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# Influence of Childhood Attachment on Self Esteem in Adults with Autism

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**Abstract:** *This study examines how childhood attachment experiences with both mother and father influence self-esteem outcomes in adults diagnosed with autism spectrum disorder (ASD). The research focuses on a sample of 200 adults aged 20 to 45 with a formal diagnosis of ASD. Data collection involved the administration of validated assessment tools, including the Adult Parental Attachment Short Scale (ASPAS) and the Rosenberg Self-Esteem Scale (RSES). Ethical guidelines were strictly followed, ensuring informed consent, confidentiality, and adherence to principles of beneficence and nonmaleficence. Statistical analyses, including Correlation was employed to study the relationship between childhood attachment patterns and self-esteem levels. Regression, was used to study the influence of childhood attachment patterns and self- esteem levels The result of the study showed a significant influence of childhood attachment on self-esteem, The study findings indicated a positive correlation between childhood attachment and self-esteem. The aim is to provide insights that can inform interventions tailored to the unique needs of individuals with ASD, ultimately enhancing their psychological well-being and overall quality of life.*

**Keywords:** *Autism, Childhood Attachment, Self-esteem.*

## I. INTRODUCTION

### A. Autism

According to the American Psychiatric Association (1994), Autism is a neurodevelopmental condition presenting challenges in reciprocal social interaction, communication, and repetitive behaviours, distinguishing it from typical development and mental retardation. These challenges include difficulties with eye contact, sharing attention, and using gestures for communication, alongside repetitive actions like hand flapping. Categorized under Pervasive Developmental Disorders, autism shares space with conditions like Asperger's syndrome and Rett's syndrome, while individuals with partial symptoms fall under Pervasive Developmental Disorder, Not Otherwise Specified. Notably, autism affects males more than females, with associated intellectual impairments often present. This condition places significant burdens on carers, educators, therapists, and career counsellors due to challenges in diagnosis, treatment, and family planning. Despite ongoing research, effective pharmacological remedies remain elusive due to incomplete understanding of its biochemical mechanisms.

### B. Genetic Contributions in Cases with An Unknown Aetiology

According to Bailey et al. (1995), genetic factors play a significant role in the development of autism, with heritability estimates surpassing 0.9. Recent research has revised the risk of autism in siblings to approximately 9%, considering "stoppage rules" in families with a child already affected.

Concordance rates in twin studies further support the genetic basis, with monozygotic twin concordance rates ranging from 36 to 96%, compared to significantly lower rates in dizygotic twins. However, the concept of the phenotype complicates understanding, as siblings and family members often exhibit milder social, language, and cognitive difficulties. This wider phenotypic perspective suggests a polygenic nature for autism, with interactions between different genes contributing to the phenotype. Efforts to identify specific genes associated with autism have focused on multiplex families, revealing correlations with chromosomal regions such as chromosome 15 and others.

The research led by Cohen et al. (2003) in Canada has linked variations in the gene coding for monoamine oxidase-A to cognitive functioning and autism severity, offering implications for treatment and outcome prediction.

These findings underscore the complex genetic contributions to autism spectrum disorders and the potential for targeted interventions based on genetic insights.

### C. *The Prevalence of Autism*

Research suggests that there is currently no evidence linking childhood vaccine exposure to autism, with new studies indicating a potential higher incidence of autism among infants who have not received vaccinations. One California post-hoc analysis of autism prevalence traced back every recorded case in the state's developmental disorder monitoring system, revealing a notable increase in cases born after 1978. Initially, autism lacked a clear definition and was often considered a form of childhood schizophrenia. The introduction of the DSM-III in 1980, as discussed by Bailey et al., marked the classification of autism as a separate condition, leading to broader diagnostic criteria and potentially influencing the rise in reported cases. Changes in diagnostic criteria, particularly with the introduction of the DSM-III and subsequent revisions, likely contributed to the perceived increase in autism cases, as children born after 1977 were increasingly diagnosed using broader criteria. This shift in diagnostic practices complicates interpretations of prevalence data and challenges the notion of an "epidemic" of autism cases among young children. Rather, it suggests a need to consider undiagnosed cases among adults and teens in the community, an area requiring further research and investigation.

### D. *Interventions for Autism Spectrum Disorders (ASD)*

Depend on factors such as age, severity of the condition, and co-occurring diagnoses. While research supporting various therapies like speech and language therapy and sensory integration is lacking, applied behavioural analysis (ABA) techniques have garnered significant support. Perry, Cohen, & DeCarlo (1995) highlight the effectiveness of ABA in teaching new skills and reducing challenging behaviours across age groups, with notable contributions from researcher Ivar Lovaas.

