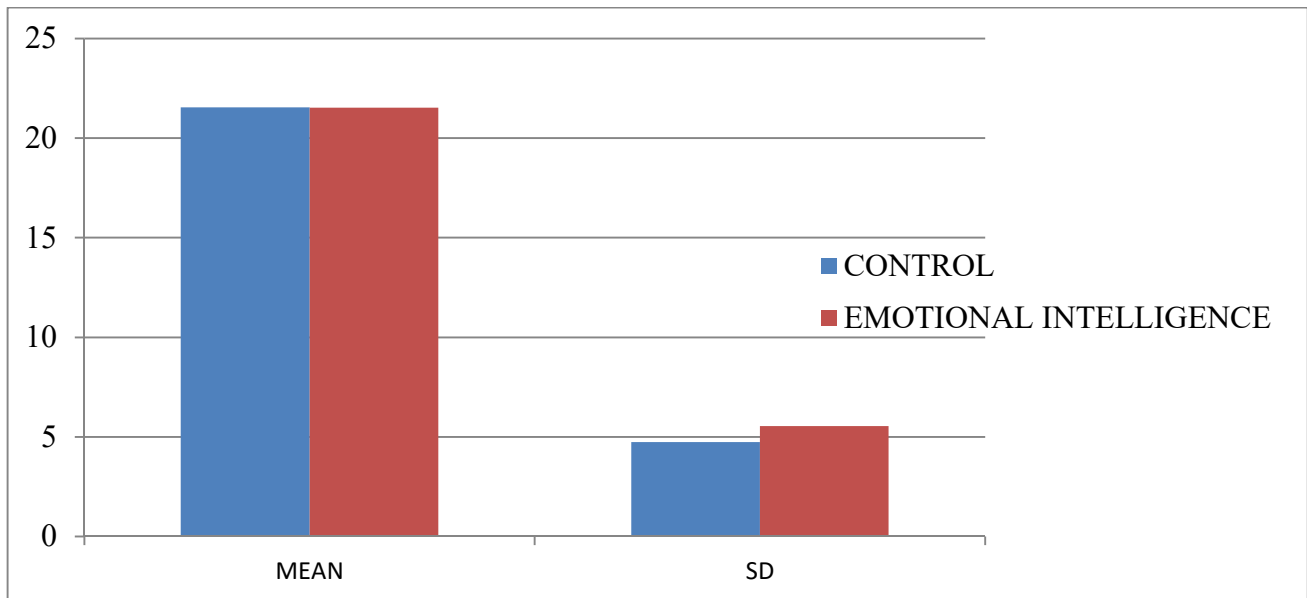
VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
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VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (CONTROL)	60	21.55	4.74	0.02	NOT SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Control Group and the Emotional Intelligence Group. The analysis revealed no significant difference in scores between the Control Group ($M=21.55$, $D =4.74$) and the Emotional Intelligence Group ($M =21.53$, $SD =5.54$). Therefore, the null hypothesis is accepted, suggesting that the intervention did not result in a statistically significant difference in Control dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 1

Mean and S.D. difference between Control and Emotional Intelligence

TABLE 2: PROTECTIVENESS VS EMOTIONAL INTELLIGENCE

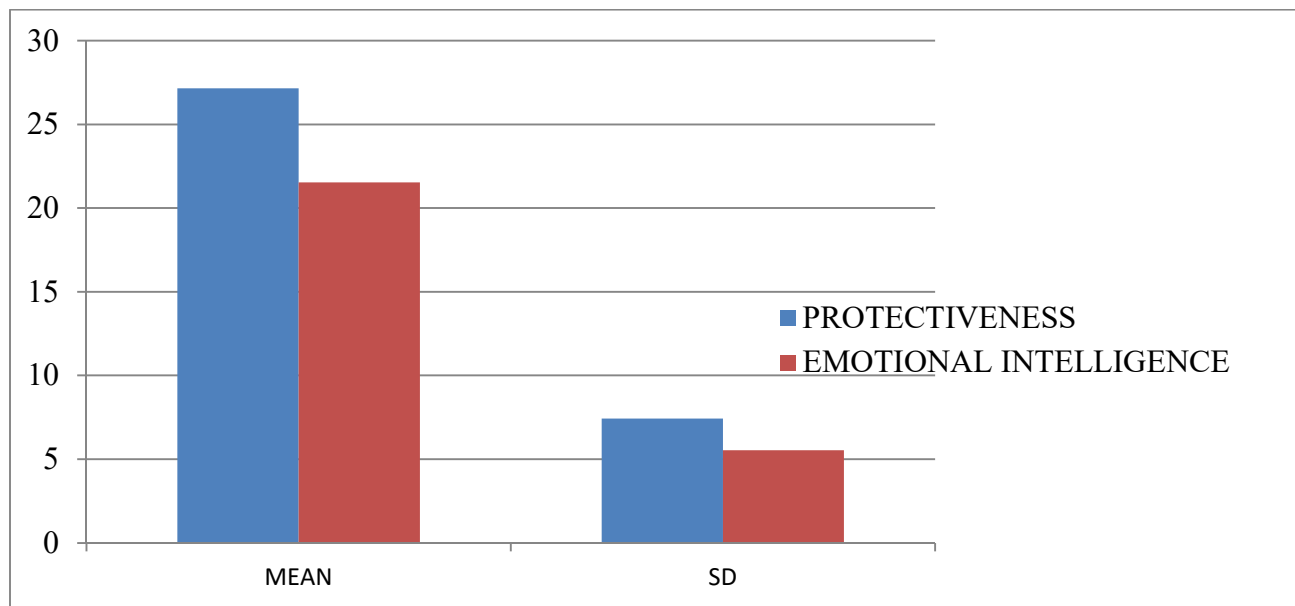
Mean, S.D, and T-Value (Protectiveness X Emotional Intelligence)



