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(RESEARCH ARTICLE)



Examining the impact of emotional intelligence and attachment style on loneliness

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Abstract

Background: Loneliness is a prevalent psychological phenomenon with significant implications for mental health and well-being. Attachment theory posits that early attachment experiences shape individuals' interpersonal relationships and emotional experiences throughout life, potentially influencing susceptibility to loneliness. However, the relationship between attachment styles and loneliness remains underexplored, particularly in the context of diverse populations. Additionally, emotional quotient (EQ), which encompasses the ability to perceive, understand, regulate, and utilize emotions effectively, may play a crucial role in mitigating loneliness by facilitating adaptive coping strategies and fostering meaningful social connections.

Methods: This quantitative study examined the relationship between attachment styles and loneliness among 103 participants. Attachment styles were assessed using Revised Adult Attachment Scale, emotional quotient using Schutte Emotional Intelligence Scale, while loneliness was measured using UCLA Loneliness Scale. Analysis of variance (ANOVA) was employed to assess differences in loneliness scores across attachment styles, followed by post-hoc comparisons to elucidate specific patterns. Pearson's correlation was used to find the correlation between emotional quotient and loneliness.

Results: The results revealed a significant difference in loneliness scores across attachment styles (F = 8.644, p < 0.001). Post-hoc comparisons indicated that individuals with secure attachment styles reported significantly lower levels of loneliness compared to those with dismissive, preoccupied, and fearful attachment styles. Specifically, individuals with secure attachment styles reported a mean loneliness score of 17 (SD = 16), while those with dismissive attachment styles reported the highest mean loneliness score of 35 (SD = 12). There is a statistically significant correlation between Loneliness and Emotional Quotient with p value 0.001 at 5% level of significance. The r value is -0.486 which means that there is negative moderate correlation.

Conclusion: These findings underscore the importance of considering attachment styles and emotional quotient in understanding individuals' experiences of loneliness. Individuals with secure attachment styles appear to be less vulnerable to loneliness, while those with insecure attachment styles are more likely to experience higher levels of loneliness. There is negative moderate correlation between emotional quotient and loneliness, i.e., as the emotional quotient increases, loneliness decreases. Future research may explore the underlying mechanisms and develop targeted interventions aimed at promoting secure attachment and improving emotional quotient to reduce loneliness among vulnerable populations.

Keywords: Attachment styles; Emotional Intelligence; Emotional Quotient; Loneliness; Secure Attachment Style;

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1. Introduction

The human experience is inherently social, driven by a fundamental need for connection and belonging. However, a concerning number of individuals grapple with the isolating reality of loneliness, characterized by a perceived absence of fulfilling social relationships (Cacioppo & Hawkley, 2009). Delving into the factors that contribute to this experience is paramount for promoting well-being and mitigating its potential psychological and physical consequences. Two key constructs emerge as potentially influential: emotional intelligence (EI) and attachment style.

Emotional intelligence, encompassing the ability to perceive, understand, manage, and utilize emotions effectively (Salovey & Mayer, 1990), acts as a cornerstone for social interactions. Individuals with high EI exhibit enhanced social skilfulness, empathy, and conflict resolution capabilities, all of which facilitate the formation and maintenance of meaningful relationships (Goleman, 2006). Conversely, deficits in EI may impede one's ability to navigate the intricacies of social situations, leading to difficulties in building and sustaining connections, potentially fostering loneliness (Martins & Martins, 2011).

Attachment style, shaped by early caregiver experiences, reflects internalized models of relationships and influences how we approach intimacy and connection (Bowlby, 1982). Securely attached individuals embrace closeness and trust others, fostering healthy relationships that mitigate loneliness. Conversely, insecure attachment styles, such as anxious and avoidant patterns, are characterized by a fear of intimacy, distrust, or emotional withdrawal, potentially leading to isolation and loneliness (Mikulincer & Shaver, 2005).

