

Adolescents' Body Image Evaluation and Attachment to Parents and Peers: Mediating Role of Emotional Regulation

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The present study aims to investigate the direct as well as indirect effect (through Emotional Regulation) of Attachment (to Parents and Peers) on Body Image Evaluation (BIE) among adolescents. In this model, Emotional Regulation (ER) serves as a catalyst in the relationship of Attachment and BIE. A sample of 611 adolescents (298 males and 313 females) with age ranging from 13-19 years ($M = 16.03$; $SD = 1.55$) was taken. The mediating role of ER in the relationship of Attachment and BIE was investigated. Multiple Hierarchical Regression analyses revealed that the relationship between Mother Attachment and BIE was partially mediated by Positive Rational Acceptance (emphasizing acceptance of the challenging event and positive self-care). Further, the relationship of Father Attachment and Peer Attachment with BIE was partially mediated by Appearance Fixing (altering appearance by covering, camouflaging, or correcting the perceived defect). The findings of the study are considered in terms of Cognitive Behavioral (CB) Perspectives on the development of BIE. The findings of the present study highlighted that Attachment with Parents and Peers and ER strategies influence the acquisition of BIE among adolescents.

Keywords: Attachment, Body Image Evaluation, Emotional Regulation, Appearance Fixing, Positive Rational Acceptance, Experiential Avoidance, Adolescence

Body image is an important part of one's physical self (Allen & Walter, 2016) and is a significant psychosocial concept. According to CB perspectives, Body image is a multidimensional construct influenced by social learning, conditioning processes, and cognitive mediation of behaviors and emotions. Adolescence is the stage where an individual encounters various changes in their physical self (for instance, evaluation of one's appearance in terms of body satisfaction or body dissatisfaction, etc.) (Ata et al., 2011). Researchers have found that Body Image concerns are prevalent in both males and females in developed and developing countries, with prevalence estimates ranging from 11% to 72% among

females and 8% to 61% among males (Karazsia et al., 2017; Fiske et al., 2014).

The review suggested that the majority of body image research has been deduced from Cognitive and Behavioral (CB) Perspectives in psychology. These perspectives suggest Attachment as a historical factor and ER as a proximal factor in the development of Body Image. CB perspectives of Body Image (Cash, 2002, 2012) explain the acquisition of BIE (it refers to the satisfaction or dissatisfaction with one's body) through the lens of the Historical Factors (past experiences that influence how individuals think, feel, and act about their body) and Proximal Factors (current life events, etc.).

Research suggested that it is significant to understand the role of Attachment (Amianto et al., 2017; Aktaran & Üstündag-Budak, 2019) and ER (Khodabakhsh et al., 2017; Nejati et al., 2014; Hughes & Gullone, 2012; Sim & Zeman, 2006) in Body Image. The review suggests that there are individual differences in the perception of Body Image (Cash & Smolak, 2011; Hughes & Gullone, 2011). Research suggests that body-related concerns lead to a variety of mental health problems and long-term consequences (Hughes & Gullone, 2011). Concerning body image, one such mental health variable that has received little attention is Emotional Regulation (Hughes & Gullone, 2011; Sim & Zeman, 2006). Therefore, the present research will study the mediational role of ER in the relationship of Attachment and BIE.

Emotion regulation is defined as a process through which an individual evaluates, monitors, maintains and modify their emotional experiences (Thompson, 1994). It has been reported in research that difficulties in the regulation of emotions are linked with the majority of psychological disorders (Gross & Levenson, 1997; Hughes & Gullone, 2011) whereas effectively regulating one's emotions is associated with healthy body image, mental health and wellbeing. Cash (2012) initiated a seminal work on body image coping and self-regulation processes, which Hughes and Gullone (2011) later referred to as domain specific ER strategies. Cash (2012) describes three cognitive behavioral strategies to deal with disturbing body image thoughts and feelings. These are Appearance Fixing (includes efforts to change, fix, or correct aspects of one's appearance perceived as imperfect or flawed), Positive Rational Acceptance (consists of positive self-care or rational self-talk and self-acceptance), and Experiential Avoidance (ways to avoid situations, thoughts, and feelings that are perceived threatening).

Empirical evidence suggests that there are a few studies that address the association of ER and BIE. To comprehend this relationship, it is required to investigate the association of domain-specific ER strategies and BIE.