VARIABLES	N	MEAN	SD	T-SCORE	SIGNIFICANCE
VARIABLE 1 (PROTECTIVENESS)	60	27.15	7.43	4.32	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Protectiveness Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Protectiveness Group ($M=27.15, SD =7.43$) and the Emotional Intelligence Group ($M =21.53, SD =5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Protectiveness dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 2

Mean and S.D. difference between Protectiveness and Emotional Intelligence

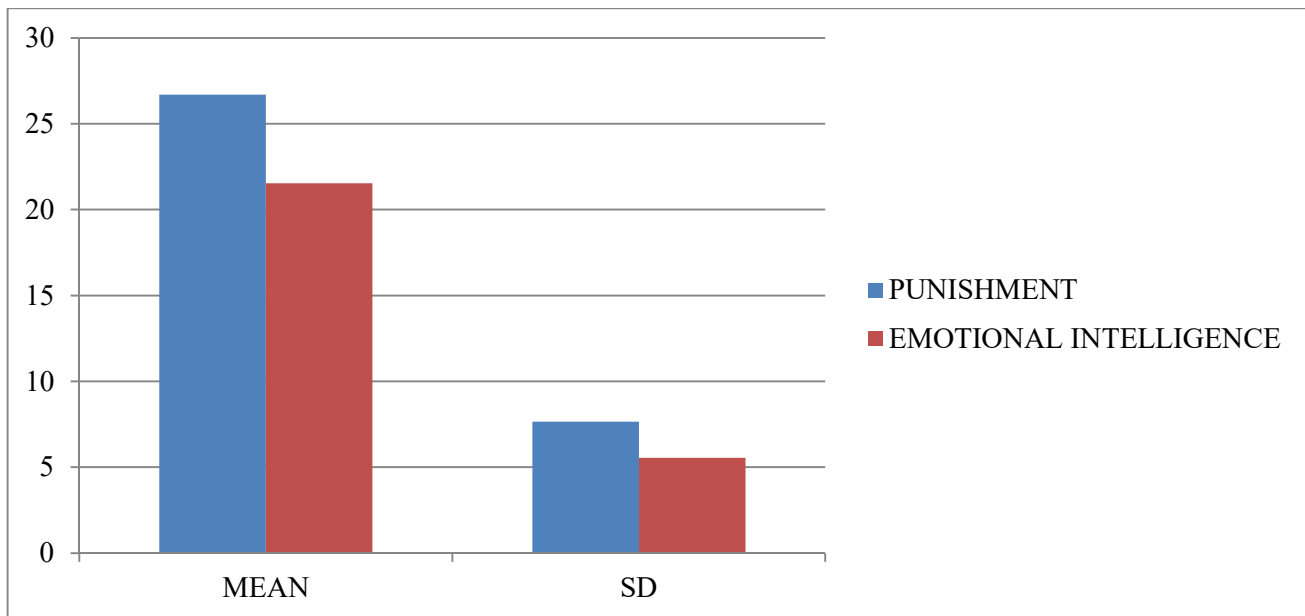
TABLE 3: PUNISHMENT VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Punishment X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (PUNISHMENT)	60	26.70	7.66	4.10	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Punishment Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Punishment Group ($M=26.70, SD =7.66$) and the Emotional Intelligence Group ($M =21.53, SD =5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Punishment dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 3