Studies suggest that intensive and relevant ABA interventions can potentially redirect the developmental trajectory of young children towards "normality." Early intervention, beginning around two years of age, has shown remarkable changes in some cases, challenging the notion that autism diagnosis determines prognosis.

Early intervention may modify brain morphology and functionality, underscoring the importance of early diagnosis. Research by Nelson et al. (2001) has identified physiological markers that predict autism and mental retardation, aiding early identification. Rating scales developed by psychologists, such as those by Robins, Fein, Barton, & Green (2001), facilitate early detection of autism in infancy. However, co-morbid diagnoses often complicate therapies, with individuals with ASDs frequently experiencing conditions like seizures, tic disorders, anxiety, and depression. Tsiouris, Cohen, Patti, & Korosh (2003) emphasize the importance of diagnosing co-morbid conditions for appropriate treatment. Piven & Palmer (1999) note that certain DSM disorders are more prevalent in families of individuals with autism, highlighting the need for autism therapy within the context of the larger family system. This underscores the multifaceted approach required for effective intervention in autism spectrum disorders.

### E. *Self-Esteem*

Self-esteem is a concept that has garnered substantial attention in psychology, with over 18,000 studies published over the past 35 years (Greenier, Kernis, & Waschull, 1995). Its significance spans various fields including clinical, developmental, personality, and social psychology. However, the importance of self-esteem has sometimes been exaggerated, with low self-esteem being demonized and high self-esteem being glorified (Manning, Bear, & Minke, 2006). Hewitt (2002) highlights the vast and complex nature of research on self-esteem, making it challenging to summarize concisely. Nevertheless, the fundamental understanding of self-esteem revolves around one's overall positive assessment of oneself. Rosenberg (1965) defines self-esteem as encompassing beliefs about one's worthiness and appreciation of oneself.

Sedikides and Gregg (2003) further define self-esteem as an individual's subjective evaluation of their own value, including their level of confidence, respect, and self-worth, as well as the positivity or negativity of their thoughts about themselves. This understanding of self-esteem underscores its significance in psychological functioning and its pervasive influence on individuals' perceptions and behaviors. Murphy, Stosny, and Morrel (2005) note that self-esteem encompasses global assessments of self-worth as well as emotive experiences and cognitive evaluations related to the self. Wang and Ollendick (2001) emphasize that self-esteem results from an emotional response to one's self-evaluation. Brown, Dutton, and Cook (2001) identify three uses of the phrase "self-esteem": global or trait self-esteem, self-evaluation, and feelings of self-esteem, which denote transient emotional states. Webster's dictionary defines self-esteem as "satisfaction with oneself" or "one's good opinion of one's dignity or worth." Hewitt (2002) challenges the traditional perception of self-esteem as a psychological feature, proposing instead that it is a socially produced emotion based on mood. Smith and Lovin (1995) characterize self-esteem as a reflexive emotion shaped by social processes, learned experiences, and societal norms. Overall, these perspectives highlight the multifaceted nature of self-esteem, encompassing both cognitive evaluations and emotive experiences, shaped by social and individual factors.

Branden (1969) suggests that self-esteem comprises two main components: believing in one's own effectiveness and respecting oneself. Reasoner (2005) further delineates self-esteem into competence and worth, emphasizing the experience of being capable and worthy of happiness. Heatherton & Wyland (2003) state that self-esteem can encompass various facets of one's identity, such as social status, physical attributes, and performance in different domains.

Branden (1969), Reasoner (2005), Cattell (1966), Spielberger and colleagues (1983), and Nisbett, Keltner, and Gilovich (2006) distinguish between different forms of self-esteem, including contingent versus non-contingent, explicit versus implicit, genuine versus fake, stable versus unstable, and global versus domain-specific (Cattell, 1966; Spielberger et al., 1983).

The distinction between state self-esteem, which is influenced by situational factors, and trait self-esteem, which is more stable over time, is recognized in personality psychology.

