

# A Correlational Analysis of Attachment Styles, Loneliness and Anxiety Among Single, Married and Committed Individuals in Early and Middle Adulthood Population

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**Abstract**—The present quantitative method study investigates the intricate relationship between attachment style, loneliness, and anxiety within different relationship statuses and age groups. Through a statistical approach, the study aims to fill a notable gap in existing literature by examining how these variables intersect and influence mental health outcomes. The research, conducted with a diverse sample comprising single, married and Committed Individuals in Early and Middle Adulthood Population, utilized standardized tools including the UCLA Loneliness Scale Version 3, Adult Attachment Scale (AAS), and Beck Anxiety Inventory (BAI) to collect data. The impetus behind this research lies in recognizing the prevalent issue of anxiety among single, married, and committed individuals in early and middle adulthood, alongside the recognition that attachment style and loneliness wield significant influence on anxiety levels. In the study, both Cognitive Behavioural Therapy (CBT) and Attachment Theory have been employed to elucidate their correlation and mutual influence. SPSS v. 22.0 revealed that the collected data for loneliness, adult attachment, and Beck Anxiety Inventory (BAI) conformed to normal distributions, thus validating the employment of parametric tests for further analysis, thereby ensuring the reliability and robustness of the findings. Analysis of the data revealed a significant correlation between loneliness and anxiety, suggesting that higher levels of loneliness correspond to increased levels of anxiety among the surveyed population. However, while correlations between loneliness and adult attachment were not deemed significant, this study acknowledges this limitation and suggests avenues for future research. Despite this, the study underscores the importance of attachment type and its relationship with anxiety and loneliness in mental

health outcomes. While the direct correlation between loneliness, attachment type, and anxiety may not be as pronounced in this particular survey, the findings highlight their collective significance in understanding mental health, particularly anxiety.

**Index Terms**— Anxiety; Attachment Style; Loneliness; Cognitive Behavioural Therapy; Attachment theory; Committed; Adulthood.

## I. INTRODUCTION

Anxiety. Anxiety is a natural human emotion defined by emotions of concern, uneasiness, or unease about an uncertain outcome. It is a natural reaction to stress or perceived threats that ranges in intensity from mild to severe. According to the American Psychological Association (APA), anxiety is "an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure." Anxiety disorders are a collection of mental health diseases that magnify these symptoms, resulting in excessive anxiety and nervousness that can interfere with daily life. Anxiety inside a relationship can have a dramatic impact on both partners. It can appear in a variety of ways, including communication difficulties, feelings of insecurity, and fear of abandonment. Individuals with anxiety may fail to articulate their requirements clearly, resulting in misunderstandings and disputes. Overthinking and rumination about being in a relationship might stem from a complex interaction of psychological elements (Barakat et al.,

2019). Emotional and physical intimacy are both important factors in relationship anxiety.

**Attachment style.** Attachment, also known as the attachment bond, is the emotional connection developed between an infant and their primary caregiver, usually the mother. This fundamental concept stems from attachment theory, which was pioneered by British psychiatrist John Bowlby and American psychologist Mary Ainsworth. According to this hypothesis, the quality of attachment formed from infancy has a profound impact on how people interact with others and manage intimacy throughout their lives. While experiences from infancy to maturity surely alter our relationships, the attachment bond has a significant impact on the newborn brain. Understanding one's attachment style might provide useful insights into adult relationship issues (Ahmad et al., 2016).

**Loneliness.** Loneliness, which is frequently misunderstood as simply solitude, is a deeper mental state that evokes feelings of emptiness, isolation, and a sense of being unloved. Despite a need for human connection, loneliness might impede one's ability to form lasting relationships. Recognizing its substantial impact, US Surgeon General Vivek Murthy had published an 82-page advisory on the critical subject of loneliness. The recommendation requires attention to disturbing figures, which show that over half of US individuals suffer loneliness on a regular basis. Murthy's study emphasizes loneliness's serious health consequences, noting evidence linking it to a 26% to 29% rise in the chance of premature death, as well as increased vulnerability to anxiety, depression, stroke, heart disease, and dementia. Loneliness is difficult to define because it manifests differently in each person and does not have a single source. Loneliness is a universal sensation that almost everyone experiences at some point in their lives. While specific conditions, such as disease or global catastrophes like pandemics, might exacerbate feelings of loneliness, it is a common occurrence regardless of external events. In reality, research reveals that a considerable section of the population, including 61% of Americans in 2019, report feeling lonely. Understanding loneliness is critical for recognizing when help is required. Loneliness can be caused by a variety of demographic characteristics, with particular groups being more vulnerable than others, including young adults, mothers with young children, the elderly, immigrants,

and members of the LGBTQ+ community (Adamczyk, 2016).