Mean and S.D. difference between Punishment and Emotional Intelligence



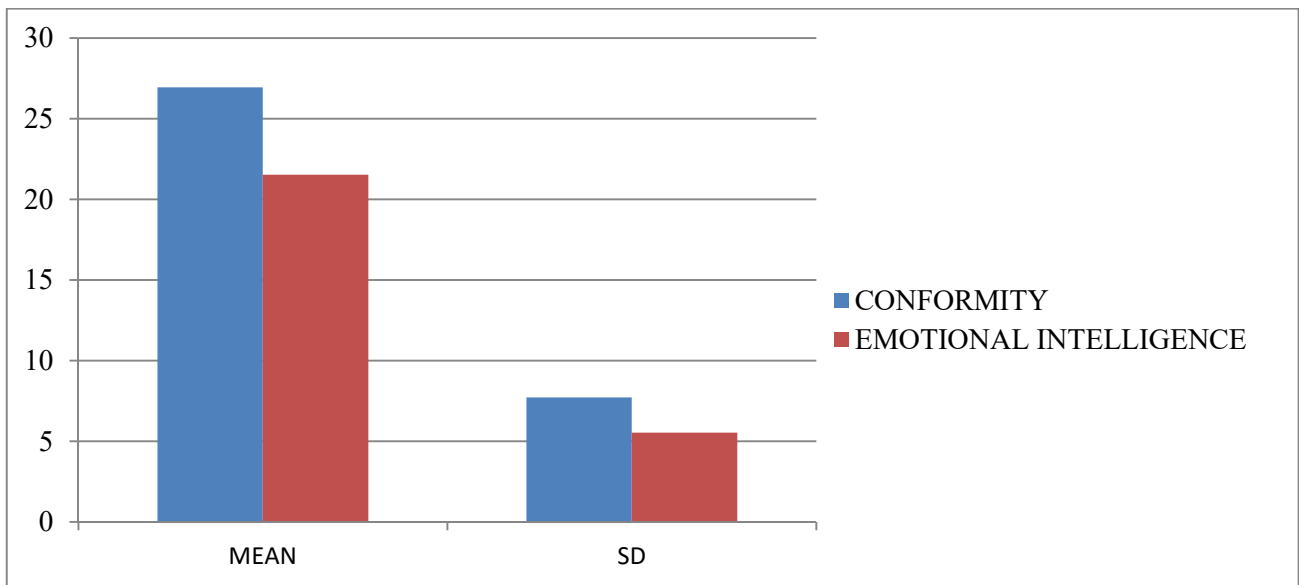
TABLE 4: CONFORMITY VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Conformity X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (CONFORMITY)	60	26.95	7.71	3.98	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Conformity Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Conformity Group ($M=26.95$, $SD =7.71$) and the Emotional Intelligence Group ($M =21.53$, $SD =5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Conformity dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 4

Mean and S.D. difference between Conformity and Emotional Intelligence



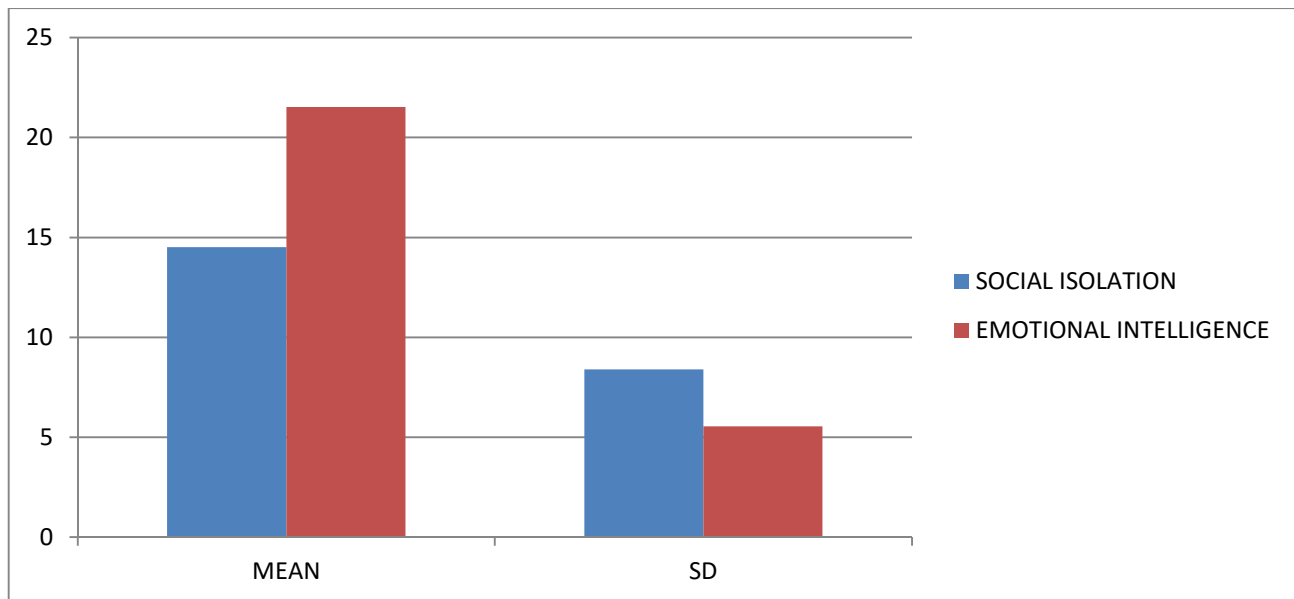
TABLE 5: SOCIAL ISOLATION VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Social Isolation X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (SOCIAL ISOLATION)	60	14.52	8.40	-5.50	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Social Isolation Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Social Isolation Group ($M = 14.52, SD = 8.40$) and the Emotional Intelligence Group ($M = 21.53, SD = 5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Social Isolation dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 5