This multifaceted understanding of self-esteem highlights its complexity and the various dimensions and components involved in its conceptualization. Deci and Ryan (1995) delineated between genuine and contingent self-esteem, with contingent self-esteem being dependent on meeting certain criteria and often linked to narcissism, while genuine self-esteem is rooted in a strong sense of self. Orth, Brzezinski, & Robins (2010) state that the development of self-esteem is a prolonged process associated with the formation of self-concept and self-image, which can fluctuate during life transitions. Tsai, Ying, & Lee (2001) note that self-esteem tends to increase in early adulthood but decrease during adolescence. Brown et al. (2001) propose that the affective model of self-esteem development suggests that early relational and temperamental factors influence its formation, with high self-esteem individuals having the ability to foster and protect their self-worth. Rosenberg (1965); Coopersmith (1967) highlight that family environment plays a crucial role in personality development, with studies showing a positive correlation between parental involvement and teenage self-esteem. Mogonea and Mogonea (2014) emphasize the importance of adolescence in the formation of self-esteem, with teachers and parents playing crucial roles in supporting teenagers' self-esteem development. Lavoie (2012) states that high self-esteem in teenagers is associated with positive traits such as confidence, resilience, and emotional regulation. Conversely, poor self-esteem during adolescence may jeopardize emotional regulation while strong self-esteem can act as a protective factor. Lin et al. (2008). suggested that individuals with low self-esteem often experience emotional instability, feelings of worthlessness, and inferiority, leading to unhappiness with life. Mackinnon (2015) adds that this negative outlook extends to various aspects of life, including relationships and personal circumstances. Low self-esteem has been linked to depression, violence, reduced resilience, and lower well-being during adolescence (Stavropoulos et al., 2015). Weber's (2001) hypothesis states that college students who experience emotional maltreatment are likely to have lower self-worth, particularly among males. Additionally, research by Aydin and Sari (2011) found a significant negative correlation between internet addiction and self-esteem.

Andreassen, Pallesen, and Griffiths (2016) suggest that compulsive social media use may stem from narcissistic traits and an attempt to avoid negative self-evaluation. According to the sociometer concept proposed by Leary, Tambor, Terdal, and Downs (1995), low self-esteem can result from perceived social rejection. Campbell and Lavalley (1993) describe individuals with low self-esteem as having a neutral self-evaluation, unclear self-concept, high susceptibility to external cues, and conservative social behaviour, indicating a cautious orientation. Baumeister (1993) suggests that indicators of low self-esteem include an inability to identify oneself, a guarded attitude towards life, and a lack of positive internal resources, leading to vulnerability to external events. Low self-esteem is often observed in individuals with mental illnesses, with Silverstone and Salsali (2003) finding that all 957 mental patients in their study exhibited some degree of low self-esteem. Specifically, patients with eating disorders, substance addiction, and major depressive illness showed the lowest levels of self-esteem, indicating a negative feedback loop between mental illness onset and self-esteem. Donnellan, Trzesniewski, Robins, Moffitt, and Caspi (2005) discovered a strong correlation between externalizing difficulties such as aggression and poor self-esteem across different nationalities, age groups, and measures of self-esteem. Additionally, Moksnes and Espnes (2012) found a high negative correlation between self-esteem and both state anxiety and depression in a sample of Norwegian teenagers. Poor self-esteem has also been linked to behavioural issues, academic underachievement, and severe psychological problems like suicidal thoughts and maladjustment, as well as depression, social anxiety, loneliness, and alienation (Sharma and Agarwala, 2015). Kempke, Luyten, Houdenhove, Goossens, Bekaert, and Wambeke (2011) conducted a study involving 192 chronic fatigue syndrome patients and found that the relationship between maladaptive perfectionism and depression was fully mediated by self-esteem. Kamkar, Doyle, and Markiewicz (2012) found that this finding could have significant implications for the treatment and prevention of depression in these patients.

Additionally, long-term research suggests that low self-esteem predicts depression in later life. Two widely accepted theories explaining the relationship between psychopathology and low self-esteem are the vulnerability model, which suggests that psychopathology is more likely to occur in individuals with low self-esteem, and the scar model, which proposes that psychopathology results from low self-esteem rather than causing it.

Regarding the stability of self-esteem, while most theories suggest that self-esteem is a relatively constant personality characteristic, it is also acknowledged that self-esteem can be temporarily influenced or altered, leading to the conceptualization of self-esteem as both a "trait" and a "state." Furthermore, self-esteem instability, defined as the degree to which people's sense of self-worth fluctuates over the short term, is distinct from self-esteem level. Research by Greenier et al. (1995) suggests that self-esteem instability in individuals with high self-esteem is associated with stronger tendencies to defend positive self-feelings, while in those with low self-esteem, it is linked to markers of psychiatric issues and maladjustment.

#### *F. Childhood Attachment*

Bowlby (1969) was the first to develop attachment theory, defining attachment as an enduring mental bond between a human and their caregiver, influenced by evolutionary processes. Attachment formed in early childhood has lasting effects on an individual's life and is considered adaptive for survival. Research by Harlow (1950s and 1960s) conducted research on social isolation and parental deprivation with rhesus monkeys, demonstrating that attachment is more than just feeding and is rooted in comfort and care from a caregiver.

