

### The Journal of Psychology



Date: 03 June 2016, At: 04:48

Interdisciplinary and Applied

ISSN: 0022-3980 (Print) 1940-1019 (Online) Journal homepage: http://www.tandfonline.com/loi/vjrl20

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**To cite this article:** Ercan Kocayörük & Ömer Faruk Şimşek (2016) Parental Attachment and Adolescents' Perception of School Alienation: The Mediation Role of Self-Esteem and Adjustment, The Journal of Psychology, 150:4, 405-421, DOI: 10.1080/00223980.2015.1060185

To link to this article: <a href="http://dx.doi.org/10.1080/00223980.2015.1060185">http://dx.doi.org/10.1080/00223980.2015.1060185</a>

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## Parental Attachment and Adolescents' Perception of School Alienation: The Mediation Role of Self-Esteem and Adjustment

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#### **ABSTRACT**

The present study examined the relationship between adolescents' attachment to parents and their feelings of alienation in the school context by considering the mediating role of adjustment and selfesteem. It was proposed that the degree of attachment to one's parents was associated with adjustment and self-esteem, which in turn predicted possible school alienation. A total of 227 students completed self-report measures on parental attachment, adjustment, self-esteem, and alienation from school. Results were consistent with the attachment theory and related literature that posits that (a) secure attachment to parents was associated with adjustment and selfesteem, (b) secure attachment to parents was negatively associated with feelings of school alienation, and (c) adjustment and self-esteem were a crucial mediators between attachment to parents and school alienation. In addition to enhanced adjustment, the self-esteem of adolescents may be an additional factor in reducing alienation at school. The results also supported the mediator role of self-esteem in the relationship between attachment to parents and adjustment. Finally, the relationship between self-esteem and school alienation were shown to be fully mediated by adjustment. The results were discussed in the context of responsibilities of teachers and school counselors, which may provide both students and parents with the skills to improve social functioning in the school context.

#### ARTICLE HISTORY

Received 1 March 2014 Accepted 4 June 2015

#### **KEYWORDS**

adjustment; parental attachment; school alienation; self-esteem

#### Introduction

Attachment is a universal human need that leads to the formation of close bonds of affection according to Bowlby (1969). Infants become attached to familiar people who respond to their needs for physical care and stimulation. Traditionally, the most important function of attachment is to provide security for offspring and attachment theory underlines the importance of the quality of the affectional bond established between a child and caregivers in different contexts. Much of the existing literature concerning attachment focuses on the positive relationship between parents and adolescents as an important dimension in enhancing academic development, preventing achievement-related and educational problems, and facilitating healthy adolescent development. One of the crucial issues related to the

formation of a positive relationship between parents and children is assisting children to become more successful at school by increasing their participation in the social context of the school (Aviezer, Sagi, Resnick, & Gini, 2002). Indeed, Belsky and Fearon (2002) suggested that children who have been the beneficiaries of positive parental or caregiver relationships in early childhood experience greater success in school than classmates who experience detached or disengaged relationships. A number of studies have also suggested that an adolescent's sense of school connectedness might stem from a healthy reciprocal relationship in the family context during the socialization process (Barber & Olsen, 1997; Shochet, Smyth, & Homel, 2007).

In addition, perceived parental supportiveness is known to be related to school-oriented interests, academic achievement, and the general school adaptation of children (Toth & Cicchetti, 1996; Wentzel, 1998). A lower level of violent activity and a higher level of academic motivation have also been associated with parental control (Frey, Ruchkin, Martin, & Schwab-Stone, 2009). Therefore, mutually positive relationships between parents and children have important consequences for how children approach and engage in the school environment.

Thus, considering the potential effects of attachment on healthy development in academic and school life, secure parental attachment may encourage students to connect and engage at school, whereas insecure parental attachment may predispose adolescents to difficulties in engaging effectively with their school. Little empirical evidence has been reported, however, on the relationship between attachment to parents and school functioning. Consequently, the main goal of this study is to examine the association between parental attachment and school alienation and analyze the mediatory variables in this relationship in a group of middle adolescents. Specifically, this study seeks to clarify the relation between attachment to mother and father and school alienation and uses structural equation modeling to test the mediation roles of self-esteem and psychological adjustment in this relationship.

#### **Attachment and School Alienation**

Several definitions of alienation have been proposed in the literature. The concept of alienation usually refers to a lack of sense of belonging coupled with estrangement or detachment from family, friends, and school (Bronfenbrenner, 1986). As a research subject, alienation is a more complicated phenomenon, as it has been conceptualized from different perspectives and takes on several meanings such as loss of self, apathy, anomie, loneliness, despair, isolation, and pessimism.