Mean and S.D. difference between Social Isolation and Emotional Intelligence



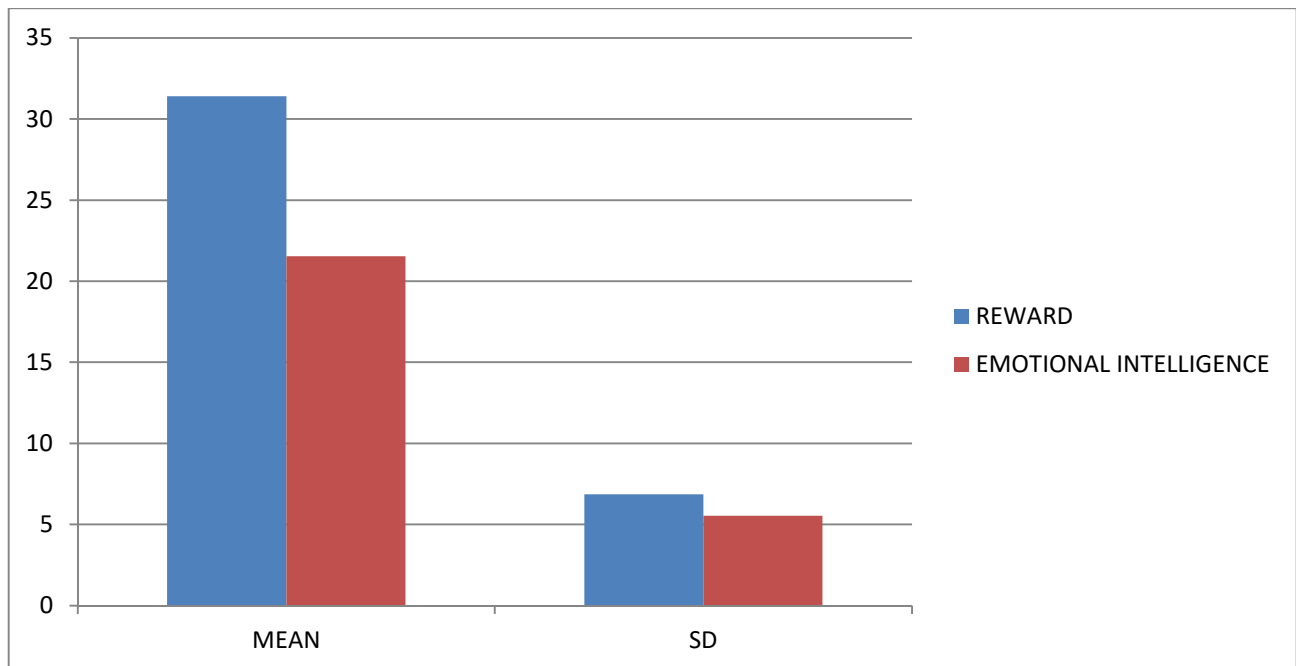
TABLE 6: REWARD VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Reward X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (REWARD)	60	31.40	6.86	8.17	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Reward Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Reward Group ($M= 31.40, SD = 6.86$) and the Emotional Intelligence Group ($M =21.53, SD =5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Reward dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 6