While his studies provided compelling evidence for the necessity of love in healthy childhood development, they also raised ethical concerns due to the harm inflicted on the monkeys. Further research (Schaffer and Emerson, 1964) identified four distinct phases of attachment development: pre-attachment, indiscriminate attachment, discriminate attachment, and multiple attachments. These phases span from birth to early childhood and involve the formation of specific attachment bonds with caregivers and other significant individuals.

Additionally, Ainsworth (1978) conducted experiments using the Strange Situation Procedure (SSP) to observe the attachment relationship between infants and caregivers. This research revealed different attachment styles and provided insight into how early attachment experiences shape individuals' relationships later in life.

#### *G. Attachment*

Ainsworth (1978) describes secure attachment as characterized by children having confidence that their attachment figure will be available to meet their needs and seeking them out in times of distress. Securely attached infants readily accept comfort from their attachment figure when upset, facilitating the formation of a stable relationship. In Ainsworth's experiment, securely attached children protested when their mother left but greeted her warmly upon return. They displayed avoidant behaviours with strangers in the absence of their mother but were friendly when she was present, using her as a secure base for exploration. Insecure-avoidant attachment as characterized by children who do not seek proximity to their attachment figure and can self-soothe both physically and emotionally when the figure is absent. These children may have caregivers who are unresponsive or consistently reject their needs. Insecure-avoidant children typically exhibit little emotional fluctuation and maintain their distance from others, displaying minimal distress when separated from their attachment figure. They may avoid seeking comfort from their caregiver when upset and show little reaction upon their return. These behaviours indicate a reluctance to risk rejection and a lack of trust in the availability of support from the attachment figure.

Ainsworth also identified insecure ambivalent attachment as the third type, characterized by mixed emotions towards the attachment figure. These children often display clinging and dependent behaviours but may also reject the involvement of the attachment figure in interactions. They experience distress when separated from their parents and struggle to resume exploration. Inconsistency in the caregiver's responses to their needs leads to difficulty in settling down and reluctance to engage with the caregiver.

Insecure ambivalent children may reject the caregiver and push them away in attempts to seek contact. Insecure Disorganized Attachment, these kids seem disoriented, acting in ways that are inconsistent or contradictory. They exhibit stereotypical behaviour and struggle with the paradox that their parents, who provide a safe haven, are also the cause of their anxiety and misery. Since both secure and insecure-avoidant attachment result in low anxiety and insecure-avoidant attachment has little effect on a child's future behavioural and psychological development. Comparison of Secure and Insecure-Avoidant Attachment: Both insecure-avoidant and secure attachment styles share low anxiety levels, but they differ in their approach to closeness with caregivers. Secure children actively seek closeness, while avoidant children avoid it. Secure children are more likely to explore independently and respond less strongly to stress, leading to easier formation of strong bonds as they age. Conversely, avoidant children learn to be self-reliant and suppress emotional needs due to early disregard, potentially leading to a false sense of independence. As a result, insecure-avoidant children typically avoid seeking attention and interacting with others, preferring solitude. This avoidance may hinder their growth and innovation. Muris, Meesters, van Melick, and Zwambag (2001) administered the Attachment Questionnaires for Children (AQ-C) to self-classify their attachment styles.

The AQ-C comprised three descriptions of children's feelings and perceptions regarding their relationships with other children, resulting in categories of securely, avoidantly, or ambivalently attached.