In addition to ER, Attachment to Parents and Peers is a significant factor that influences the acquisition of BIE (Cash, 2012). Research indicates that the perception of Attachment with Parents and Peers may promote positive BIE or Body Image Satisfaction (Cash, 2012). Attachment is a developmental process that involves the formation of emotional relationships with significant people and it can have a significant influence on an individual's adult adjustment (Bowlby, 1969; Furman & Buhrmester, 2009). The sense of self that one has derived out of the earlier bondings may significantly relate to body image (Sharpe et al., 2014; Sandoval, 2008). Researchers suggest that the quality of one's early interactions with parental figures influences how one thinks and feels about oneself and others (referred to in the Attachment literature as "internal working models") and how comfortable a person is with proximity and separation (Sharpe et al., 2013; Bowlby, 1969, 1988).

Research has investigated links between Attachment and ER (Holmes, 2014) which indicates that attachment quality and experiences are necessary for optimal emotional functioning and mental health. Adolescents' perception of Attachment to Parents and Peers is associated with favorable BIE (Laporta-Herrero et al., 2022). In the present study, the direct effect of Attachment on BIE, Attachment on ER, and ER on BIE has been explored extensively. The review associating these variables has been considered separately.

The rationale behind the present study is the utilization of CB Perspectives on Body

Image (Cash, 2002, 2012). CB perspectives suggest the mediational role of ER in the development of BIEs (Cash, 2012). Thus, understanding the demonstrated links between Attachment, ER, and BIE it is proposed that ER may mediate the relationship between Attachment and BIE. The present study therefore aims to examine the direct as well as indirect effect (through ER strategies) of Attachment (to Mother, Father, and Peers) on BIE. Attachment to Mother, Father, and Peers as well as ER strategies have been found to predict BIE in adolescents, hence it may be likely to consider that ER strategies may play a role in the relationship between Attachment and BIE.

Hypotheses

The following hypotheses were formulated:

1. There will be a significant positive relationship of Attachment to Parents and Peers with BIE among adolescents.
2. There will be a significant relationship of Attachment to Parents and Peers with ER among adolescents.
 - a) Mother, Father and Peer Attachment will be negatively related to AF and EA.
 - b) Mother, Father and Peer Attachment will be positively related to PRA.
3. There will be a significant relationship between ER and BIE.
 - a) AF and EA will be negatively related to BIE.
 - b) PRA will be positively related to BIE.
4. There will be a mediational role of ER in the relationship between Attachment (to Parents and Peers) and BIE among adolescents.

Method

Sample

To achieve the objectives of the present study, the total sample consisted of 611 adolescents (298 males and 313 females) with ages ranging from 13-19 years ($M = 16.03$; $SD = 1.55$). The sample was collected from eight schools affiliated with the Central Board of Secondary Education located in different areas of Amritsar and Jalandhar (districts in Punjab State), and also from Guru Nanak Dev University located in Amritsar district. No school declined to participate. All the participants were fluent in English language. An incidental sampling technique was used in data collection. When selecting the sample, it was made sure that the schools and the university considered were more or less homogenous in terms of cultural background and academic setting. The sample was chosen based on the cooperation demonstrated by the authorities of the university, various schools, and students. Furthermore, all the incomplete psychological measures used were omitted, and only those that were complete were selected for the research. Only participants who were willing to participate were chosen. The present study has been approved by the Institutional Ethical Committee, Department of Human Genetics, Guru Nanak Dev University, Amritsar, India.

Psychological Measures Used

i) *The Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987)*: IPPA is a 75-item self-report scale that measures adolescents' perceptions of their Attachment to their Parents and Peers. The inventory is divided into three parts: Mother Attachment, Father Attachment, and Peer Attachment. Each part consists of 25 statements. Items are both positively worded and negatively worded and are rated on five five-point Likert scale ranging from 'Almost Always or Always True' with a value of 5 to

'Almost Never or Never' with a value of 1. Negatively worded items are reverse scored. The scores of each scale range from 25 to 125. This inventory is a sufficiently valid and reliable measure of Parent and Peer Attachment (Armsden & Greenberg, 1987). Armsden & Greenberg (1987) have reported Cronbach's alpha for the subscales ranging from .72 to .92 and test-retest reliability as .93 for Parent Attachment and .86 for Peer Attachment. IPPA has been successfully used by Bhau & Tung (2019) on a sample of Indian adolescents.