#### Research Gap and Study Rationale

There is a significant gap by investigating the nuanced relationship between attachment style, loneliness, and anxiety in individuals. There are individual links between attachment style and loneliness, as well as loneliness and anxiety, there is a notable lack of research examining how these factors interact to influence anxiety levels. By delving into this area, this research has the potential to uncover the underlying mechanisms by which attachment style and loneliness contribute to anxiety, thereby enhancing our understanding of psychological distress and informing targeted interventions aimed at promoting mental well-being in individuals with varying attachment patterns and levels of loneliness.

The rationale behind this study stems from the recognition of the prevalent issue of anxiety among single, married and committed individuals in the early and middle adulthood population, alongside the understanding that attachment style and loneliness can significantly impact anxiety levels. We aim to shed light on the interconnectedness of these factors and their influence on anxiety. Furthermore, exploring therapeutic approaches such as Cognitive Behavioral Therapy (CBT) and attachment theory offers a promising avenue to comprehend and address the anxiety aspect more effectively. Through this research, we aspire to contribute to the development of strategies and interventions that can mitigate anxiety by considering the roles of attachment style and loneliness, thereby potentially enhancing the well-being of individuals experiencing such challenges.

#### Research Questions and Hypotheses

This study examined the following research questions:

1. What are the relationships among anxiety, loneliness, and attachment styles in single, married and committed individuals?
2. Do early and middle adulthood population differ in anxiety, loneliness, and attachment styles?
3. To what extent do anxiety, loneliness, and attachment styles predict the status of single, married and committed individuals?

Based on theoretical frameworks and prior research, following hypothesis were framed:

H1: High levels of loneliness will be positively associated with high levels of anxiety.

H2: Low levels of loneliness will be positively associated with low levels of anxiety.

H3: Individuals with a secure attachment style will exhibit lower levels of anxiety compared to individuals with insecure attachment styles.

H4: Individuals with insecure attachment styles will display higher levels of anxiety compared to individuals with secure attachment styles.

H5: Insecure attachment styles will be positively associated with higher levels of loneliness.

H6: Secure attachment styles will be negatively associated with lower levels of loneliness.

## II. METHOD

### Research Design

The design of the work is Quantitative, Cross sectional (Survey), Correlational research design which contains data collected, analyzed, and discussed from a quantitative approach. The purpose of this design was firstly to describe the correlation of factors influencing anxiety with a focus on attachment style and loneliness. Mainly, the quantitative data were collected and analyzed.

### Participants

The sample comprised 203 individuals. Of the 210 individuals who initiated the survey, 203(96.7%) completed all questionnaires. The sample included 160 females (78.4%), 43 males (21.1%), and 1 LGBTQ+ (0.5) with ages ranging from 18 years to 49 years. Individuals were single (65.7%), married (1%), and committed (25%).

### Measures

UCLA Loneliness Scale Version 3 - A 20-item scale designed to measure one's subjective feelings of loneliness as well as feelings of social isolation. Participants rate each item on a scale from 1 (Never) to 4 (Often). This measure is a revised version of both the original UCLA Loneliness Scale and the Revised UCLA Loneliness Scale. The first revision was done to make 10 of the 20 original items reverse scored. UCLA Loneliness Scale developed by Daniel Russell, Letitia Peplau, and Mary Ferguson in 1978. The reliability for this scale is .830. The measurements on the scale are set according to the following scoring

system: the response Never was scored as "1", Rarely as "2", Sometimes as "3" and always as "4". There was reverse scoring in Item 1,5,6,9,10,15,16,19,20.

Adult Attachment Scale (AAS) - This scale developed in 1990 but built on the earlier work of Hazen & Shaver (1987) and Levy & Davis (1988). The scale was developed by decomposing the original three prototypical descriptions (Hazen & Shaver, 1987) into a series of 18 items. The reliability for this scale is .614. The scale consists of 18 items scored on a 5-point likert-type scale. It measures adult attachment styles named "Secure", "Anxious" and "Avoidant". The measurements on the scale are set according to the following scoring system: the response Strongly Disagree "1", Disagree as "2", Neutral as "3", Agree as "4" and Strongly Agree as "5".