Additionally, the Inventory of Parent and Peer Attachment (IPPA) was used to assess attachment quality in communication, alienation, and trust aspects with parents and peers. Symptoms of anxiety disorders were measured using the Spence Children's Anxiety Scale (SCAS), covering various subscales, and depressive symptoms were assessed using the Children's Depressive Inventory (CDI) for children aged 7 to 17. Findings revealed that approximately 30% of individuals identified as insecurely attached in the AQ-C. Also In the study, notable gender differences were observed in attachment patterns and associated psychological outcomes. Girls reported higher levels of communication with parents and peers, as well as greater peer trust, compared to boys. Regarding anxiety symptoms measured by the Spence Children's Anxiety Scale (SCAS), girls exhibited higher levels of fear of physical harm and separation anxiety than boys. Securely attached adolescents displayed higher levels of trust and lower degrees of alienation in relationships, as evidenced by IPPA scores, compared to those insecurely attached. Furthermore, adolescents with secure attachment demonstrated the lowest levels of anxiety and depression, while ambivalently attached adolescents exhibited the highest scores, and those with avoidant attachment received moderate scores. The research conducted by Muris, Meesters, van Melick, and Zwambag (2001) emphasizes how the quality of attachment during childhood can significantly impact adolescents' psychological well-being, including their self-esteem. Adolescents who had secure attachment experiences reported higher levels of trust and lower levels of alienation in their relationships compared to those with insecure attachment experiences. This suggests that individuals who feel secure in their relationships during childhood are more likely to develop healthier self-esteem. Furthermore, the study revealed a notable link between early psychopathology and insecure attachment. Adolescents who experienced insecure attachment were found to have higher levels of anxiety and depression. Additionally, they displayed lower levels of communication and trust, as well as higher levels of alienation in their relationships. These findings suggest that insecure attachment experiences during childhood may contribute to lower self-esteem in adolescents, as they struggle with feelings of anxiety, depression, and social disconnection. Therefore, the quality of early attachment relationships can play a crucial role in shaping an individual's self-esteem and overall psychological well-being throughout adolescence and beyond. Subsequent meta-analyses, such as the one conducted by Badovinac and colleagues in 2021, have examined the relationship between attachment style and internalizing or externalizing symptoms. The findings revealed that insecure attachment traits, particularly avoidant behaviours, were associated with higher rates of internalizing symptoms like anxiety and depression, as well as externalizing symptoms like aggressiveness. Interestingly, the secure attachment group exhibited fewer externalizing symptoms compared to the insecure group, indicating the protective role of secure attachment against behavioural issues. Surprisingly, avoidantly attached children within the insecure group displayed the fewest externalizing symptoms during middle childhood when compared to ambivalently and disorganized attached children. This behavior aligned with avoidant children's tendency to interact politely and neutrally with their attachment figure, resulting in reduced social conflict. This research underscores the complex interplay between attachment style and psychosocial adjustment, highlighting the importance of early attachment experiences in shaping children's emotional and behavioural development.

## II. METHOD

### A. Objective of the Study

- 1) To investigate the relationship between parental attachment patterns during childhood and self-esteem levels in adults with autism.
- 2) To assess the influence of parental attachment patterns during childhood on self-esteem among adults with autism.

### B. Hypothesis

H1: There will be a significant relationship between parental attachment patterns during childhood and self-esteem levels in adults with autism.

H2: Parental attachment patterns during childhood will have influence on self-esteem among adults with autism.

### C. Research Design

Correlational research design and Regression analysis is used in this study.

### D. Variable

The variables of the study were childhood attachment and self-esteem. The demographic variable was age.

**E. Sample Distribution**

The present study selected a total of 200 Adults with Autism between the age range of 20-45. The responses were collected from the participants using the Google Form which was a one-time response. The consent of the participant was taken before filling the google form to participate in the current study.

**F. Inclusion criteria**

- 1) Adults aged 20 to 45
- 2) with a formal diagnosis of autism spectrum disorder (ASD)

**G. Exclusion criteria:**

- 1) Age Out of Range
- 2) Lack of Formal ASD Diagnosis
- 3) Other Developmental or Psychological Disorders
- 4) Inability to Provide Informed Consent

**H. Research Ethics Followed**

- 1) No harm was done to anyone in this study
- 2) Informed consent was obtained from the participants.
- 3) The participant had complete freedom to quit from the study at any point.
- 4) Confidentiality was maintained.

**I. Tools for the study**

- 1) Rosenberg’s Self-Esteem Scale (RSES) by Rosenberg M. (1965)
- 2) Adult Parental Attachment Short Scale (ASPAS).

**J. Description Of the Tools**

- 1) The Rosenberg Self-Esteem Scale (RSES): A validated scale assessing self-esteem with 10 items rated on a Likert scale. It has demonstrated reliability and validity, Reliability. The RSE demonstrates a Guttman scale coefficient of reproducibility of .92, indicating excellent internal consistency. Test-retest reliability over a period of 2 weeks reveals correlations of .85 and .88, indicating excellent stability. The Validity, demonstrates concurrent, predictive and construct validity using known groups. The RSE correlates significantly with other measures of self-esteem, including the Coopersmith Self-Esteem Inventory.
- 2) The Adult Parental Attachment Short Scale (ASPAS): A 40-item self-report measure assessing adult attachment patterns based on relationships with parents during childhood. It has established reliability and validity.
- 3)

**K. Statistical Analysis**

The results were analysed using descriptive and inferential statistics. IBM SPSS-25 was used for the data analysis. Among descriptive statistics, mean and standard deviation were used, among the inferential statistics such as correlation analysis and regression analysis was used to test the hypothesis.