ii) *Body Image Coping Strategies Inventory-Revised (BICSI-R; Cash, 2005)*- BICSI-R is the body image domain specific ER measure used for the assessment of the cognitive and behavioral activities (AF, EA, and PRA) that persons use to manage or cope with threats or challenges to their body image. The BICSI is a 29-item self-report inventory. Its three subscales are AF (10 items), EA (8 items), and PRA (11 items). Items are rated on a four-point scale weighing the response of 'definitely like me' with a value of 3 and 'definitely not like me' with a value of 0. The scores on the scale range from 0 to 87. BICSI has been reported to have good internal consistency 0.74–0.90 and 2-week test-retest reliability 0.66–0.86. It has sufficient construct validity (Cash & Grasso, 2005; Cash et al., 2005). In the present study, all three of the BICSI scales showed a high test-retest reliability coefficient of 1.00.

iii) *Multidimensional Body Self Relations Questionnaire-Revised (MBSRQ-R; Cash et al., 2018)*- It is a 69-item self-report inventory to measure body image attitudes. BIE is the dispositional dimension of Body Image Attitudes and is measured by Appearance Evaluation (AE) and Body Areas Satisfaction (BAS) subscales of MBSRQ. AE and BAS scales have been widely used by researchers to assess the emotional and evaluative experience of appearance. AE scale (5 items) measures the degree of overall satisfaction with one's appearance and BAS scale (9

items) measures the degree of satisfaction with discrete aspects of one's appearance. Their overall scores range from 14 to 70. Scoring was done according to the manual of the test. The items of AE scale were scored by weighing the response of 'definitely agree' with a value of 5 and the response of 'definitely disagree' with a value of 1. The nine items of the BAS scale were scored by weighing 'very satisfied' with a value of 5 and 'very dissatisfied' with a value of 1. Negative items were reverse-scored. The measure is sufficiently reliable and valid. Authors have reported internal consistency alphas ranging from 0.70 to 0.91 among males and 0.73 to 0.90 among females. The questionnaire has been utilized successfully on adolescents of Indian culture. Deshmukh & Kulkarni (2017) reported the value of internal consistency alpha of the MBSRQ as 0.781.

Statistical Analysis Plan

Following data screening and preliminary analyses, a series of regressions were conducted predicting BIE from Attachment to Parents and Peers and ER strategies. Mediation was examined in testing condition IV where the variables of Attachment to Parents and Peers were entered at Step 1 and ER strategies (AF, PRA, and EA) were entered at Step 2 as predictor variables. BIE served as the criterion variable.

Results

Preliminary analyses

The data was analyzed using Statistical Package for Social Sciences (SPSS Version 22). Means, standard deviations, skewness, and kurtosis are presented in Table 1. Pearson Product Moment Correlation analyses were employed to determine the correlations among BIE, Attachment to Parents and Peers, and ER variables. Inter-correlations between these variables are presented in Table 2. With few exceptions, there were significant correlations among the predictors and outcome variables.

Table 1. Means (M), Standard Deviations (SD), Skewness and Kurtosis of study variables

Variables	M	SD	Skewness	Kurtosis
1. Mother Attachment(MA)	98.05	17.46	-.66	.06
2. Father Attachment(FA)	95.18	19.37	-.77	.59
3. Peer Attachment(PA)	94.24	16.62	-.42	-.20
4. Appearance Fixing(AF)	1.33	.64	.15	-.39
5. Positive Rational Acceptance(PRA)	1.81	.45	-.28	-.44
6. Experiential Avoidance(EA)	1.04	.52	.48	.21
7. Body Image Evaluation(BIE)	3.64	.69	-.49	.23

Table 2. Inter-Correlations among different variables under study

Variables	1	2	3	4	5	6	7
1. Mother Attachment	-	.68**	.32**	-.16**	.12**	-.30**	.38**
2. Father Attachment	-	-	.34**	-.16**	.05	-.10**	.37**
3. Peer Attachment	-	-	-	.017	.10**	-.18**	.22**
4. Appearance Fixing	-	-	-	-	.24**	.25**	-.19**
5. Positive Rational Acceptance	-	-	-	-	-	.10*	.17**
6. Experiential Avoidance	-	-	-	-	-	-	-.20**
7. Body Image Evaluation	-	-	-	-	-	-	-

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Table 2. depicts that BIE is positively correlated with Mother Attachment, Father Attachment and Peer Attachment, and PRA. It is negatively correlated with AF and EA. Further, Mother Attachment and Father Attachment are found to be positively correlated with PRA and negatively correlated with AF and EA. Peer Attachment is positively related to AF and PRA while negatively related to EA.

