

Impact of Mother Attachment on the Psychological Immunity among girl students studying at Senior Secondary level

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Abstract: Attachment can be understood as a long-lasting, deep and strong emotional bond formed between the primary caregiver (mother) and the child or infant, especially during early formative years which arises out of the human need to connect and seek affection, love, and security. It is seen that early attachment experiences impact our behaviour and relationships as adults. Mother-daughter attachment is a unique form of attachment which is studied under the Mother-Daughter Attachment Model helping us to explore and understand the attachment needs of the mother-daughter relationship across ages, cultures, and areas. The current study does not focus on the intergenerational attachment between mothers and girls, rather it tries to study the impact of gender as an independent variable on mother attachment and psychological immunity of 2160 adolescents (n1 (boys) = 1080; n2 (girls) = 1080) studying in senior secondary classes (class XI) of government and private schools in Delhi NCR. It also aims to investigate the impact of mother attachment as an independent variable on the Psychological Immunity (PI) of adolescents and among girls specifically, using linear regression analysis. It is seen that gender plays no significant role in influencing mother attachment, though girls are reported to demonstrate lesser externalizing behaviours than boys in case of avoidant or insecure attachments; however, mother attachment plays a significant role in impacting PI of students in the transition phase from childhood to adulthood. The study reveals how coping behaviours, daily stress management, and the mental well-being of adolescents are closely linked to maternal attachment, though mother attachment is not found to significantly impact the PI of girl students in particular. The need for mental health professionals to better understand the intricacies of mother-daughter relationships thereby helping to foster the need to support availability of better guidance and counselling services, healthier aging among mothers, better mental health and emotional well-being of girls and women is recommended.

Keywords: Attachment, Coping, Correlation, Girls, Mother-attachment, Mental health Psychological Immunity, Regression analysis, Senior secondary level, Well-being.

1 Introduction

A mother has the responsibility of nurturing her child and is considered the primary caregiver. Though motherhood itself is considered a full-time job, many mothers also take up the additional responsibility of salaried employment which comes with its own stress and trials [11]. Mother-daughter attachment is a unique form of attachment which is studied under the Mother-Daughter Attachment Model [14]. In a conventional family, the male members are viewed as the bread earners while the mother works at home, fulfilling the needs of her family members. However, with the rise of industrialization and the modern need for self-actualization, more women are opting for working outside the home environment. Such mothers

must compromise on the time spent with their children. Fixed work hours and long routines result in an adverse impact on the levels of attachment with their children. Some mothers also need to employ additional caregivers for looking after their children [27]. Patterns of parenting which include availability for the child, care, display of love and affection, all such factors promote the development of strong and secure attachment between the mother and the child. Being responsive to the child's needs makes the child feel safe and secure, even after the mother leaves for the workplace [27]. The involvement of mothers in employment is not the sole factor responsible for the deterioration of the mother-child attachment, rather it is the result of several factors [15]. Balance in the dual role of motherhood and job results in the development of secure attachment bonds between child and mother. Infants who are securely attached to their mothers can use them as their base of exploration, problem-solving behaviours, and development of pro-social behaviours, by the age of 2 years [15]. At the pre-school age, such children also display ego-control, flexible management of behaviour, and a source of comfort during separation. Such attachment relationships result in long-term changes in behaviour and relationship patterns, influencing attachment and the formation of bonds in later adolescent and even adult life [12]. The incidence of externalizing behaviour (mal-adaptive behaviour) is seen much less in girls than boys displaying insecure (disorganized) attachment with their mothers [29]. The study utilized a longitudinal study on a sample of 235 community children (comprising of boys = 106, girls = 129) in which data was collected on six time points. This study related mother attachment and gender in significant terms [29-30]. There are various factors affecting antenatal maternal attachment which was seen to impact the mother-child attachment styles in the future [16]. The identified factors include: gender of baby as desired; long term craving for infant leading to Assistive Reproductive Therapy (ART); history of miscarriages; visualization of pregnancy due to use of sonography and manual examination techniques. It was also seen that secure maternal attachments resulted in strong relationships among individuals in the future while adversely impacting future bonds including romantic relationships in case of insecure attachments [16]. The existence of a crucial link between sexuality and quality of parental attachment (mother and father attachment: secure, insecure) during the transition years of early adolescence (mean age = 13.8 years) was reported [25]. The findings show that presence of insecure (ambivalent) attachment with mother leads to greater sexual involvement especially among boys while insecure (avoidant) attachment with mother leads to emotional disinvestment (decreases sexual involvement). However, insecure (avoidant) attachment with father influences sexual decisions among girls.