Mean and S.D. difference between Reward and Emotional Intelligence

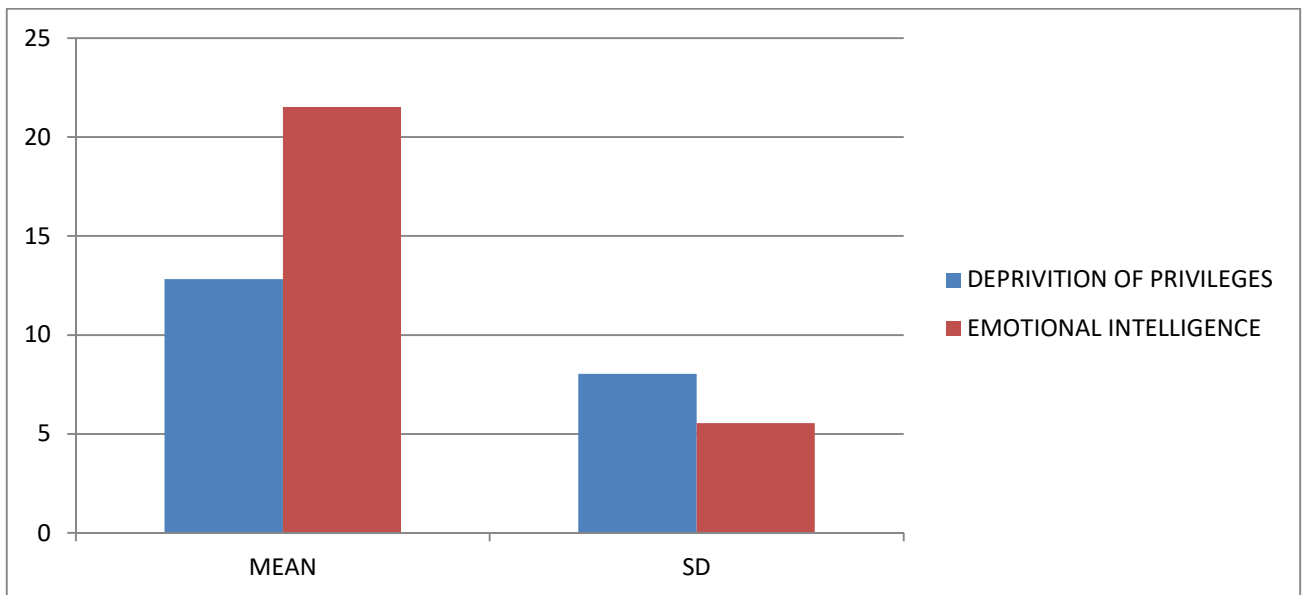
TABLE 7: DEPRIVATION OF PRIVILEGES VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Deprivation of Privileges X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (DEPRIVATION OF PRIVILEGES)	60	12.83	8.04	-6.06	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Deprivation of Privileges Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Deprivation of Privileges Group ($M= 12.83, SD = 8.04$) and the Emotional Intelligence Group ($M =21.53, SD =5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Deprivation Of Privileges dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 7



Mean and S.D. difference between Deprivation of Privileges and Emotional Intelligence

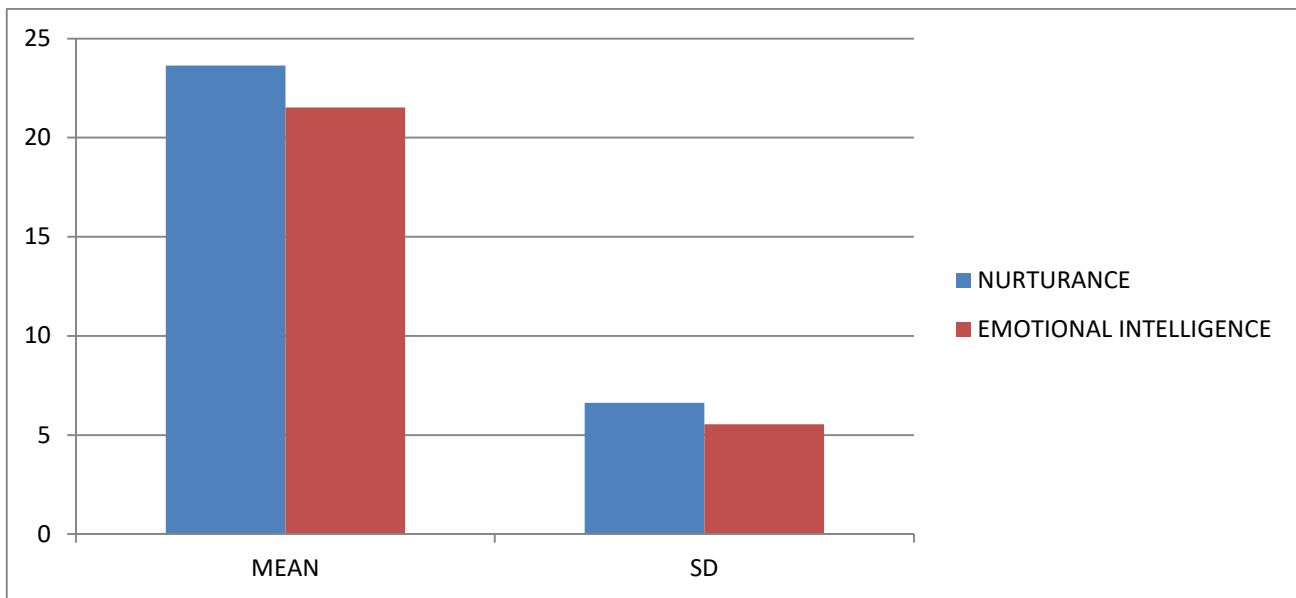
TABLE 8: NURTURANCE VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Nurturance X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (NURTURANCE)	60	23.63	6.62	1.84	NOT SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Nurturance Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Nurturance Group ($M= 23.63, SD = 6.62$) and the Emotional Intelligence Group ($M =21.53, SD =5.54$). Therefore, the null hypothesis is accepted, suggesting that the intervention did not result in a statistically significant difference in Nurturance dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 8