Hierarchical Multiple Regression Analyses

A series of Hierarchical Multiple Regression analyses were conducted to study the mediating role of ER strategies in the relationship of Attachment to Parents and Peers with BIE. In the testing of the

mediational hypothesis, Attachment to Mother, Father, and Peers were considered as predictor variables, and three ER strategies of AF, PRA, and EA were taken as mediator variables, and BIE was taken as outcome variable.

Testing for Condition I

Attachment to Parents and Peers as the predictor variable and BIE as the criterion variable

To test for condition I, the hierarchical regression analysis was conducted in which Attachment to Mother, Father, and Peers were entered as predictor variables, and BIE was entered as the criterion variable. The results indicated that Attachment to Mother, Father,

and Peers accounted for 17% of the variance in BIE. All three predictors contributed to the variance. The beta coefficients of Mother Attachment ($\beta = .24$; $t(611) = 4.74$, $p < 0.01$), Father Attachment ($\beta = .17$; $t(611) = 3.43$, $p < 0.01$), and Peer Attachment ($\beta = .08$; $t(611) = 2.07$, $p < 0.05$) (Table 3) are contributing in the variance. Thus, the hierarchical regression analysis explains that Attachment to Mother, Father, and Peers account for significant variance in BIE. Hence, the hierarchical regression analysis for condition I is fulfilled, and Attachment to Parents and Peers is significant predictor of BIE. Hence, hypothesis 1 is accepted.

Table 3. Hierarchical Regression Analysis with Attachment to Parents and Peers and ER as predictor variables and BIE as criterion variable

Variables	BIE		
	β	t	R ²
Mother Attachment	.24**	4.74	.17
Father Attachment	.17**	3.43	
Peer Attachment	.08*	2.08	
Appearance Fixing	-.2**	-4.95	.11
Positive Rational Acceptance	.23**	5.94	
Experiential Avoidance	-.18**	-4.47	

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Testing for Condition II

Attachment to Parents and Peers as a predictor variable and ER (AF, PRA, and EA) as a criterion variable

To test for condition II, the hierarchical regression analysis was employed in which Attachment to Mother, Father, and Peers were entered as predictor variables and ER strategies were entered as outcome variables. In order to see the validity of

condition II as a pre-requisite for applying meditational analysis, the hierarchical regression analysis was conducted to find out the variance for all three ER strategies one by one, and results are given in Table 4.

When AF was entered as a criterion variable, the results indicated that it is negatively correlated with Father Attachment and positively correlated with Peer Attachment. Attachment to Parents and Peers accounted for 4% of the variance in AF. The beta coefficients of Father Attachment ($\beta = -.15$; $t(611) = -2.36$, $p < 0.01$) and Peer Attachment ($\beta = .09$; $t(611) = 2.17$, $p < 0.05$) are contributing in the variance. The hierarchical regression indicates that Father Attachment (negatively) and Peer Attachment (positively) are significant predictors of AF strategy of ER. For PRA, the Attachment to Parents and Peers accounted for 2% of the variance. As shown in Table 4, Mother Attachment is positively associated with PRA. This unique contribution of Mother Attachment is also reflected in the significant beta coefficient value ($\beta = .16$; $t(611) = 2.84$, $p < 0.05$). Further with regard to EA, the Attachment to Parents and Peers accounted for 11% of the variance in EA. As shown in Table 4, Mother Attachment and Father Attachment are negatively associated with EA. The significant beta coefficient values of Mother Attachment ($\beta = -.18$; $t(611) = -3.38$, $p < 0.01$) and Father Attachment ($\beta = -.15$; $t(611) = -2.81$, $p < 0.05$) are making unique contribution in the variance. Thus, hypotheses 2a and 2b are partially supported since there is a non-significant relationship between Mother Attachment and AF; Father Attachment and Peer Attachment with PRA; and Peer Attachment and EA.

