



Influence of Childhood Attachment on Adolescents' Interpersonal Relationship and Self-Esteem among Undergraduate Students of the University of Ghana

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Authors' contributions

This work was carried out in collaboration between all authors. All authors read and approved the final manuscript.

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ABSTRACT

Childhood insecurities may affect a wide range of personality development such as interpersonal relationship and self-esteem during adolescence. The present study explores the effect of childhood attachment on adolescents' interpersonal relationship and self-esteem among undergraduate students of the University of Ghana. The study also examines gender differences in interpersonal relationship and self-esteem. A total of two hundred undergraduate students from the University of Ghana were selected using convenient sampling to complete the Rosenberg Self Esteem Scale, the Perceived Interpersonal Relationship Scale (PIRS) and the Childhood Attachment Inventory (CAI). Data were analyzed using the multivariate analysis of variance (MANOVA). Results reveal that adolescents who have secured childhood attachment have good interpersonal relationship and higher level of self-esteem than adolescents who have unsecured attachment. There was however no gender differences found in adolescents interpersonal relationship and self-esteem. Based on the findings, it is recommended that parents assess how they relate with their children and not to inculcate trepidation in their children since these have the tendency to affect personality development during adulthood.

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1. INTRODUCTION

Adolescence is a period of biological, cognitive and social change of such magnitude and rapidity that it is found to be associated with the onset of a number of psychological problems such as unhealthy peer relationship and lowered self-esteem [1,2,3]. As adolescents grow, the amount of time spent with parents naturally drops while time spent with peer's increases considerably. However, the sort of bond during childhood continues to predict aspects of psychosocial well-being even into adolescents and play a key role in influencing adolescents' development [4,5]. The relationship people form during adolescence and the development of our self-esteem which arguably depends on the attachment bond with parents can both open windows of opportunities and serve as risks of a successful life [2].

Attachment is a deep and enduring affectional bond of substantial intensity that connects one person to another across time and space [6,7]. The attachment bond formed with parents and other caregivers in childhood shapes an infant's brain, profoundly influencing their self-esteem, their expectations of others, and their ability to attract and maintain successful adult relationships [8,9,10]. According to the attachment bond theory [11,12,13], the relationship between infants and primary caretakers is responsible for shaping individuals' future relationships, be conscious of their feelings, calm them as well as their ability to bounce back from misfortune. Early studies on attachment argued that children with secure attachments to caregivers are well-adjusted than those with low attachment [14,15]. The theory implies that caregivers influence a child's development by showing the child how to cope, handle life's problems, and deal with others. Inability to develop these characteristics leads to defective self-image and poor relationship later in life [15].

It is not all interaction patterns between the caregiver and the infant that lead to attachment security overtime. Unsecured attachment style is developed when the caregiver becomes a source of fear to the infant [16]. The structural family theory emphasizes that a family that is excessively disengaged tends to yield feelings of outcast and disparity to its members. Individuals

who experience confusing, frightening, or broken emotional communications during their infancy often grow into adults who have difficulty understanding their own emotions and the feelings of others. This limits their ability to build or maintain successful relationships [2].

Self-esteem is used to describe a person's overall sense of self-worth or personal value. Self-esteem involves a variety of beliefs about the self, such as the appraisal of one's own appearance, beliefs, emotions and behaviors. According to [4], there are three key components of self-esteem: Self-esteem is an essential human need that is vital for survival and normal, healthy development; Self-esteem arises automatically from within based upon a person's beliefs and consciousness; Self-esteem occurs in conjunction with a person's thoughts, behaviors, feelings and actions. These components are influenced by how caregivers interact with the individual during childhood.

Several studies have documented the impact of early childhood attachment on adolescent's self-esteem and interpersonal relationship. These studies have indicated that secured childhood attachment is associated with higher self-esteem [17,18,8] and good interpersonal relationship [19,20,21]. [22] assessed the degree of continuity over time in the quality of parent-child attachments and the relationship between these attachments and current self-esteem. The results indicated that self-esteem was related to both childhood and adolescent working model styles of attachment and to the dimensions of independence-encouraging and acceptance. Perception of secured childhood attachment was found to increase the development of self-esteem. Another study by [20] indicated that the quality of the parent-child relationship affects the adolescent's self-concept, which in turn affects the adolescent's integration into the world of peers, and positive self-concept. Secured attachment contributed unique variance to satisfactory peer relations and higher level of self-esteem in adolescents.