**III. RESULT AND DISCUSSION**

Table 1 shows Descriptive Statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Self Esteem	200	11	40	26.16	3.666
Mother Safe	200	6	20	12.34	2.845
Mother Dependent	200	4	20	12.17	2.934
Mother Parentifeid	200	4	20	12.19	2.795

Mother Fearful	200	4	20	12.71	2.812
Mother Distant	200	6	20	12.34	2.721
Father Safe	200	4	20	10.66	3.020
Father Dependent	200	4	20	12.87	3.233
Father Parentified	200	4	20	13.05	3.023
Father Fearful	200	4	16	10.26	2.063
Father Distant	200	5	18	10.72	2.517
Valid N (listwise)	200				

The presented table provides descriptive statistics for various variables, including self-esteem and different maternal and paternal attachment patterns. For self-esteem, the sample size (N) is 200, with scores ranging from 11 to 40. The mean self-esteem score is 26.16, with a standard deviation of 3.666, suggesting a moderate level of variability in self-esteem within the sample. Similarly, maternal and paternal attachment patterns, such as safe, dependent, parentified, fearful, and distant, are also described. These variables exhibit varying ranges, means, and standard deviations, reflecting differences in perceptions or experiences among the respondents. For instance, Mother Safe has a mean score of 12.34 and a standard deviation of 2.845, indicating moderate variability in perceptions of maternal safety among participants. In general, these descriptive statistics offer a quick overview of the distribution and variability of parental attachment patterns and self-esteem within the sample, setting the stage for additional research and analysis of the information.

Table 2 shows the test of Normality.

<b>Test Of Normality</b>						
	Kolmogorov-Smirnov <sup>a</sup>			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Self Esteem	.127	200	.000	.914	200	.000
Mother Safe	.100	200	.000	.974	200	.001
Mother Dependent	.123	200	.000	.976	200	.002
Mother Parentified	.109	200	.000	.982	200	.013
Mother Fearful	.127	200	.000	.966	200	.000
Mother Distant	.175	200	.000	.954	200	.000
Father Safe	.156	200	.000	.968	200	.000
Father Dependent	.092	200	.000	.974	200	.001
Father Parentified	.110	200	.000	.958	200	.000
Father Fearful	.121	200	.000	.966	200	.000
Father Distant	.132	200	.000	.972	200	.000

a. Lilliefors Significance Correction

The table presents the outcomes of normality tests, including the Kolmogorov-Smirnov and Shapiro-Wilk tests, conducted on variables related to self-esteem and parental attachment patterns. Across all variables, including self-esteem and various aspects of maternal and paternal attachment such as safety, dependency, parentification, fearfulness, and distance, the tests reveal statistically significant deviations from normality, as evidenced by p-values below 0.05. These findings indicate that the distributions of these variables are not normally distributed.



**A. Correlations of Childhood Attachment with Mother on Self-esteem of Adult's**

In Table 3, the correlation study examined the relationships between maternal attachment patterns and various psychological features of children. The findings revealed a significant positive correlation ( $r = 0.660, p < 0.01$ ) between children's self-esteem and their perception of safety from their mothers. This underscores the crucial role of maternal security in fostering higher levels of self-esteem in children.

Table 3 Shows Correlations of Childhood Attachment with Mother on Self-esteem of Adult's with Autism.

Correlations	Self Esteem	Safe	Dependent	Parentified	Fearful	Distant
Self Esteem	1.000	.	.	.	.	.
Spearman's rho Mother Safe	.660**	1.000	.	.	.	.
Mother Dependent	.054	.070	1.000	.	.	.
Mother Parentified	.444	.325	.	1.000	.	.
Mother Fearful	-.025	-.018	.306**	.730	1.000	.
Mother Distant	.028	.039	.210**	.730	.376**	1.000
	.691	.586	.003	.000	.000	.
	.072	.042	.070	.188**	.112	1.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Additionally, a marginally significant association was observed between children's sense of parentification and their perception of their mother's dependence ( $r = 0.306, p < 0.01$ ), suggesting that children may take on greater parental responsibilities when they perceive their mother as dependent.

Moreover, a significant correlation ( $r = 1.000, p < 0.01$ ) was found between children's perceptions of their mother being parentified and their own feelings of being parentified, indicating a relationship between children's assumption of parental roles and their perception of their mother in a similar role.

Children's perceptions of their mother as distant ( $r = 0.188, p < 0.01$ ) and parentified ( $r = 0.376, p < 0.01$ ) were also moderately positively correlated with their feelings of fearfulness, suggesting that children experiencing fearfulness may also perceive their mother as distant or burdened with parental responsibilities.

Moreover, a marginally positive correlation was noted between children's experiences of feeling parentified and their view of their mother as emotionally distant ( $r = 0.112, p < 0.01$ ), indicating a mild relationship between children adopting parental roles and perceiving their mother as emotionally distant.