Table 4. Hierarchical Regression Analysis with Attachment to Parents and Peers as predictor variable and ER as criterion variable

Variables	AF		PRA		EA	
	β	t	β	t	β	t
Mother Attachment	-.09	-1.80	.16*	2.84	-.18**	-3.38
Father Attachment	-.13**	-2.36	-.08	-1.51	-.15*	-2.81
Peer Attachment	.09*	2.17	.07	1.81	-.75	-1.82
R ²	.04		.02		.11	

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Testing for Condition III

ER (AF, PRA and EA) as predictor variable and BIE as criterion variable

To test for condition III, the hierarchical regression analysis was employed in which ER strategies were entered as predictor variables, and BIE was treated as an outcome variable. The results indicated that ER strategies accounted for 11% of the variance in BIE. All three predictors made a contribution in the variance. The beta coefficients of AF ($\beta = -.2$; $t(611) = -4.94$, $p < 0.01$), PRA ($\beta = .23$; $t(611) = 5.94$, $p < 0.01$) and EA ($\beta = -.18$; $t(611) = -4.47$, $p < 0.05$) (Table 3) are contributing in the variance. AF and EA are negatively associated with BIE and PRA is positively associated with BIE and making a unique contribution. Thus, the hierarchical regression analysis explains that ER strategies have been found to be significant predictors of BIE in adolescents. Hence, hypothesis 3 is supported.

Testing for Condition IV

ER as a mediator of the relationship between Attachment to Parents and Peers and BIE

To test for condition IV, the hierarchical regression analysis was conducted to study ER as mediating the relationship between

Attachment to Parents and Peers and body image attitudes. In these analyses, the variables of Attachment to Parents and Peers were entered in Step 1, and ER strategies (AF, PRA, and EA) were entered in Step 2 as predictor variables, and BIE served as criterion variable. Table 5 reveals that at step 1, Mother, Father, and Peer Attachment when entered accounted for 17% of variance in body image attitudes. The beta coefficients of Mother, Father, and Peer Attachment indicated that they are significant predictors of BIE in adolescents. It has been found that Mother, Father, and Peer Attachment are positively related to BIE. Thus, hypothesis 2 stands supported. In step 2, ER strategies (AF, PRA, and EA) are added to determine the mediational effect. It accounted for a 22% variance in body image attitudes with AF and PRA uniquely explaining this variance. These findings predicted a significant relationship between predictor variables and the outcome/criterion variable and also revealed the mediational role of the mediator variable. It was found that an additional 5% variance is accounted for in BIE when ER strategies were added to see their mediational role. The beta coefficients of Mother, Father, and Peer Attachment, AF, and PRA also highlighted the effect of mediation. Results showed that AF is negatively related to BIE while PRA is positively associated with BIE. On the other hand, no significant relationship existed between EA and BIE.

Table 5. Hierarchical Regression Analysis taking ER as Mediator between Attachment to Parents and Peers and BIE

Variables	BIE			
	Step I		Step II	
	β	t	β	t
Mother Attachment	.24**	4.74	.19**	3.68
Father Attachment	.17**	3.43	.16**	3.17
Peer Attachment	.08*	2.08	.08*	2.02
Appearance Fixing			-.16**	-4.17
Positive Rational Acceptance			.17**	4.63
Experiential Avoidance			-.06	-1.61
R ²	.17		.22	
Adjusted R ²	.17		.21	

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

The effect of mediation has been proved by the present study as the addition of mediating variables has led to an increase in R² (from 17% to 22%). Evidence for mediation is also proved as the variance in the value of beta coefficients between the predictor variable (Attachment) and the criterion variable (BIE) is lower in the presence of the mediator variable (ER) (Table 5). The β value of Mother, Father, and Peer Attachment is significant in Step 2 which indicate that the relation between Mother Attachment and BIE is partially mediated. Thus, hypothesis 4 is partially supported as EA was not proven to be a mediator in the relationship of Attachment to Parents and Peers with BIE.