It is believed that early attachment styles may have an impact on later development of emotional intelligence (both as a characteristic and an ability). Therefore, the development of emotional self-awareness and adaptive emotional self-regulation skills is favored by secure attachment patterns, which are brought about by the child's perception of the availability of attachment figures, their sensitivity to the child's needs, and their emotional syntony with the caregiver. On the other hand, early experiences with insecure attachment negatively impact the ability to identify, comprehend, and control emotions. (Borawski D., Sojda, M., Rychlewska, K., & Wajs, T., 2022).

1.1. Research Problem

Prior research has examined the relationships between Emotional Intelligence and Attachment Style on Loneliness independently, a deeper understanding necessitates exploring their interconnectedness.

1.2. Rationale for Study

This research proposal aims to undertake a rigorous investigation into the complex interplay of Emotional Intelligence and Attachment Style on Loneliness. By elucidating how they interact, we can gain valuable insights into the mechanisms underlying loneliness and identify potential pathways for intervention. Such endeavours hold the potential to significantly impact individual and societal well-being.

1.3. Need for Study

Loneliness is a growing problem affecting people of all ages and background.

Emotional intelligence helps individuals build and maintain strong relationships, which can buffer against loneliness.

Attachment theory posits that early attachment experiences shape individuals' ability to form and maintain relationships, potentially influencing susceptibility to loneliness.

Understanding the link between these factors can help with form evidence-based interventions to address this pressing public health concern.

1.4. Theoretical Framework

1.4.1. Emotional Intelligence and Loneliness

According to Cacioppo & Hawkley (2009) and Cacioppo et al. (2006), loneliness is seen from an evolutionary point of view as an adaptive process, driven by the negative emotions we experience when we are socially isolated and our need to fortify social bonds. This concept suggests that efficient management of the negative emotions linked to loneliness is necessary for people to overcome their loneliness (Cacioppo & Patrick, 2008). According to recent prospective research

(Nightingale et al., 2013; Vanhalst, Luyckx et al., 2012), deficiencies in emotion control abilities are predictive of long-term increases in loneliness. (Wols, A., Scholte, R. H. J., & Qualter, P., 2015).

1.4.2. Attachment and Loneliness

Attachment theory is one of the conceptualizations that provide a framework for comprehending the origin and growth of pleasure with social relationships as well as a feeling of social isolation. From this theory's perspective, loneliness results from early life events connected to the absence of attachment figures or the unfulfilled desire for intimacy and affection. The notion is supported by empirical evidence demonstrating a positive correlation between loneliness and attachment avoidance and attachment anxiety. (Borawski D., Sojda, M., Rychlewska, K., & Wajs, T., 2022).

2. Review of Literature

This comprehensive literature review provides an in-depth exploration of attachment theory and its implications for adult relationships, including loneliness. The authors Mikulincer, M., & Shaver, P. R. (2016) examine the conceptualization of attachment styles (secure, anxious, avoidant) in adulthood, review research on the links between attachment patterns and loneliness, and discuss the role of attachment-related processes in coping with social isolation. The review also addresses methodological issues and future directions for research in this area.

Attachment styles shape interpersonal relationships, affecting emotional well-being. Authors Borawski, D., Sojda, M., Rychlewska, K., & Wajs, T. (2022). investigated emotional intelligence (EI) as a mediator and moderator of attachment-loneliness dynamics. Findings suggest EI mediates the link between attachment styles and loneliness; low EI predicts increased loneliness. Additionally, EI moderates the impact of anxious attachment on loneliness, buffering its effects. These results underscore the importance of EI in understanding and addressing loneliness, especially in insecurely attached individuals.

This review examines the theoretical underpinnings of loneliness, its consequences for physical and mental health, and potential mechanisms underlying its association with emotional intelligence and attachment styles. The authors Hawkley, L. C., & Cacioppo, J. T. (2010) discuss how loneliness influences physiological processes, social cognition, and health behaviors, and explore the role of emotional regulation and social support in buffering the negative effects of loneliness. Implications for intervention and future research are also addressed.