**B. Correlations of Childhood Attachment with Father on Self-esteem of Adult's with Autism**

In the correlation analysis presented in the table, the study explored the relationships between different paternal attachment patterns and their impact on the mental health of children, based on data collected from adults with autism. Several notable findings emerged from the analysis. Firstly, a modest yet statistically significant positive correlation was observed between

Table 4 Shows Correlation Attachment with Father on Self-esteem of Adult's with Autism

Correlations		Self Esteem	Father Safe	Father Dependence	Father Parentified	Father Distant
Spearman's rho	Self Esteem	1.000				
	Father Safe	.168*	1.000			
	Father Dependence	.045	.309**	1.000		
	Father Parentified	.058	.288**	.362**	1.000	
	Father Distant	.059	.277**	.216**	.122	1.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

children's self-esteem and their perception of protection from their fathers ( $r = 0.168, p < 0.05$ ), indicating a subtle but meaningful relationship between these variables. Additionally, weak positive correlations were found between paternal attachment patterns such as dependency, parentification, and distant attachment, and children's self-esteem, although these associations did not reach statistical significance.

Moreover, finding revealed a weak but significant positive correlation between children's self-esteem and their perception of their father's safety ( $r = 0.168, p < 0.05$ ), suggesting that children who perceive their father as protective are more likely to have higher self-esteem. Furthermore, a significant association ( $r = 0.309, p < 0.01$ ) was observed between paternal parentification and children's perception of their father's dependence, indicating that children may feel parentified and assume parental roles when they perceive their father as dependent.

Additionally, the perception of paternal parentification was moderately positively correlated with feelings of safety ( $r = 0.288, p < 0.01$ ) and dependence ( $r = 0.362, p < 0.01$ ), suggesting that children feel safer and perceive their father as more dependent when they believe he is parentified. Lastly, a weak positive correlation was found between the perception of paternal distance and feelings of safety ( $r = 0.277, p < 0.05$ ) and dependence ( $r = 0.216, p < 0.05$ ), indicating that children may feel more secure with their father when they perceive him to be distant. These findings underscore the importance of understanding the complex interplay between paternal attachment patterns and the mental well-being of their children.

C. Influence of Childhood Attachment with Mother on Self-esteem on Adult's with Autism

The correlation coefficient (R) of 0.675 suggests a moderately positive connection between the predictors and the dependent variable, indicating that changes in predictor values correspond to changes in the adjusted R Square of 0.442 offers a more precise evaluation of the model's goodness of fit by accounting for the number of predictors, demonstrating an improvement in model estimation.

Table 5 Shows Influence of Childhood Attachment with Mother on Self-esteem on Adult's with Autism

Model Summary						
Model	R	R Square	Change Statistics			
			Adjusted Square	R R Change	SquareF Change	Sig. F Change
1	.727	.529	.516	.529	43.298	.000

a. Predictors: (Constant), Distant, Safe, Dependent, Fearful, Parentified

The inclusion of predictors significantly enhances the model's explanatory power, as evidenced by the increase in R Square (0.456), signifying a meaningful impact of the predictors on understanding the variation in the dependent variable. Moreover, the substantial F Change statistic (32.483) underscores the overall relevance of the model compared to a null model with no predictors, emphasizing the significance of the included variables in explaining the dependent variable. The statistical significance of the change in R Square is further supported by the accompanying p-value of less than 0.001 for the F Change statistic, indicating that the predictors collectively make a significant contribution to explaining the observed variability in the dependent variable.

Table 6 Shows Coefficient of Regression Analysis on Mother  
Coefficient of Regression Analysis on Mother

Coefficient						
Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	10.934	1.389		7.870	.000
	SAFE	1.227	.087	.705	14.169	.000
	DEPENDENT	.023	.069	.019	.339	.735
	PARENTIFIED	.013	.078	.010	.163	.870
	FEARFULL	.045	.075	.035	.604	.546
	DISTANT	.129	.060	.108	2.143	.033

a. Dependent Variable: Self Esteem

The coefficients table illuminates the relationship between different maternal attachment styles—Safe, Dependent, Parentified, Fearful, and Distant—and the postulated dependent variable, likely self-esteem. t term, representing self-esteem in the absence of all predictors. A baseline level of self-esteem, independent of maternal attachment styles, is evident from the statistically significant ( $p < 0.001$ ) constants with a coefficient of 1.227 ( $p < 0.001$ ), Safe emerges as a strong and statistically significant predictor, suggesting that higher perceptions of maternal safety correlate with elevated levels of self-esteem. In contrast, the coefficients for Dependent, Parentified, Fearful are near zero, suggesting that these variables have little or no association with self-esteem and are not statistically significant ( $p > 0.05$ ) as predictors. However, DISTANT's coefficient of 0.129 ( $p = 0.033$ ) indicates a minor but statistically significant link with self-esteem, indicating that self-esteem levels are significantly influenced by perceptions of maternal distance. The analysis, in summary, highlights the minimal effects of mother reliance, parentification, and fearfulness while underscoring the important influence of maternal safety views on self-esteem.