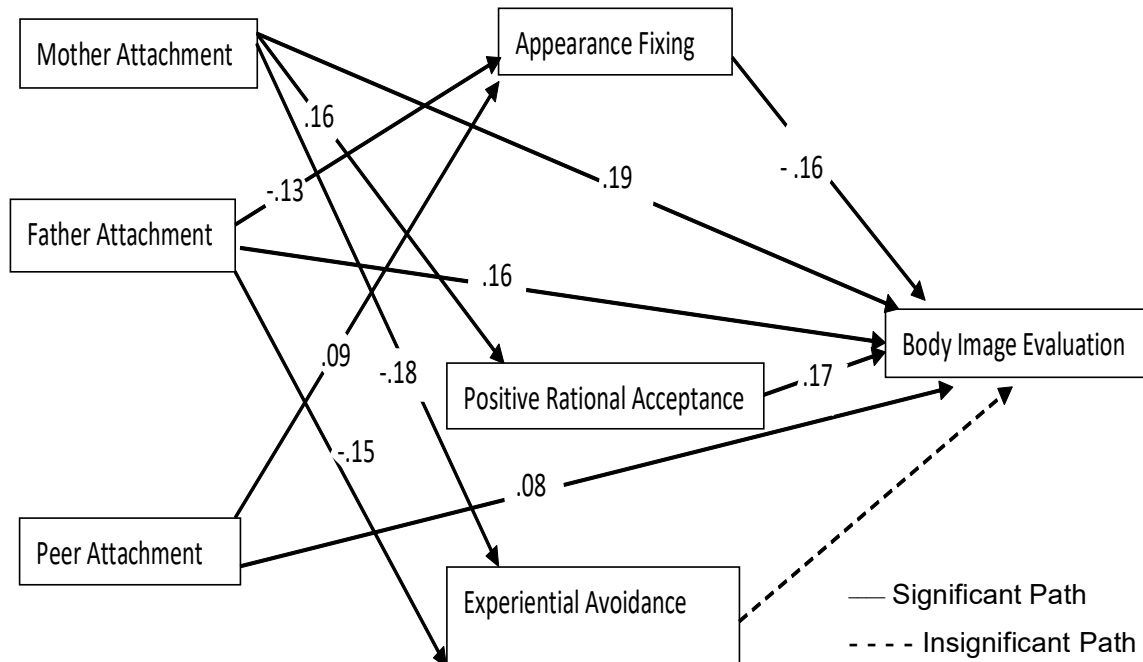


Figure1. The mediational model shows significant paths between Attachment to Parents and Peers, ER, and BIE.

** Correlation is significant at the 0.01 level

* Correlation is significant at the 0.05 level

Discussion

The results of our study show the importance of parental and peer attachment to the BIE of Adolescents. The positive association of Mother Attachment, Father Attachment and Peer Attachment with BIE reveals that adolescents evaluate their bodies based on their attachment to their Mother, Father, and Peers. Also, Laporta-Herrero et al. (2022, 2021) suggested that Attachment to Parents and Peers is influential during adolescence. A previous study indicated that the fulfilled emotional and physical needs (to be fed, held, cared for, etc) of individuals in the early stages have a positive impact on the later stages of their development (Aktaran & Üstündağ-Budak, 2019). Evidence also suggests that Attachment needs are first and foremost body based needs; therefore, there is an undeniable link between attachment and body image (Krueger, 2002; Aktaran & Üstündağ-Budak, 2019).

Budak,2019).

Furthermore, the findings demonstrated a link between Attachment and ER strategies (AF, PRA, and EA). It was found that Peer Attachment has a positive association with AF whereas Father Attachment has a negative association with AF. Researchers also suggest that as far as appearance and correcting one's looks are concerned, the opinions, comments or remarks, and suggestions of peers are significant during the adolescent stage (Laporta-Herrero et al., 2022). In the present study, the positive association of Peer Attachment with AF indicates that attachment to peers plays a significant role in AF of adolescents. In contrast, the negative association of Father Attachment with AF demonstrates that adolescents who are attached to their Father are less invested in fixing their appearance. Earlier research by Grenon et al. (2016) and Gander et al. (2015) suggests that

adolescents with a strong attachment to their fathers have increased satisfaction and awareness of their bodies. A similar kind of relationship was also reported by Michael et al. (2014).

Moving further, it was also found that there is a positive relationship between Attachment to the Mother and PRA. It indicates the significance of adolescents' attachment to their mothers for the development of PRA. Several researchers (Smith et al., 2016; Laporta-Herrero et al.,2022) also asserted similar kinds of research findings. Previous research also suggests that adolescents who are high in PRA remind themselves of their good qualities, they do positive self talk and try to figure out the reasons behind their feelings of body image threats (Webb et al, 2015; Hughes & Gullone, 2011; Cash et al., 2005). Therefore, in terms of BIE, ER, and mental health, it is crucial to emphasize that the Mother's Attachment is vital in the acquisition and development of body image.

Furthermore, it was also found that Mother Attachment and Father Attachment are negatively related to EA. It indicates that high Attachment to Mother and Father is related to less involvement in EA. Previous studies done by Vanwoerden et al. (2015) and Cash (2005) also found that adolescents who are attached to their Mother and Father are less involved in regulating their emotions through EA.