Mean and S.D. difference between Nurturance and Emotional Intelligence



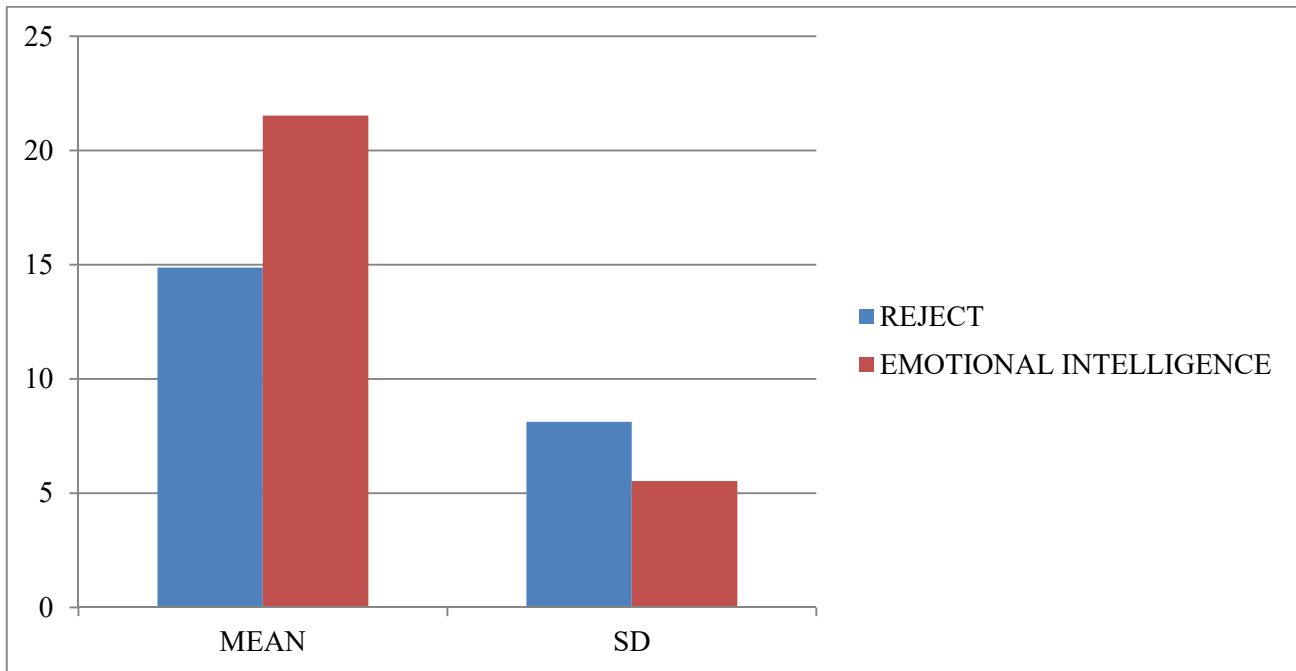
TABLE 9: REJECT VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Reject X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (REJECT)	60	14.88	8.12	-4.66	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Reject Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Reject Group ($M= 14.88, SD = 8.12$) and the Emotional Intelligence Group ($M =21.53, SD =5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Reject dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 9



Mean and S.D. difference between Reject and Emotional Intelligence

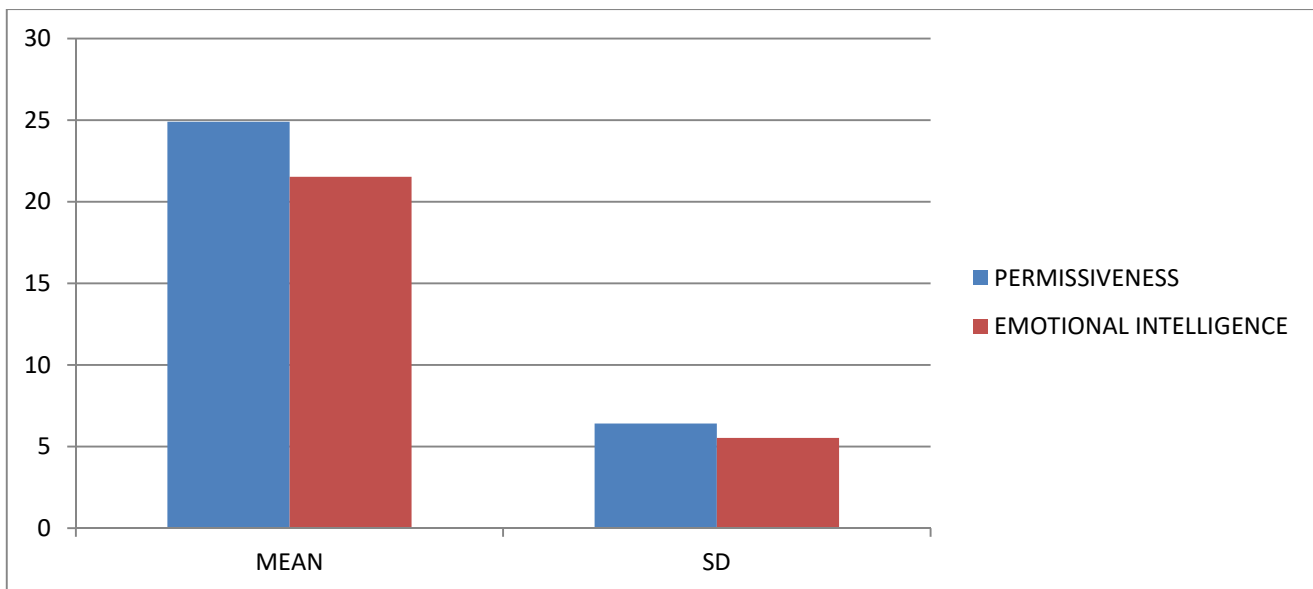
TABLE 10: PERMISSIVENESS VS EMOTIONAL INTELLIGENCE