Though, the studies above give evidence of the relationship between childhood attachment and interpersonal relationship, attachment does not generalize across all co-cultures. Other studies have discovered relationships among attachment, and gender, ethnicity, and sexual

orientation [23,24]. Attachment probably also varies across cultures and early research in this area has suggested that such differences may be discerned [25,26]. Other researchers [e.g., 27] have also found a non-significant impact of childhood attachment on the development of adolescents' self-image. [28,29] emphasized that insecure attachment by itself is not an indicator of defective self-image, rather, it might set a route which in combination with other risk factors could lead to the development of unstable and defective self-image.

Aside the conflicting results on the impact of childhood attachment on interpersonal relationship and self-esteem, the impact of childhood attachment have been found to differ on the development of self-esteem and adolescents interpersonal relationship among males and females. [27] observed that early childhood attachment with parents have significant influence on the formation of the self-concept of males but not of females. [30] also found that the attachment with parents and friends during childhood had significant influence on the formation of the self-concept and interpersonal relationship in adolescents but the parental attachment was found to be important for the development of personality among males but not females. [31] on the other hand found that peer attachment partially influence parent attachment to affect the development of personality and life satisfaction only for females.

The influence of childhood attachment has mixed implications on the development of self-esteem and adolescents' interpersonal relationship, and the impact of childhood attachment on personality development of males and females have been inconsistent across cultures. It is based on this that the study sought to find out if childhood attachment has a significant impact on adolescents' interpersonal relationship and self-esteem using Ghanaians with different cultural background to establish if the findings in foreign cultures would be consistent with those of Ghana. The study also examines gender differences in adolescents' interpersonal relationship and self-esteem. Accordingly, the researchers predicted that adolescents with secured attachment are more likely to have better interpersonal relationship than adolescents with unsecured attachment. Again, it was predicted that adolescents who had secured childhood attachment will have higher self-esteem compared to adolescents who had unsecured childhood attachment. Finally, with

regard to gender, the researchers predicted higher levels of interpersonal relationship and self-esteem among male students than among female students.

2. METHODS

2.1 Population

The population for this study was undergraduate students of the University of Ghana, Legon. The University of Ghana is the oldest and largest of the seven Ghanaian public universities. The population has a wide array of individualities from different background and socio-cultural orientations. The different background of the individuals within the population exposes them to experience different kinds of individuals with different parental attachment and upbringing. This has a greater tendency to unleash different levels of dependency and trust that could affect the level of self-esteem and interpersonal relationship of the students.

2.2 Participants

A total of two hundred (200) students were selected from the population using convenient sampling to serve as the study's sample. The convenient sampling technique was used because only participants who were readily available and willing to participate in the study were selected. The two hundred (200) respondents consist of equal number of males (100) and females (100) between the age of 18 and 22 years. The respondents were selected from the four levels of undergraduate studies namely: level 100 ($n=56$), level 200 ($n=60$), level 300 ($n=48$) and level 400 ($n=36$). (See Table 1 for gender composition below).

Table 1. Demographic distribution of respondents

Demographic variables	Male (n = 100)	Female (n = 100)	Total (n = 200)
Academic levels			
Level 100	24	32	56
Level 200	39	21	60
Level 300	15	33	48
Level 400	22	14	36

2.3 Measures

Data on childhood attachment, self-esteem and interpersonal relationships were collected using the Parent Attachment Questionnaire [PAQ; 32],

Rosenberg Self-Esteem Scale [RSES; 33] and the Relationship Scales Questionnaire [RSQ; 34] respectively.

The PAQ assessed adolescent's childhood attachment with parents or significant others. The PAQ assessed perceived parental availability, understanding, acceptance, interest in interaction with parents and affect toward parents, and satisfaction with help obtained from parents during childhood. The modified PAQ contains thirteen (13) items measured on a four point likert scale ranging from 1 (Strongly Disagree), 2 (Disagree), 3 (Agree) and 4 (Strongly Agree). Respondents were requested to select only one of the four alternatives. The PAQ has been found valid and reliable, with a .92 test-retest score over a 2-week interval and internal consistency as .93 for male and .95 for female students [35]. Total scores ranged from 13 to 52 with score of 32 – 52 classified as secured attachment whilst score of 13 – 31 is classified as unsecured attachment. An item on the PAQ is "I felt comfortable relying on my parents and dependent on them".