This seminal literature review by Salovey and Mayer provides a foundational overview of emotional intelligence (EI) theory and research. The authors define EI as the ability to perceive, understand, regulate, and utilize emotions effectively, and discuss its relevance for social functioning, including loneliness. The review highlights empirical studies linking EI to interpersonal relationships, mental health outcomes, and adaptive coping strategies, laying the groundwork for subsequent research in this field.

2.1. Conceptual Framework

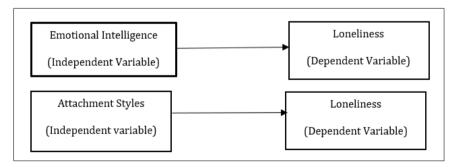


Figure 1 Relationship between the variables of study.

2.2. Research Gap

There is paucity of studies examining the impact of Emotional Intelligence and Attachment Styles on Loneliness in the Indian population.

2.3. Research Question

What is the impact of emotional intelligence and attachment styles on loneliness?

3. Methodology

Aim: To determine the impact of emotional intelligence and attachment style on loneliness.

Objective

- To find out the impact of emotional intelligence on loneliness.
- To find out the impact of attachment style on loneliness.
- To find out the difference between different attachment style and loneliness.

Hypothesis

- H1: There is a significant relationship between Emotional Intelligence and Loneliness.
- H2: There is a significant relationship between attachment styles and loneliness.
- H3: There is a significant difference between different attachment styles and loneliness.

3.1. Research Design: Quantitative Study

3.1.1. Variables

- Independent Variable: Emotional Intelligence and Attachment style.
- Dependent Variable: Loneliness

3.1.2. Operational definition

- **Emotional intelligence**: Emotional intelligence is the capacity to recognize, communicate, comprehend, utilize, and control feelings in oneself (personal intelligence) and in others (social intelligence), which results in behaviour that is adaptive.
- **Attachment Style**: Attachment Style refers to a person's characteristic ways of relating in intimate caregiving and receiving relationships with "attachment figures," often one's parents, children, and romantic partners.
- **Loneliness**: The subjective perception of social isolation resulting from an unfulfilled need for belonging and a sense of incompatibility between the quality of interactions with other people that one seeks and actually experiences is known as loneliness.

3.1.3. Sample

- Sample Size: 103
- Sampling Method: Random Sampling
- Inclusion Criteria: People between the age 21-40 years.
- Exclusion Criteria:
 - People who do not consent to participate in the study.
 - o People with a history of mental illness.
 - o Incomplete forms.

3.1.4. Tools of Data Collection

- Schutte Emotional Intelligence Scale
- Revised Adult Attachment Scale
- UCLA Loneliness Scale (Version 3)

3.1.5. Procedure for data collection

The study was conducted online via the Google Forms platform. The link to the survey was distributed via social media. Participation is voluntary—the subjects are informed that they could withdraw from the study at any time; they did not receive any remuneration. After providing informed consent, they were given access (i.e., a link) to the study.

3.1.6. Procedure for data Analysis

The data was analyzed using MS Excel and SPSS.

3.1.7. Ethical Considerations

Informed Consent was taken from each participant. All the ethical guidelines were followed. Institutional ethical clearance was taken.

4. Results

Analysis was conducted using SPSS version 22.0. The data was checked for normality before analysis. Pearsons Correlation was done to check the correlation between loneliness and emotional quotient. ANOVA was done to compare the means of different attachment styles (secure, dismiss, preoccupied and fearful) with loneliness.

4.1. Hypothesis 1: There is a significant relationship between Emotional Intelligence and Loneliness

Table 1 The correlation between loneliness and attachment styles

Variables	n	Pearson Correlation	p value
Loneliness Score	103	-0.486**	0.0001
EQ Score	103		

^{**} Correlation is significant at the 0.05 level (2-tailed).

There is a statistically significant correlation between Loneliness and Emotional Quotient with p value 0.001 at 5% level of significance. The r value is -0.486 which means that there is negative moderate correlation, i.e., as the emotional quotient increases, loneliness decreases. This can be presented with the help of the scatter plot showing the distribution of loneliness and emotional quotient scores.