Beck Anxiety Inventory (BAI) - The scale was developed by Aaron T Beck, MD (Beck et al., 1990; Steer and Beck, 1997). The BAI contains 21 self-report items (Beck et al., 1996b). The items are rated on a 4-point Likert scale ranging from 0 (Not at all) to 3 (Severely-it bothered me a lot). The reliability for this scale is .926. The measurements on the scale are set according to the following scoring system: the response: Not at all as "0", Mildly but it didn't bother me much as "1", Moderately - it wasn't pleasant at times as "2" and severely - it bothered me a lot as "3".

### Procedure

The procedure for the responses of data collection took place from 16th January 2023, which ended till 16 March 2023. Those participants who were meeting with inclusive criteria were able to fill through google form. The form consisted with the descriptive of the study, the informed consent and the three scales of questionnaires where the participant would complete filling the three scales of questionnaire in 15 minutes to 20 minutes. There were no complaints of the participants related to the google form's issue where there was only issue from the participants for the questionnaires being lengthy. There were some participants approaching the researcher for the proper and satisfactory use of scales in the google form. The impression of receiving the responses of participants from the data collection was satisfactory.

### Data Analysis

Data were analyzed using SPSS Version 26.0. Preliminary analyses assessed normality using

Kolmogorov-Smirnov and Shapiro-Wilk tests along with visual inspection of histograms and Q-Q plots. Results indicated normal distributions for all primary variables, necessitating parametric statistical approaches.

Descriptive statistics (mean) was used for each variable. Pearson Correlation Coefficient(r) examined relationships among primary variables. Statistical significance was set at  $\alpha = .05$  for all analyses.

### III. RESULTS

Preliminary Analyses  
Table 1: Normality check of the data

	Kolmogorov-Smirnova	Shapiro-Wilk				
	Statistic	df	Sig	Statistic	df	sig
Loneliness	.052	203	.200*	.995	203	.748
Adult Attachment	.088	203	.001	.934	203	.000
Anxiety	.085	203	.001	.959	203	.000
*. This is a lower bound of the true significance						
a. Lilliefors significance correction						

Normality assessments revealed significant deviations from normal distributions for all primary variables as shown in Table 1. Loneliness showed Shapiro-Wilk  $W = 0.995$  ( $p = .748$ ) and Kolmogorov-Smirnov  $D = 0.052$  ( $p = .200$ ), indicating marginal normality and Q-Q plots revealed no deviations. Adult Attachment showed  $W = 0.934$  ( $p = .000$ ) and  $D = 0.088$  ( $p = .001$ ), with no deviations in Q-Q plots. Social-efficacy showed  $W = 0.959$  ( $p = .000$ ) and  $D = 0.085$  ( $p = .001$ ), also with no deviations in Q-Q plots. These results justified use of parametric statistical methods for primary analyses.

Descriptive statistics  
Table 2: Descriptive mean

N	scale	mean
203	Loneliness	36.44
203	Attachment style	53.15
203	Anxiety	20.05

Table 2 presents the mean of Loneliness (36.44), Attachment Style and Anxiety (20.05).

Correlational Analyses  
Table 3: Pearson Correlation Coefficient(r)

Scales	N	P-Value	R-Value
Loneliness	203	.000	.358**
Adult Attachment	203	.000	.335**
Anxiety	203	.000	1
correlation is significant at the 0.01 level (2-tailed)			

The table 3 presents the results of correlational analyses conducted between loneliness, adult

attachment, and Beck Anxiety Inventory (BAI) scores. The sample size for each scale was 203 participants. For the Loneliness scale, a significant positive correlation was found with anxiety, as indicated by a p-value of .000 and R-value of .358\*\*. This suggests that higher levels of loneliness are associated with higher levels of anxiety in the surveyed population. Similarly, the Adult Attachment scale showed a significant positive correlation with anxiety, with a p-value of .000 and R-value of .335\*\*. This indicates that certain attachment styles are associated with elevated levels of anxiety.

Notably, the Beck Anxiety Inventory demonstrated a perfect correlation with itself, as expected, with a p-value of .000 and an R-value of 1. This signifies a strong relationship between anxiety scores obtained from the BAI.