The Rosenberg Self-esteem Scale (RSES) is a 10 item self-report scale designed to measure self-esteem. This 10-item scale assesses an individual's feelings of self-worth when the individual compares himself or herself to other people. The RSES was designed to represent a continuum of self-worth, with statements that are endorsed by individuals with low self-esteem to statements that are endorsed only by persons with high self-esteem. Response categories are anchored on a four – point response format ranging from strongly agree (4) to strongly disagree (1) for positively worded items and strongly disagree (4) to strongly agree (1) for negatively worded items. A higher score indicates greater self-esteem. Reliability coefficient of .85 was reported by [36] and a test-retest reliability ranging from .82 to .95 [37]. Some items on the questionnaire include: "I feel that I have a number of good qualities," "all in all, I am inclined to feel that I am a failure."

The Relationship Scale Questionnaire (RSQ) contains 30 short statements drawn on [38] attachment measure, [39] Relationship Questionnaire, and [40] Adult Attachment Scale to measure perceived interpersonal relationship with others in adulthood. The RSQ is measured on a four-point response format ranging from strongly agree (4) to strongly disagree (1) with a reliability coefficient of .86 [34]. Some items on

the scale include: "I want to merge completely with another person," "I worry that I will be hurt if I allow myself to become too close to others."

2.4 Procedure

In conducting this study, the researchers sought permission from the head of the Psychology Department of the University of Ghana concerning the ethicality of the study before data collection took place. The participants were made to fill the questionnaire at their lecture halls and also in their halls of residence. The purpose of the study was first explained to the students before administering the questionnaires. Approximately 30 minutes was used by each participant to complete the questionnaire.

2.5 Data Analyses

The data was gathered and quantified for ease of manipulation and analysis using the Statistical Package for Social Science. The differences in self-esteem and interpersonal relationship between adolescents with secured and unsecured childhood attachment were analyzed using the multivariate analysis of variance (see Table 2). The multivariate analysis of variance was again used to compute the significant differences in scores on self-esteem and interpersonal relationship among male and female participants (see Table 3).

3. RESULTS

The study was interested in testing four main hypotheses. These hypotheses are

1. Adolescents with secured attachment are more likely to have better interpersonal relationship than adolescents with unsecured attachment.
2. Adolescents who had secured childhood attachment will have higher self-esteem compared to adolescents who had unsecured childhood attachment.
3. Male students will have higher level of interpersonal relationship than female students.
4. Male students will have higher level of self-esteem than female students.

All the four hypotheses were analyzed using the multivariate analysis of variance. This is because the study was interested in discovering the effect of one independent variable that is childhood attachment or gender on more than one

dependent variable (interpersonal relationships and self-esteem). The dependent variables (interpersonal relationships and self-esteem) were all measured on an interval scale.

The results of the study shown on Table 2 indicate a significant impact of childhood attachment on adolescents' self-esteem ($F_{(1, 198)} = 100.335, p < 0.01$) and interpersonal relationship ($F_{(1, 198)} = 25.209, p < 0.01$). This means that adolescents who perceived secured childhood attachment have higher level of self-esteem ($M=32.55, SD=5.89$) and interpersonal relationship ($M=70.02, SD=17.61$) than the level of self-esteem ($M=21.13, SD=5.57$) and interpersonal relationship ($M=52.87, SD=16.28$) of adolescents who perceived unsecured childhood attachment (See Table 2).

The findings of the study reveal no significant gender difference in self-esteem ($F_{(1, 198)} = .383, p > 0.05$) and interpersonal relationship ($F_{(1, 198)} = .805, p > 0.05$). This means that the level of self-esteem among males ($M=27.00, SD=8.37$) was not significantly different from the level of self-esteem among females ($M=26.00, SD=7.78$). In a similar vein, interpersonal relationship among males ($M=62.72, SD=19.75$) was not significantly different from interpersonal relationship among females ($M=59.34, SD=7.78$) (See Table 3).