Furthermore, it has been found that ER is the predictor of BIE. Results of the present study indicate that AF and EA are negatively associated with BIE and PRA is positively associated with BIE. Previous researchers have also reported similar results (Khutan & Tung, 2024; Zucchelli et al., 2020; Jewett et al., 2018; Shorey et al., 2017; Mancuso, 2016; Cash et al., 2005; Rumsey & Harcourt, 2004). It is also evident in earlier research that adolescents who are high on AF are occupied with their looks, seek reassurance

about their appearance from others, and compare themselves to attractive others (Laporta-Herrero et al., 2022; Yamani Ardakani et al., 2020; Cash et al., 2005). Results of the present study also revealed that PRA is positively related to BIE. Previous researchers (Soponarū & Bojian., 2020; Webb et al., 2015; Cash et al., 2012; Hughes & Gullone, 2011) found that adolescents high on PRA do positive self-talk and make efforts to cope with the stressors related to their bodies.

The results of the present study provide support to the premises that ER may be a mediating variable between Attachment and BIE. The results of mediational analysis indicate that Attachment to Mother, Father, and Peers plays a crucial role in the development of body image attitudes. Similar kinds of relationships have been discovered in earlier studies (Cheng & Mallinckrodt, 2009). The findings of the current study suggest that the contribution of Attachment to Parents and Peers in the acquisition of BIE is mediated by ER strategies. The results of the present study suggest that the relationship between Mother Attachment and BIE is partially mediated by PRA. It means that different characteristics associated with PRA and Mother Attachment (i.e. acceptance of one's thoughts and feelings, care and attention given by caregiver and care for oneself, trust, comfort, understanding, and sharing) help an adolescent to develop BIEs.

Still further, the results indicate that the relationship between Father Attachment and BIE is partially mediated by AF. The negative association of Father Attachment with AF and BIE reflects that adolescents who have high Attachment to their Father are less invested in evaluating and fixing their appearance and body image. Previous researchers also reported the relationship between Father Attachment and BIE (Grenon et al., 2016; Gander et al., 2015).

Moreover, the relationship between Peer Attachment and BIE is partially mediated by AF. The results indicate that AF acts as a catalyst in the relationship between Peer Attachment and BIE. Similarly, previous research by Laporta-Herrero et al. (2021) indicates that adolescents usually follow the advice of their friends because the influence of friends is greater in adolescence. They also reported that adolescents learn various ER strategies from their Peers to deal with their physical self related concerns and AF is one such strategy. Moving further, EA has not been proven to be a mediator between the relationship of Attachment to Parents and Peers and body image attitudes. It indicates that adolescents who have high attachment to their Parents and Peers are not involved in regulating their emotions through the less adaptive coping strategy of EA. Earlier research by Zucchelli et al., (2020) also indicated that EA is an unhelpful ER strategy for adolescents.

Limitations and Suggestions

Although the current investigation was carried out with great care, several limitations must be mentioned. The findings may have limited generalizability, and they should be interpreted carefully because the study only included adolescents from the Jalandhar and Amritsar districts of Punjab. Because the data is cross-sectional, it is also possible that the factors have bi-directional impacts. Longitudinal studies will aid in better understanding and interpreting the connections discovered in this study. It is proposed that future research should look for gender variations in the development of body image attitudes. To completely comprehend the intervening function of ER as a proximal or concurrent factor in the link between developmental influences (for instance attachment to parents and peers) and BIE, more research is required.

Conclusion

In conclusion, the current study offers empirical support for the mediational role of ER in the relationship between Attachment to Parents and Peers and BIE. ER as a concurrent factor has been shown to impact the acquisition of body image attitudes. A current study has also investigated that the Attachments adolescents develop with their Parents and Peers play a significant role in the regulation of their emotions. Individuals' healthy development necessitates early training in the development of perception of their Attachment to Parents and Peers. This will further influence how an individual reacts to his or her body. It is crucial to report that from the perspective of mental health and well-being of adolescents, it has been discovered that PRA acts as a mediator between the relationship between Mother Attachment and BIE. Previous research suggests that PRA is a more adaptive ER strategy than AF and EA (Webb et al., 2015). Several Researchers (Cash et al., 2012; Webb et al., 2015) regard PRA as a concurrent factor that can act as a buffer against body image related concerns. Therefore, it is vital to encourage adaptive ER strategies like PRA in order to influence the acquisition of adaptive and healthy BIEs among adolescents.

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