Overall, these findings highlight significant associations between loneliness, adult attachment, and anxiety. BAI R-value is higher than the loneliness and adult attachment scale R-value. And there is no difference between loneliness and adult attachment scale R-value.

### IV. DISCUSSION

We investigated the relationship between anxiety and attachment style and loneliness in this quantitative study. The goal of the study was to comprehend how these elements interact and support psychological health in general. The results show a strong correlation

between anxiety levels, adult attachment style, and loneliness in the population assessed.

The findings imply that people with particular attachment types and higher degrees of loneliness typically have higher anxiety levels. This emphasizes the complex interrelationships among various psychological elements and the overall influence of these factors on mental health.

In the survey study (Quantitative study) all the participants fulfilling the inclusion criteria were participated through google form – 210 participants responded and 210 participants completed the questionnaires from which 209 participants gave a response rate of 98.5% for informed consent. Thus, there was voluntary participation and no participants were forced to complete the questionnaire and those 06 participants did not continue and were completely supported without any hesitation and consequences while completing the data collection.

According to the UCLA Loneliness Scale Version 3, there is a slightly suitable relationship ( $r = .358^{**}$ ) between anxiety and loneliness. Similar to that, the Adult Attachment Scale's r-value of  $.335^{**}$  points to a comparable moderately favorable relationship between anxiety and adult attachment style. The r-value indicates that there is no direct correlation between the Beck Anxiety Inventory score of 1 and the other scales. These correlations suggest that anxiety may be correlated with higher levels of loneliness along with particular attachment types, and vice versa. Not to mention, the statistical significance indicated by  $^{**}$  suggests that these associations are probably not the result of pure chance.

According to the Adult Attachment Scale, the UCLA Loneliness Scale Version 3, and the Beck Anxiety Inventory, the p-values of .000 for each measure show that the relationships are statistically significant. Based on the corresponding scores, this implies a high degree of confidence in the correlations among loneliness, attachment type, and anxiety. As a result, these conclusions are probably accurate and not just the result of chance variations in the data.

## V. CONCLUSION

The survey study found a strong relationship between the assessed population's attachment type and anxiety and loneliness. This highlights the importance of these factors to mental health outcomes by indicating that

emotions of loneliness and specific attachment styles are linked to higher levels of anxiety. The direct correlation between loneliness and attachment type and anxiety may not be as strong in this particular survey study, despite the fact that both are acknowledged as significant variables in mental health, especially in regard to anxiety. However, these results advance our knowledge of the intricate interactions among psychological variables and highlight the need of treating attachment disorders and loneliness in anxiety-reduction and mental health initiatives.

Even though this study clarifies these linkages, more investigation is necessary to examine and understand the intricate relationships that exist between anxiety, attachment type, and loneliness in various groups and situations. We can improve our understanding of mental health and create more potent interventions to help people reach their highest level of well-being by looking into these linkages more.

In conclusion, while the absence of significant correlations in this study necessitates the rejection of the hypothesis, it highlights the need for continued investigation and exploration in understanding the complexities of attachment style, loneliness, and anxiety. Identifying and addressing these gaps in knowledge can contribute to the development of more targeted interventions and strategies aimed at promoting mental well-being.

To understand these linkages better and clarify their intricacies in a variety of settings and groups, more research is necessary. Through further exploration of the interplay of anxiety, attachment type, and loneliness, we can enhance our comprehension of mental health and create more specialized interventions to help people reach their full potential.

## VI. PRACTICAL IMPLICATIONS

Therapeutic approach:

This discovery has significant implications for treatment and therapeutic practice in addition to academics. Therapeutic therapies focused at enhancing psychological well-being can benefit from an understanding of the connections among anxiety, attachment type, and loneliness. First, the results point to a range of problems that relationship therapists might address in the context of treating patients' interpersonal connections, including anxiety,

attachment style, and loneliness. Therapists can assist people in creating healthier relationship dynamics and enhancing their general emotional well-being by investigating and resolving these aspects. Furthermore, understanding a person's communication style and attachment type can be very helpful in clinical settings. With this knowledge, therapists can customize their treatments to meet the unique requirements of each client, assisting them in creating more stable attachment patterns and efficiency.

Moreover, by emphasizing the connections between loneliness, attachment type, and anxiety in romantic relationships, the research findings help guide couple therapy. This information can be used by therapists who work with couples to address underlying problems and improve the relationship between partners.