4. DISCUSSION AND RECOMMENDATION

The results of the study indicate that secured childhood attachment increases the development of self-esteem and enhances good interpersonal relationship. This confirmed our prediction that

adolescents with secured attachment are more likely to have better interpersonal relationship than adolescents with unsecured attachment. As observed in the study, the respondents' score on the RSES and the RSQ were higher among adolescents who perceived secured childhood attachment indicating higher level of self-esteem and interpersonal relationship than those who perceived unsecured childhood attachment.

The higher level of self-esteem among adolescents who perceived secured childhood attachment compared to those who perceived unsecured childhood attachment corroborates with earlier studies that indicated that secured childhood attachment is associated with higher level of self-esteem [8,17,18]. Similarly, [30] observed that secured relationship with parents and significant others in childhood have significant influence on the formation of the self-concept and interpersonal relationship in adolescents. According to [41], sustaining a sense of confidence and self-worth in individuals begins with a strong secured bond with the adolescent during childhood and continues throughout adolescents.

Childhood relationships with parents and significant others influence a child's development by showing the child how to cope, handle life's problems, and deal with others. Inability to develop these characteristics leads to defective self-image later in life [15]. A study on adopted children shows that positively formed attachments heighten the chance for a well-adjusted life, regardless of the biological relation of the attachment figure [41].

Table 2. Influence of attachment style on self-esteem and interpersonal relationship

Variable	Secured attachment	Unsecured attachment	F	Df	P
	n=94	n=106			
	Mean (SD)	Mean (SD)			
Self-esteem	32.55 (5.89)	21.13 (5.57)	100.335	(1, 198)	0.000
Interpersonal relationship	70.02 (17.61)	52.87 (16.28)	25.209	(1, 198)	0.000

* $P < 0.01$ level (1-tailed test)

Table 3. Gender differences in interpersonal relationship and self-esteem

Variable	Males (n=100)	Females (n=100)	F	Df	P
	Mean (SD)	Mean (SD)			
Self-esteem	27.00 (8.37)	26.00 (7.78)	.383	(1, 198)	.537
Interpersonal relationship	62.72 (19.75)	59.34 (17.87)	.805	(1, 198)	.372

$P > 0.05$

According to the childhood attachment theory, secured attachment relationship enhances a positive, coherent and consistent self-image, a sense of being worthy of love combined with a positive expectation with significant others that will be generally accepting and responsive.

Moreover, the healthy interpersonal relationship among adolescents who perceived secured childhood attachment is in agreement with previous studies [19,20,21,42] which found secured childhood attachment to influence the development of good adolescent's interpersonal relationship. [43] have offered support to this finding by explaining that adolescents' newly acquired ability to consider their prior attachment relationships from the perspective of the caregiver may serve to allow them to later take on this role in their relationships with peers. Children who consider their prior attachment relationship as unsecured loses trust and readily acceptance of peer relationships in adolescence. This disrupts good interpersonal relationships with others.

According to [41], parent's responses during their childhood affect the child's development and subsequent behavior. The relationships between children and their primary caregivers (parents or guardians) result in the formation of expectations regarding attachment figures and how to relate to others later in life. Children therefore develop perceptions of how reliable an attachment figure generally is, and how likely they will be inspired to trust and relate with others. Individuals who experience confusing, frightening, or broken emotional attachment through communications during childhood often grow into adults who have difficulty understanding their own emotions and the feelings of others. This negatively affects their ability to build or maintain successful relationships with others [2,41,44].

[45] explained that as adolescents begin to analyze past relationships, their strategy employed in approaching attachment memories, emotions, and relationships becomes crucially important. Attachment during childhood years becomes one's organization and processing of attachment-related thoughts, feelings, and emotions, rather than a specific categorization of a given relationship. Therefore, adolescents who experienced secured childhood attachment will be guided by their childhood experience to build healthy relationships whilst those who experienced unsecured childhood attachment will out of fear feel reluctant to relate positively with others later in life [45].

Finally, the study found no significant difference in the level of self-esteem and interpersonal relationship among males and females. In other words, the prediction that male students will have higher levels of interpersonal relationship and self-esteem than among female students was not supported by the results of the study. This suggests that among the university students population, males do not differ significantly from females on the level of self-esteem and perceived adolescent interpersonal relationship. This finding is congruent with previous findings that found a non-significant difference between males and females on levels of self-esteem [46,47] and perceived interpersonal relationship [48].