Objectives

1. To study the impact of gender as Independent Variable (IV) on Mother Attachment as Dependent Variable (DV) among senior secondary students (class XI).
2. To study the impact of Mother Attachment as Independent Variable (IV) on Psychological Immunity (PI) as Dependent Variable (DV) among senior secondary students (class XI).
3. To study the impact of Mother Attachment as Independent Variable (IV) on Psychological Immunity (PI) as Dependent Variable (DV) of girls at senior secondary level (class XI).

2 Materials and Methods

Sample design: The sample was selected using stratified random sampling from 2160 adolescents comprising of 1830 male and female students studying in class XI of Co-ed schools (both government and private) located in 10 districts of Delhi. The schools were identified using a computer-generated random sampling method and permission was sought for data collection for the present study. The students selected randomly from each school, responded in both soft copy (Google forms) and hard copies of the questionnaire.

Research Tools: The research tools used were Mother Attachment Inventory (originally developed by Armsden and Greenberg (1987) [4] and the Psychological Immunity Competency Inventory (Olah, 2009) [22] (Both tools were adopted with permission and standardized within the Indian context using Factor analysis).

Statistical examination: Linear regression analysis was performed using the SPSS software (version 23.0) for the present study.

3 Results and discussion

It is widely known that attachment patterns play a significant role in supporting relationships in later life such as adolescence and adult life. Such findings further support Ecological-attachment theory which states that infant-adult attachments are a

sum of interaction over time [8]. The results of the present study which involved regression analysis can be seen in the tables given below:

Findings for objective-1

Table 1. Regression analysis summary between selected independent variable (gender) and maternal attachment (dependent variable)

D.V.	I.V. (Predictor)	R	R Square	S.E.E.
Maternal Attachment	GEN.	.032 ^a	.061	6.110

Note: D.V. = Dependent Variable; I.V. = Independent Variable; GEN = Gender; S.E.E = Std. Error of Estimation

The regression analysis used to predict the relationship between maternal attachment and gender reveals the R value as .242 as observed from the table and the R- squared value of 0.061 which is indicative of 6.1% variance.

Table 2. Summary of ANOVA for regression analysis

D.V.	MODEL	S.S.	DF	M.S.	F	SIG.
Mother Attachment	Regression	70.349	1	70.349	1.884	.170 ^b
	Residual	68242.618	1828	37.332		
	Total	68312.967	1829			

Note: D.V. = Dependent Variable; S.S. = Sum of Squares; df = degree of freedom

For mother attachment, the F-value is 1.884 ($p > 0.05$). Hence it is deduced that the resultant regression model does not predict the Mother Attachment significantly. Table 2 shows the ANOVA results which indicate that the regression model ($p = .170$, which is greater than 0.05) does not predict the outcome model. Hence it is not a good fit.

Table 3. Coefficients summary for regression analysis

DV	IV	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	t	Sig.
		B	Std. Error	Beta		
MA	(Constant)	67.778	.452		149.915	.000
	GEN	.392	.286	.032	1.373	.170

Note: D.V. = Dependent Variable; I.V. = Independent Variable; MA = Mother Attachment; GEN = Gender

From table 3 it can be understood that gender is not significant predictor ($p > 0.05$) of Maternal Attachment among secondary school students.

Findings for objective-2

The present study also attempted to highlight the impact of mother attachment as Independent Variable (IV) on Psychological Immunity (PI) as Dependent Variable (DV).

Table 4. Regression analysis summary between Maternal attachment and Psychological Immunity

D.V.	I.V. (Predictor)	R	R Square	S.E.E.
PI	MA	.700	.650	4.034

Note: D.V. = Dependent Variable; I.V. = Independent Variable; S.E.E = Std. Error of Estimation, PI = Psychological Immunity, MA = Mother Attachment

From table-4 it can be stated that value of R i.e. multiple correlation is .700, and R² i.e. coefficient of determination has value

of .650, thereby indicating that (Maternal Attachment) account for 65% of the variation seen in PI of boys and girls studying at senior secondary level (Class XI) in selected government and private schools in Delhi.

Table 5. Summary of ANOVA for regression analysis

D.V.	MODEL	S.S.	DF	M.S.	F	SIG.
MOTHER ATTACHMENT	Regression	1.667	1	1.667	.102	.000b
	Residual	35121.881	2158	16.275		
	Total	35123.548	2159			

Note: D.V. = Dependent Variable; S.S. = Sum of Squares; df = degree of freedom

From table 5, it can be seen that formaternal attachment, the F-value is .102 ($p < 0.05$) which helps us to deduced that the resultant regression model predicts the PI highly significantly, hence it is a good fit.

Table 6. Coefficients summary for regression analysis

DV	IV	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS		Sig.
		B	Std. Error	Beta	t	
PI	(Constant)	156.076	.942		165.712	.000
	MA	-.400	.014	-.007	-.320	.000

Note: D.V. = Dependent Variable; I.V. = Independent Variable; MA = Maternal Attachment; PI = Psychological Immunity

From table 6, it can be deduced that independent variable maternal attachment contributes positively towards PI. For MA, the value of B is 0.007 and t is .320, $p < 0.05$. Hence, it can be told that maternal attachment is a significant predictor ($p < 0.05$) of PI among secondary school students.