Mean, S.D, and T-Value (Reject X Emotional Intelligence)

VARIABLES	N	MEAN	SD	T-VALUE	SIGNIFICANCE
VARIABLE 1 (PERMISSIVENESS)	60	24.90	6.41	3.08	SIGNIFICANT
VARIABLE 2 (EMOTIONAL INTELLIGENCE)	60	21.53	5.54		

DF = 118; Significant Level = 0.05, 0.001

INTERPRETATION: An independent samples t-test was performed to determine if there were significant differences in the measured variable between the Permissiveness Group and the Emotional Intelligence Group. The analysis revealed significant difference in scores between the Permissiveness Group ($M= 24.90, SD = 6.41$) and the Emotional Intelligence Group ($M =21.53, SD =5.54$). Therefore, the null hypothesis is rejected, suggesting that the intervention did result in a statistically significant difference in Permissiveness dimension of Home Environment Inventory, and Emotional Intelligence.



GRAPH 10

Mean and S.D. difference between Permissiveness and Emotional Intelligence



TABLE 11: Correlation between Hei & EI

Pearson and Spearman Correlation (HEI and EI)

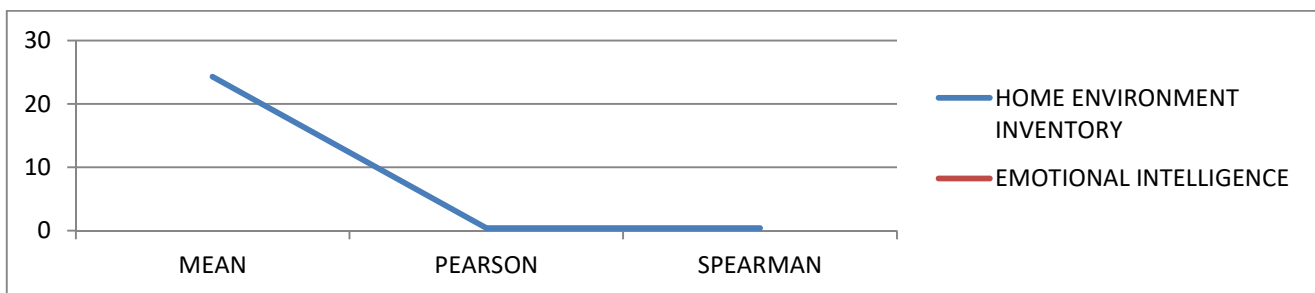
VARIABLES	N.	PEARSON r	SPEARMAN p	SIGNIFICANCE
HOME ENVIRONMENT INVENTORY AND EMOTIONAL INTELLIGENCE	120	0.42	0.39	SIGNIFICANT

INTERPRETATION: The table shows the relationship between Home Environment Inventory and Emotional Intelligence Scores based on 60 paired observations.

The Pearson correlation coefficient ($r = 0.42$) indicates a moderate positive relationship between home environment and emotional intelligence. This suggests that individuals who experience more supportive, structured and resourceful home environments tend to demonstrate higher emotional intelligence. The obtained significance value ($p = 0.0008$) is well below the 0.01 level, confirming that this relationship is statistically significant and unlikely to have occurred by chance.

The Spearman rank correlation ($\rho = 0.39$) also reflects a moderate positive association between the variables, with a significance value ($p = 0.002$) that is also below the 0.01 threshold. The closeness of Pearson’s r and Spearman’s ρ indicates that the relationship is stable and consistent, and not substantially affected by non-normality or extreme values.

Taken together, these findings clearly demonstrate that home environment plays a meaningful role in emotional development. Individuals from more positive home settings are more likely to possess better emotional awareness, regulation, and interpersonal competence.