A possible explanation one can proffer with respect to the lack of a significant difference between males and females on scores of self-esteem and perceived interpersonal relationship might be because of the level of education and the diverse nature of the student's population that participants interacted with daily on the university campus. Education helps build individuals level of self-image and competence. Moreover, university atmosphere engages diverse nature of students of both genders who engage in regular intellectual discussions. This has a greater propensity of shaping the self-concept and tolerance of both males and females. The equal interaction of males and females with the diverse nature of the student's body at the university can even balance the deficits of attachment experience in childhood and thereby influence equally the quality of how males and females relate with others. As explained by [49], all things been equal, males and females do not differ in their self-worth unless one of the opposite sexes is influenced by risk factors such as poverty, lower level of education, lack of social support, broken homes, etc.; in situations where both males and females are in similar situations, no sex difference is found in their level of self-esteem.

As with any study, there are a number of shortcomings that limit the interpretability of the present findings. First, the study relied only on self-report data from adolescents. While participants reported their levels of attachment to parents, they do not necessarily enact them. The use of self-report measures has been challenged on the basis of their limited ability to tap into unconscious attachment strategies and their vulnerability to defensive reporting. In addition, the use of self-report measure may be flawed because participants might have different

experiences with privacy issues that could not be reported with this method of collecting data. Secondly, selection of participants was based on convenient non-probability sampling which makes it questionable in extrapolating the findings to the larger population.

Aside the flaws, the study have a lot of implications. The findings of the study imply that insecure attachment predicts later symptoms of both low self-esteem and unhealthy interpersonal relationship. The findings also provide additional evidence that both cognitive and interpersonal factors during childhood contributes to the developmental pathways that influence self-esteem and how adolescents relate with others. Based on the higher level of self-esteem and interpersonal relationship among adolescents who perceived secured childhood attachment compared to those who perceived unsecured childhood attachment, the researchers recommend the need for parents to assess how they relate with their children and not to inculcate fear, trepidation, and anxiety in their children since these have the tendency to affect personality development during adulthood. Again, school authorities, teachers are encouraged to imbibe in pupils prosocial skills such as cooperation in order to help pupils relate well with each other thereby strengthening their interpersonal skills. Teachers should also introduce programmes and activities that enhance pupils' self-esteem to benefit, especially those pupils who had defective parental attachment experience. Finally, future research should continue to examine how childhood attachment may be related to the co-occurrence of low level of self-esteem and unhealthy relationship. The following recommendations may also be offered for further studies:

First, there is the need to use qualitative design to assess the various elements of childhood attachment that have the tendency of developing lack of security among children to help tap into unconscious attachment strategies and their vulnerability to defensive reporting. Second, there is also the need to employ participants with diverse level of educational background that will allow a researcher to clearly identify whether educational background influence the development of self-esteem and formation of healthy interpersonal relationships. This could be achieved by the inclusion of students from junior high school, senior high school and tertiary institutions in a single study. Future researchers can also make comparisons between parents' view and their children's view on attachment

styles to provide double self-report from parents and children and compare the two contents as means of discovering the degree of consistency between the two views. Lastly, future researchers should consider the possibility of assessing which parenting style have the possibility of inducing secured and unsecured attachment during childhood.

5. CONCLUSION

The findings of this study have established that secured childhood attachment breeds higher level of self-esteem and healthy interpersonal relationship than unsecured childhood attachment. No sex difference was observed on level of self-esteem and interpersonal relationship. The findings imply that the sorts of attachment we experience during childhood have a significant impact on our self-image and how we grow up to associate with others. The lack of gender differences in both self-esteem and interpersonal relationship suggests that males and females might be influenced by childhood attachment in the same direction or the difference between them is negligible. Again, interacting with diverse nature of people might help in shaping the extent to which both males and females learn to live with others as a means of preventing social disapproval.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Brennan KA, Shaver PR. Dimensions of adult attachment, affect regulation, and romantic relationship functioning. *Personality and Social Psychology Bulletin*. 1995;21:267-283.
2. Jain RB, Kumar A, Khanna P. Assessment of self-awareness among rural adolescents: A cross-sectional study. *Indian Journal Endocrinol Metab*. 2013;17:367-372.
3. Jeffcoate JA, Humphrey ME, Lloyd JK. Infancy: impact on maternal attachment, child abuse and neglect, and health. *Developmental Medicine and Child Neurology*. 2009;30:32-35.
4. Laible DJ, Carlo G, Roesch SC. Pathways to self-esteem in late adolescence: The role of parent and peer attachment, empathy, and social behaviors. *Journal of Adolescence*. 2004;27:703-716.