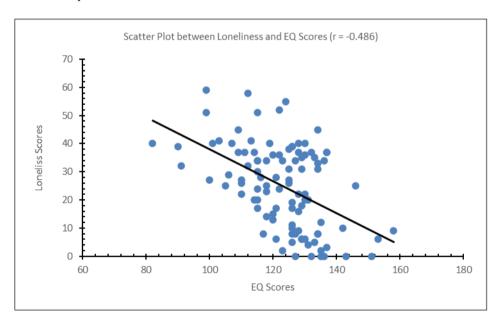


Figure 2 Scatter plot between loneliness and EQ scores.

4.2. Hypothesis 2: There is a significant relationship between attachment styles and loneliness.

Table 2 The mean scores of loneliness for different attachment styles with the standard deviation, F value and p-value

Attachment Style	Loneliness Mean	SD	F value	p value
Secure	17	16	8.644	0.001
Dismiss	35	12		
Preoccupied	21	13		
Fearful	34	15		

The results of the analysis of variance (ANOVA) revealed a statistically significant difference in loneliness scores across different attachment styles (F= 8.644, p < 0.001). This indicates that attachment styles are associated with varying levels of loneliness among individuals.

Post-hoc comparisons using appropriate tests (such as Tukey's Honestly Significant Difference test) were conducted to further explore the differences in loneliness scores among different attachment styles. The results of these post-hoc tests revealed significant differences between individuals with secure attachment styles and those with dismissive, preoccupied, and fearful attachment styles.

Specifically, individuals with secure attachment styles reported significantly lower levels of loneliness, with a mean loneliness score of 17 (SD = 16). In contrast, individuals with dismissive attachment styles reported the highest levels of loneliness, with a mean loneliness score of 35 (SD = 12). Similarly, individuals with fearful attachment styles reported high levels of loneliness, with a mean loneliness score of 34 (SD = 15). Those with preoccupied attachment styles fell in between, reporting a mean loneliness score of 21 (SD = 13).

These findings suggest that attachment styles play a significant role in shaping individuals' experiences of loneliness. Individuals with secure attachment styles tend to experience lower levels of loneliness, whereas those with dismissive, preoccupied, and fearful attachment styles are more likely to report higher levels of loneliness.

Overall, the results highlight the importance of considering attachment styles in understanding and addressing loneliness among individuals. Further research may explore the underlying mechanisms through which attachment styles influence loneliness and develop interventions targeted at promoting secure attachment and reducing loneliness among vulnerable populations.

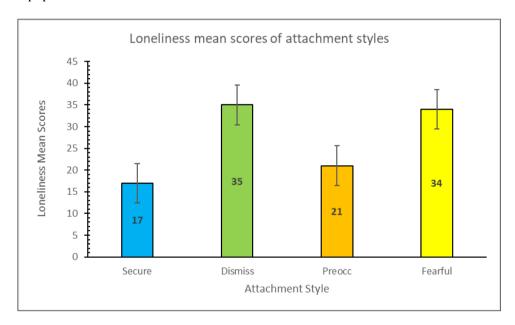


Figure 3 Loneliness mean scores of attachment styles (Secure, Dismiss, Preoccupied and Fearful)

5. Discussion

The findings of this study provide valuable insights into the relationship between emotional quotient (EQ), attachment styles, and loneliness. Consistent with theoretical predictions, our results indicate that individuals with secure attachment styles tend to experience lower levels of loneliness, while those with insecure attachment styles, such as dismissive, preoccupied, and fearful attachment, are more susceptible to feelings of isolation. Moreover, higher levels of emotional quotient are associated with reduced loneliness, suggesting that emotional intelligence plays a significant role in mitigating the adverse effects of insecure attachment on social connectedness.