GRAPH 11



Mean, Pearson and Spearman Correlation between Overall HEI and EI

5. DISCUSSION

On the basis of the current investigation, it was found that home environment has a significant influence on emotional intelligence among university students. These findings indicate that home environment if positive enhance emotional awareness, regulation and interpersonal skills. Recent studies also show that emotional intelligence plays a vital role in one's psychological wellbeing. **(Li and Xu, 2020)** states that a positive family environment, characterized by warmth and open communication, significantly predicts higher emotional intelligence and better psychological adjustment among university students whereas; **(Singh and Sharma, 2022)** found out that parental support and healthy home dynamics are positively associated with emotional regulation and interpersonal effectiveness, whereas negative family conditions contribute to emotional instability. Dimensions such as protectiveness, reward, and permissiveness may have positive influence on emotional intelligence, while social isolation, rejection, and deprivation of privileges have negative impact on emotional intelligence. **(Kumar and Rani, 2021)** states that dimensions such as protectiveness, reward, and permissiveness in the home environment positively influence emotional intelligence by fostering emotional security and self-worth among students whereas; **(Verma and Gupta, 2023)** found out that negative aspects of the home environment, such as social isolation, rejection, and deprivation of privileges, are associated with lower emotional intelligence and difficulties in emotional regulation and interpersonal relationships. Overall, it shows that there are various dimension not just one entity which influences the overall emotional intelligence of an individual.

7. *Conclusion:*

In summary, the study states that there is a significant relationship between home environment and emotional intelligence among students. Positive home environment may influence better emotional and social functioning, whereas negative home environment may hinder emotional growth. Recent researches also state that the emotional intelligence is crucial for academic success and stress management among students. Overall, the study emphasizes the healthy home environment in enhancing emotional wellbeing.

REFERENCES:

- Bandura, A. (1977). *Social learning theory*. Prentice Hall.



- Baumrind, D. (1967). Child care practices anteceding three patterns of preschool behavior. *Genetic Psychology Monographs*, 75(1), 43–88.
- Baumrind, D. (1971). Current patterns of parental authority. *Developmental Psychology Monographs*, 4(1, Pt. 2), 1–103. <https://doi.org/10.1037/h0030372>
- Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment*. Basic Books.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Goleman, D. (1995). *Emotional intelligence: Why it can matter more than IQ*. Bantam Books.
- MacCann, C., Jiang, Y., Brown, L. E., Double, K. S., Bucich, M., & Minbashian, A. (2020). Emotional intelligence predicts academic performance: A meta-analysis. *Psychological Bulletin*, 146(2), 150–186. <https://doi.org/10.1037/bul0000219>
- Mayer, J. D., Salovey, P. (1997). What is emotional intelligence? In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3–31). Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 15(3), 197–211 https://doi.org/10.1207/s15327965pli1503_02
- Pinquart, M. (2021). Parenting styles and dimensions: A meta-analysis of their associations with outcomes in children and adolescents. *Parenting: Science and Practice*, 21(1), 1–44. <https://doi.org/10.1080/15295192.2020.1742721>
- Rohner, R. P., & Lansford, J. E. (2021). Deep structure of the human affectional system: Introduction to interpersonal acceptance–rejection theory. *Journal of Family Theory & Review*, 13(4), 426–440. <https://doi.org/10.1111/jftr.12419>
- Ahmed, S., & Banerjee, R. (2021). Multimodal emotion recognition in smart environments using deep learning techniques. *Journal of Ambient Intelligence and Humanized Computing*, 12(5), 5673–5685.
- Bhattacharya, S. (2021). Home environment and emotional intelligence among adolescents: A correlational study. *International Journal of Indian Psychology*, 9(2), 1234–1242.
- Kim, J., & Park, S. (2020). Emotion-aware smart environments: A review of affective computing in home automation systems. *IEEE Access*, 8, 123456–123470.



- Kumar, R. (2020). Emotional intelligence among senior secondary students in relation to demographic variables. *International Journal of Education and Psychological Research*, 9(3), 45–50.
- Li, X., & Chen, Y. (2022). Privacy-preserving emotion recognition using federated learning in smart home systems. *IEEE Internet of Things Journal*, 9(4), 3210–3221.
- Shashank, A., Verma, P., & Rao, K. (2024). E-R Homie: An emotion-aware smart companion for enhancing mental well-being at home. *International Journal of Human–Computer Interaction*. Advance online publication.
- Thacker, M., & Rathi, N. (2024). Home environment, maternal employment, and emotional intelligence among children: Implications for moral development. *Journal of Child and Family Studies*. Advance online publication.
- Misra, K. S. (1983). *Home environment inventory*. Agra, India: National Psychological Corporation.
- Singh, A. K. (2004). *Emotional intelligence scale*. Agra, India: National Psychological Corporation.
- Kumar, S., & Rani, P. (2021). Home environment and its impact on emotional intelligence among students. *International Journal of Psychology and Behavioral Sciences*, 10(2), 45–52.
- Li, X., & Xu, Y. (2020). Family environment and emotional intelligence: The mediating role of psychological well-being among university students. *Journal of Educational Psychology*, 112(4), 785–797.
- Singh, R., & Sharma, M. (2022). Parental support and emotional intelligence among young adults: A study of home environment factors. *Indian Journal of Social Research*, 63(1), 112–120.
- Verma, A., & Gupta, N. (2023). Influence of family dynamics on emotional intelligence and stress management among college students. *Journal of Mental Health and Human Behavior*, 28(1), 34–41