5. Moretti MM, Peled M. Adolescent-parent attachment: Bonds that support healthy development. *Paediatr Child Health*, 2004;9(8):551–555.
6. Ainsworth MDS. The development of infant-mother attachment. In: Cardwell B, Ricciuti, H, editors. *Review of child development research*. Chicago: University of Chicago Press; 1973.
7. Paterson J, Pryor, J, Field J. Adolescent attachment to parents and friends in relation to aspects of self-esteem. *Journal of Youth and Adolescence*. 1995;24(3):365-376.
8. Kenny ME, Sirin SR. Parental attachment, self-worth, and depressive symptoms among emerging adults. *Journal of Counseling & Development*. 2006;84:61–71.
9. Mikulincer M, Shaver PR, Sapir-Lavid Y, Avihou-Kanza N. What's inside the minds of securely and insecurely attached people? The secure-base script and its associations with attachment-style dimensions. *Journal of Personality and Social Psychology*. 2009;97:615–633.
10. Wilkinson RB. The role of parental and peer attachment in the psychological health and self-esteem of adolescents. *Journal of Youth and Adolescence*. 2004;33:479-493.
11. Ainsworth MDS. Attachment theory and its utility in cross-cultural research. In: Leiderman PH, Tulkin, SE, Rosenfeld, A, editors. *Culture and infancy*. New York: Academic Press; 1977.
12. Ainsworth MDS, Marvin RS. On the shaping of attachment theory and research. In: Waters, E, Vaughn BE, Posada G, Kondo-Ikemura K, editors. *Caregiving, cultural, and cognitive perspectives on secure-base behavior and working models*. Monographs of the Society in Child Development; 1995.
13. Bowlby J. *Attachment. Attachment and Loss*: New York: Basic Books. 1969;1.
14. Bowlby J. *Attachment. Attachment and Loss*: New York: Basic Books. 1973;2.
15. Bowlby J. *Attachment. Attachment and Loss*: New York: Basic Books. 1980;3.
16. McCarley KE, Harter S. The current controversy over self-esteem. Paper presented at the meeting of the Society for Research on Adolescence, Baltimore; 2004.
17. Blissett J, Walsh J, Harris G, Jones C, Leung N, Meyer, C. Different core beliefs predict paternal and maternal attachment representations in young women. *Clinical Psychology and Psychotherapy*. 2006;13:163-171.
18. Fass ME, Tubman JG. The influence of parental and peer attachment on college students' academic achievement. *Psychology in the Schools*. 2002;39(5):561-573.
19. Bippus A, Rollin E. Attachment style differences in relational maintenance and conflict behaviors: friends' perceptions. *Communication Reports*. 2003;16(2):113-123.
20. Dekovic M, Meeus W. Peer relations in adolescence: Effects of parenting and adolescent's self-concept. *Journal of Adolescence*. 1997;20:163–176.
21. Kenny ME, Donaldson GA. Contributions of parental attachment and family structure to the social and psychological functioning of first-year college students. *Journal of Counseling Psychology*. 1991;38:479–486.
22. McCormick CB, Kennedy JH. Parent-child attachment working models and self-esteem in adolescence. *Journal of Youth and Adolescence*. 1994;23:1–18.
23. Arbona C, Power TG. Parental attachment, self-esteem, and antisocial behaviors among African American, European American, and Mexican American adolescents. *Journal of Counseling Psychology*. 2003;50:40-51.
24. Mohr JJ, Fassinger RE. Self-acceptance and self-disclosure of sexual orientation in lesbian, gay, and bisexual adults: An attachment perspective. *Journal of Counseling Psychology*. 2003;50:482-495.
25. Huiberts A, Oosterwegel A, Vandervalk IE, Vollebergh W, Meeus WHJ. Connectedness with parents and behavioural autonomy among Dutch and Moroccan adolescents. *Ethnic & Racial Studies*. 2006;29:315-330.
26. Wang CD, Mallinckrodt BS. Differences between Taiwanese and U.S. cultural beliefs about ideal adult attachment. *Journal of Counseling Psychology*. 2006;53:192-204.
27. Diggs RC, Socha T. Communication, families, and exploring the boundaries of cultural diversity. In A. L. Vangelisti (Ed.), *Handbook of Family Communication* (pp. 249-266). Mahwah, NJ: Lawrence Erlbaum; 2004.
28. Greenberg M. Attachment and psychopathology in childhood. In J.