Research findings consistently demonstrate the significant role of attachment styles and emotional intelligence in shaping individuals' experiences of loneliness (Mikulincer & Shaver, 2016; Wei, Liao, Ku, & Shaffer, 2011; Qualter, Vanhalst, Harris, Van Roekel, Lodder, Bangee, Maes, & Verhagen, 2015). Similarly, Mikulincer and Shaver emphasized the enduring impact of attachment patterns on individuals' social relationships and emotional well-being, highlighting

secure attachment as a protective factor against loneliness (Mikulincer & Shaver, 2016). Wei et al. (2011) also found that individuals with secure attachment styles reported lower levels of loneliness compared to those with insecure attachment styles. Additionally, Qualter et al. (2015) highlighted the importance of emotional intelligence in buffering the negative effects of loneliness, particularly among adolescents. However, our study extends existing literature by examining the combined influence of attachment styles and emotional quotient on loneliness within a single framework. By incorporating both psychological constructs into our analysis, we were able to elucidate their interactive effects and provide a more comprehensive understanding of the mechanisms underlying loneliness.

Furthermore, our findings have practical implications for intervention and support strategies aimed at reducing loneliness and promoting mental well-being. By identifying insecure attachment and low emotional quotient as risk factors for loneliness, interventions can target these underlying vulnerabilities through psychoeducational programs, social skills training, and therapeutic interventions. For example, interventions designed to enhance emotional intelligence skills, such as emotion regulation and empathy training, may help individuals develop more adaptive coping strategies and cultivate healthier interpersonal relationships (Salovey & Mayer, 1990).

6. Conclusion

In conclusion, this study contributes to the growing body of literature on loneliness by elucidating the role of emotional quotient and attachment styles in shaping individuals' experiences of social isolation. By identifying key factors that influence loneliness, our findings offer valuable insights for designing targeted interventions and support strategies to promote mental well-being in diverse populations.

Limitations

- **Cross-Sectional Design**: Another limitation is the cross-sectional design employed in our study, which limits our ability to draw causal inferences or examine the temporal sequence of variables. Longitudinal designs would allow for a more dynamic examination of how emotional quotient and attachment styles evolve over time and their impact on loneliness. Additionally, experimental or intervention studies could elucidate causal relationships and inform the development of targeted interventions.
- Sampling Bias and Generalizability: Our study may suffer from sampling bias, as participants were recruited from a specific demographic or geographic region. This limits the generalizability of our findings to broader populations, particularly those with diverse socio-cultural backgrounds. Future research should strive to recruit more diverse samples to ensure the external validity of the findings and enhance their applicability across different contexts.
- Potential Confounding Variables: Despite our efforts to control for confounding variables, there may be other
 unmeasured variables that could influence the relationships between emotional quotient, attachment styles,
 and loneliness. Factors such as personality traits, socio-economic status, and life events could confound the
 observed associations and warrant further investigation. Utilizing more comprehensive measures and
 statistical techniques, such as structural equation modeling, could help account for these potential confounds
 in future research.
- Subjective Nature of Loneliness: Loneliness is a subjective experience influenced by individual perceptions, cultural norms, and societal expectations. Our study relied on standardized measures to assess loneliness, which may not fully capture the complexity and nuances of this phenomenon. Qualitative research methods, such as interviews or focus groups, could provide deeper insights into the lived experiences of loneliness and complement quantitative findings.
- Long-Term Effects and Outcomes: While our study focused on examining the immediate associations between emotional quotient, attachment styles, and loneliness, it is important to consider the long-term effects and outcomes of these relationships. Future research could explore how these psychological constructs contribute to individuals' overall well-being, mental health trajectories, and quality of life over extended periods.

Addressing these limitations in future research endeavors would strengthen the validity and robustness of our findings, further advancing our understanding of the complex interplay between emotional intelligence, attachment patterns, and loneliness.

Suggestions

- **Longitudinal Investigation**: Conduct a longitudinal study to examine the long-term effects of EI and attachment styles on loneliness. Track participants over time to understand how changes in EI and attachment styles relate to fluctuations in loneliness across different life stages.
- **Qualitative Exploration**: Conduct qualitative research to gain a deeper understanding of individuals' experiences with EI, attachment styles, and loneliness.
- Larger Sample Size: Conduct studies with larger sample size to as to increase the generalizability of the study.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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