Also, utilizing a socio-relational psychology method can improve our comprehension of people in their relationship and social environments. Therapists can offer more thorough and successful interventions by taking into account the larger social and environmental aspects affecting a person's psychological well-being.

#### Educational Programs and Policy Development:

Insights from the research could inform the development of educational programs aimed at enhancing relationship skills and mental health literacy. Such programs could be implemented in schools, workplaces, and community settings to promote healthy attachment styles, reduce loneliness, and manage anxiety effectively. Findings from the study may inform policy development related to mental health support and relationship education. Policies could focus on integrating mental health education into school curricula or implementing workplace initiatives that address loneliness and anxiety among employees. Employers could implement workplace well-being initiatives that address loneliness and anxiety among employees. This could involve fostering a supportive work environment, offering mental health resources, and promoting work-life balance to mitigate stress and anxiety.

#### Community Support Programs and Preventive Interventions:

Communities could establish support programs and resources tailored to the needs of different attachment

styles and relationship statuses. These programs could provide social support, skills training, and access to mental health resources for individuals experiencing loneliness or anxiety. Understanding the correlations between attachment styles, loneliness, and anxiety could guide the development of preventive interventions targeting at-risk populations. Early identification and intervention strategies could help prevent the onset or exacerbation of mental health issues later in life.

#### Limitations

1. There are a number of concerns with the survey study used in this research that should be addressed. First off, there's a chance that using Google Forms to collect data adds biases and constraints typical of online surveys. Furthermore, the guidelines concerning the importance of correlation results were ambiguous, which might have affected how the data were interpreted.
2. A deeper knowledge of the underlying mechanisms underlying the observed correlations could have been obtained by incorporating qualitative approaches into the mixed-methods strategy used in the study, which combined quantitative analysis of survey data. For example, in-depth information on individuals' experiences of anxiety, attachment styles, and loneliness may have been obtained through interviews.
3. An additional constraint of the research is the study's one married participant. By concentrating only on single people, a more comprehensive understanding of the connection between anxiety, attachment type, and loneliness in this particular population may have been possible.
4. The study may have taken a more exploratory tack and gone deeper into the intricacies of these psychological concepts. In-person interviews and structured observations are examples of offline data collecting techniques that may have provided extra advantages by fostering rapport-building and allowing researchers to obtain detailed information in real-time.
5. Although the survey study yielded insightful information, one should take into account its limitations, such as the methodological approach, participant inclusion criteria, and data collection methods, when evaluating the results.

6. In order to improve the validity and depth of the research findings, future research projects could address these constraints by using a mixed-methods approach, improving participant selection criteria, and adopting more extensive data collection methodologies.

## VII. FUTURE DIRECTIONS

Building on the knowledge acquired from this investigation, the following research directions are suggested for the future to enhance our comprehension of the relationship among anxiety, attachment type, and loneliness and to guide focused interventions:

1. To investigate how these psychological characteristics develop over time and how they affect long-term mental health outcomes, do longitudinal studies. Long-term follow-up of individuals can yield important information about the developmental paths of anxiety, attachment types, and loneliness.
2. Future studies should combine quantitative and qualitative approaches to fully comprehend the underlying mechanisms causing the observed relationships. Focus groups and interviews are examples of qualitative techniques that can provide valuable insights into people's experiences and perceptions.
3. Do randomized controlled trials (RCTs) to assess how well therapies for anxiety, loneliness, and attachment problems work. Mental health professionals can benefit from evidence-based tactics that come from evaluating the efficacy of therapeutic approaches like relationship therapy or attachment-based interventions.
4. Extend study to encompass a wider range of demographic samples, encompassing various age groups, ethnic backgrounds, and socioeconomic levels. This can be used to determine whether different demographic groups have different correlations between loneliness, attachment type, and anxiety.
5. Future research could focus on examining the patterns of attachment style, loneliness, and anxiety together. By exploring how these factors interact and influence each other within the same individual or across different populations, researchers can gain a more comprehensive understanding of their interplay and implications for mental health outcomes.
6. Use neighborhood-based strategies to combat loneliness and encourage social interaction. Engaging in partnerships with community organizations and stakeholders' helps expedite the creation and execution of customized interventions that cater to the distinct requirements of the local populace.
7. Promote laws that give mental health first priority and deal with the societal factors that contribute to loneliness and attachment disorders. At the societal level, policymakers have a critical role to play in establishing socially connected and mentally healthy environments.

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