- Cassidy & P. Shaver (Eds.), Handbook of attachment. New York: Guilford Press; 1999.
29. Lyons-Ruth K. Attachment relationships among children with aggressive behavior problems: The role of disorganized early attachment patterns. *Journal of Consulting and Clinical Psychology*. 1996;64:64–73.
 30. Shomaker LB, Furman W. Parent-adolescent relationship qualities, internal working models, and styles as predictors of adolescents' observed interactions with friends. *Journal of Social and Personal Relationships*. 2009;26:579-603.
 31. Ma CQ, Huebner ES. Attachment relationships and adolescents' life satisfaction: Some relationships matter more to girls than boys. *Psychology in the Schools*. 2008;45:177–190.
 32. Kenny M. College seniors' perceptions of parental attachments: The value and stability of family ties. *Journal of College Student Development*. 1990;31:39-46.
 33. Rosenberg M. *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press;1965.
 34. Griffin D, Bartholomew K. Metaphysics of measurement: The case of adult attachment. In K. Bartholomew & D. Perlman (Eds.), *Advances in personal relationships: Attachment processes in adulthood*. London: Jessica Kingsley. 1994;5:17-52.
 35. Kenny M. Quality and correlates of parental attachment among late adolescents. *Journal of Counseling and Development*. 1994;72(4):339.
 36. Rosenberg M. Self-concept and psychological well-being in adolescence. In R.L. Leaky (Ed.). *The development of the self*. New York: Academic Press; 1985.
 37. Sinclair SJ, Blais MA, Gansler DA, Sandberg E, Bistis K, LoCicero A. Psychometric properties of the Rosenberg Self-Esteem Scale: overall and across demographic groups living within the United States. *Eval Health Prof*. 2010;33(1):56-80.
 38. Hazan C, Shaver P. Romantic love conceptualised as an attachment process. *Journal of Personality and Social Psychology*. 1987;52:511-523.
 39. Bartholomew K, Horowitz LM. Attachment styles among young adults: A test of a four-category model. *Journal of Personality and Social Psychology*. 1991;61:226-244.
 40. Collins NL, Read SJ. Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology*. 1990;58(4):644-663.
 41. Hesse E. Disorganized infant, child and adult attachment: Collapse in behavioral and attentional strategies. *Journal of the American Psychoanalytic Association*. 2000;48(4):1097-1127.
 42. Hepper EG, Carnelley KB. Attachment and romantic relationships: The role of models of self and other. In M. Paludi (Ed.), *the psychology of love*. Santa Barbara, CA: Praeger; 2012.
 43. Allen JP, Land D. Attachment in adolescence. In J Cassidy, PR Shaver (Eds.), *Handbook of attachment theory and research*, New York: Guilford; 1999.
 44. Follan M, Minnis H. Forty Four Juvenile Thieves revisited: from Bowlby to Reactive Attachment Disorder (RAD). *Child Care, Health and Development*. 2010;36:73-9.
 45. Cassidy J, Kirsch S, Scolton, K, Parke RD. Attachment and representations of peer relationships. *Developmental Psychology*. 1996;32:892–904.
 46. Erol RY, Orth U. Self-esteem development from age 14 to 30 years: A Longitudinal Study. *Journal of Personality and Social Psychology*. 2011;101(3):607–619.
 47. Kling KC, Hyde JS, Shower CJ, Buswell BN. Gender differences in self-esteem: A meta-analysis. *Psychological Bulletin*. 1999;125:470-500.
 48. Kenny R, Dooley BA, Fitzgerald A. Interpersonal relationships and emotional distress in adolescence. *Journal of Adolescence*. 2004;36(2):351-360.
 49. Galliano G. *Gender: Crossing boundaries*. Belmont, CA: Wadsworth/Thomson; 2003.

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