Findings for Objective 3

The current study makes an attempt to explore the impact of Mother Attachment as Independent Variable (IV) on the Psychological Immunity (PI) of girls as Dependent Variable (DV).

Table 7. Regression analysis summary between Maternal attachment and Psychological Immunity

D.V.	I.V. (Predictor)	R	R Square	S.E.E.
PI	MA	.015a	.000	3.695

Note: D.V. = Dependent Variable; I.V. = Independent Variable; S.E.E = Std. Error of Estimation, PI = Psychological Immunity, MA = Mother Attachment

From table-7 it can be seen that value of R i.e. multiple correlation is .015, and R2 i.e. coefficient of determination has value of .000, thereby indicating that (Maternal Attachment) account for 0% of the variation seen in PI of girls studying at senior secondary level (Class XI) in selected government and private schools in Delhi.[31]

Table 8. Summary of ANOVA for regression analysis

D.V.	MODEL	S.S.	DF	M.S.	F	SIG.
PI	Regression	3.451	1	3.451	.253	.615b
	Residual	14646.321	1073	13.650		
	Total	14649.771	1074	3.451		

Note: D.V. = Dependent Variable; S.S. = Sum of Squares; df = degree of freedom

From table 8, it can be seen that for mother attachment as I.V. and PI as D.V., the F-value is .253 ($p > 0.05$) which helps us to deduce that the resultant regression model does not predicts the PI, hence it is not a good fit.[32]

Table 9. Coefficients summary for regression analysis

DV	IV	UNSTANDARDIZED COEFFICIENTS		STANDARDIZED COEFFICIENTS	t	Sig.
		B	Std. Error	Beta		
PI	(Constant)	156.432	1.214	-.015	128.817	.000
	MA	-.009	.018		-.503	.615

Note: D.V. = Dependent Variable; I.V. = Independent Variable; MA = Maternal Attachment; PI = Psychological Immunity

From table 9, it can be deduced that independent variable mother attachment, the value of B is 0.015 and t is .503, $p > 0.05$. Hence, it can be told that maternal attachment is not a significant predictor ($p > 0.05$) of PI among secondary school girl students.[33]

The present study clearly points out the influence of maternal attachment on the nature and type of relationships formed by the child in the future.

- The type of maternal attachment displayed directly impacts the nature of adult attachment, sexuality and, even romantic relationships in the future.[34,35] It is seen that insecure attachment with mother (ambivalent or avoidant) results in greater sexual experimentation and exploration among boys [25].
- Strong evidence in the form of relevant literature review performed as part of this study reveals that nature of maternal attachment impacts display of externalizing behaviour (mal-adaptive behaviour) seen more in boys more than girls [25].
- The presence of secure attachment with mother leads to better adjustment in the individual and this attachment and this maternal attachment is itself under the impact of several factors from the very initial stages of prenatal development such as ART, increased longing for infant, history of failed pregnancies among many others [16].

Despite strong evidence regarding influence of maternal attachment on gender related attachments the present study shows that gender as an independent variable has no impact on the same, hence gender is not significant predictor ($p > 0.05$) of maternal attachment.

4 Conclusion

Research conducted by Bowlby (1988) established that attachment styles toward mothers or caregivers can predict the quality of future relationships. Previous studies have shown that the relationship between daughters and their mothers often exhibits closeness, intimacy, and support, resulting in a profound bond throughout their lives. Furthermore, mother-daughter relationships tend to display higher levels of interdependence and emotional connection compared to other types of relationships. Consequently, the nature of the mother-daughter relationship significantly influences the social and psychological well-being of daughters. Although the impact of family ties on personality and well-being has been a subject of research in developmental psychology [4], the literature exploring the relationship between mother-daughter dynamics and the well-being of daughters is still limited. As it was seen that the existing research primarily focuses on Western cultures, but child-rearing practices and family dynamics are likely to vary across different cultures [3]. Hence, the need for conducting research in this area was clearly felt in order to establish and validate the connections between mother-daughter relationships and the overall psychological immunity resulting in the well-being of daughters. Hence, the findings of this study provide empirical evidence supporting the strong association between maternal attachment and coping behaviours, daily stress management, and the mental well-being of daughters. These results have practical implications for mental health professionals, as they shed light on the complex dynamics of mother-daughter relationships. Armed with this knowledge, mental health professionals can offer guidance and counselling services that aim to strengthen future adult relationships, promote healthier aging among mothers, and enhance the emotional well-being of women.

Acknowledgements

The authors wish to acknowledge the support of the participating schools, their teachers and students for their supporting in the process of data collection.No conflict of interest is present.

4 References

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