Table 7 Shows the influence of childhood attachment with father on self -esteem of Adults with Autism

Model Summary						
Model	R	R Square	Adjusted Square	Change Statistics		
				RR Change	SquareF Change	Sig. F Change
1	.675 <sup>a</sup>	.456	.442	.456	32.483	.000

a. Predictors: Distant, Safe, Dependent, Fearful, Parentified

The correlation coefficient (R) of 0.675 suggests a moderately robust positive connection between the dependent variable and the predictors, indicating that changes in the predictors correlate in self-esteem. The estimated coefficient of determination (R<sup>2</sup>) of 0.456 suggests that the included predictors may explain 45.6% of the variability in self-esteem. The estimated coefficient of determination (R<sup>2</sup>) of 0.456 suggests that the included predictors may explain 45.6% of the variability in self-esteem. Adjusted R Square, which considers the number of predictors, slightly reduces this estimate to 0.442, offering a more precise evaluation of the model's fit. The addition of predictors significantly enhances the model's explanatory power, as indicated by the increase in R Square (0.456). With a significance level (Sig. F Change) below 0.001, the F Change statistic (32.483) underscores the overall significance of the model compared to a null model without predictors, indicating that the predictors collectively contribute significantly to explaining variance in self-esteem. These results underscore the substantial role of paternal attachment styles, father distant, father fearful, father dependent, father safe, and father parentified, in influencing psychological well-being, particularly self-esteem.

Table 8 Shows Coefficient of Regression Analysis on Father

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error			
1	(Constant)	13.195	1.326		9.952	.000
	Father safe	.179	.077	.147	2.320	.021
	father dependent	.007	.075	.006	.092	.927
	father parentified	-.058	.082	-.048	-.704	.482
	father fearful	1.143	.095	.643	11.987	.000
	Father distant	-.002	.079	-.001	-.019	.985

a. Dependent Variable: Self Esteem

Coefficient table reveals association between different styles and the dependent variable, self-esteem. The constant term (13.195) indicates the baseline level regardless of paternal attachment, suggesting a significant inherent level of self-esteem. Father safety demonstrates a statistically significant positive relationship with self-esteem (B = 0.179, p = 0.021), implying that higher perceptions of paternal safety correspond to elevated self-esteem. Conversely, father dependency, father parentification, and father distance from the child show negligible coefficients and lack statistical significance in predicting self-esteem (p > 0.05), suggesting minimal impact. However, perceptions of father fearfulness exhibit a strong and statistically significant negative relationship with self-esteem (B = 1.143, p < 0.001), indicating that when fathers are seen as fearful, individuals tend to have lower self-esteem levels. This analysis underscores the significant influence of paternal attachment styles, particularly perceptions of safety and fearfulness, on self-esteem outcomes, providing valuable insights into the complex dynamics between paternal roles and individual psychological well-being.

#### D. Implications

The findings of this study carry significant implications across various domains. In clinical practice, therapists and clinicians can utilize the understanding of the relationship between childhood attachment patterns and self-esteem in adults with autism spectrum disorder (ASD) to tailor therapeutic approaches. By integrating interventions focused on enhancing attachment security and promoting positive self-esteem, practitioners can effectively address underlying emotional needs and improve overall psychological well-being. Educators and special education professionals can leverage these insights to create more supportive learning environments for individuals with ASD, fostering a sense of belonging and competence. Additionally, families of individuals with ASD can benefit from understanding how early attachment experiences influence long-term self-esteem outcomes, enabling them to foster secure attachment relationships and promote positive parenting practices. Policymakers and stakeholders can use these findings to advocate for policies prioritizing early intervention and support for individuals with ASD, thereby working towards comprehensive and inclusive support systems. Lastly, this study paves the way for future research exploring the complex interplay between attachment, self-esteem, and other psychosocial factors in individuals with ASD, suggesting avenues for investigating intervention effectiveness across different age groups and cultural contexts through longitudinal studies.

#### E. Suggestions for Future Research

Future research on attachment patterns and self-esteem among individuals with autism spectrum disorder (ASD) should focus on longitudinal studies tracking development from childhood to adulthood, comparative studies with neurotypical individuals, exploring cultural influences, and using mixed-methods approaches for comprehensive understanding and tailored interventions.

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