One of the most important theoretical models was developed by Seeman (1959) in which alienation was a discrepancy between personal expectation and reward in the context of social interaction, including six researchable dimensions: social isolation, cultural alienation, self-isolation, powerlessness, meaninglessness, and normlessness. Similarly, Mau (1992) studied the validity of the multidimensional concept of alienation considering four dimensions, namely, social estrangement, powerlessness, meaninglessness, and normlessness. "Social estrangement," combining Seeman's self-estrangement and isolation, refers to a student's feeling of isolation, which could be due to physical or emotional withdrawal. Feelings of lack of control over their lives is considered "powerlessness." "Meaninglessness" is a feeling of irrelevance toward what is happening to them at the time. "Normlessness" refers to a student's rejection of society's rules and norms. According to Mau, alienation is

demonstrated in behaviors such as aggression, violence, and self-isolation. Furthermore, Mau points out that alienation is also associated with negative school outcomes such as truancy, failure, absenteeism, and dropping out.

The results of recent studies have provided consistent evidence that school alienation is due to children lacking a feeling of subjective relevance and bonding with school (Hascher & Haganauer, 2010) and the influence of parenting (Studsrød & Bru, 2009). Taking the relationship between parent and adolescent development into consideration and rooted within the framework of attachment theory, a large number of recent studies have focused on the connection between parental attachment and adolescent behaviors in school. For instance, Aviezer et al. (2002) examined the predictive association of infant attachment to mothers and fathers with adolescents' later school functioning. The results of this longitudinal study stated that infant attachment to the mother, but not the father, contributes significantly to the prediction of a child's scholastic skills and emotional maturity. In another one year longitudinal study, Elmore and Huebner (2010) examined the relationship of demographics, parent and peer attachment to school satisfaction and engagement behavior. The findings of this study showed that although school satisfaction seemed to be an independent predictor of school engagement behaviors, school satisfaction was related positively to parent and peer attachment. The authors suggested that a secure attachment between parents and adolescents might provide a psychological source that children took with them into a new setting or environment, such as school.

A correlational study by Shochet, Homel, Cockshawa, and Montgomery (2008) examined whether school connectedness mediated and moderated the effect of parental attachment on adolescent depressive symptoms with a sample of 153 secondary school students ranging from eighth to twelfth grades. The findings reveal that parental attachment was indeed associated with school connection and depression symptoms; parental attachment and school connectedness accounted for 28% and 49% of variance in depressive symptoms, respectively, but together accounted for 53% of the variance. The study concluded that school connectedness partially mediated the relationship between parental attachment and depressive symptoms.

Given the relationship between attachment to parents and school context, a secure attachment in adolescence might be a crucial dimension in reducing feelings of alienation in school. Studies indicate that securely attached children have a high level of readiness for school (e.g., Belsky & Fearon, 2002). Attachment to parents might have a positive impact on a child's perception of the school environment, which in turn impacts school outcomes such as psycho-social development (social, emotional, and behavioral) and academic performance (Jacobsen & Hofmann, 1997; Kennedy & Kennedy, 2004).

#### **Attachment and Adolescent Well-Being**

Parental attachment has been considered a crucial phenomenon in relations between adolescents and parents and has been found to have a direct and positive influence on the wellbeing outcomes of adolescents such as adjustment and self-esteem (e.g., La Guardia, Ryan, Couchman, & Deci, 2000; Patrick, Knee, Canevello, & Lonsbary, 2007). Furthermore, many studies have concluded that attachment is associated with aspects of social competence including social desirability (Rice, Cole, & Lapsley, 1990), social support seeking (Blain, Thompson, & Whiffen, 1993; Cutrona, Cole, Colangelo, Assouline, & Russell, 1994), social adjustment and social self-efficacy (Rice, Cunningham, & Young, 1997), social skills, academic achievement and overall psychological adjustment (Rice, 1990), and psychological adjustment during adolescence (Noom, Decovic, & Meeus, 1999). A relationship between parents and adolescents characterized by warmth, contingent responsiveness, and sensitivity, which promotes the child's ability to achieve effective communication, trust, and emotional regulation, has been associated with secure attachment.

The results of many studies reveal that adjustment has an enormous effect on school-related outcomes, such as school adjustment (Birch & Ladd, 1997), externalizing and internalizing problems both at home and school (Wood, Repetti, & Roesch, 2004), and academic achievement (Wentzel, 1991). Thus, in the present study, given that attachment to parents has an influence on the adjustment level of adolescents, the adjustment level of students was examined as a mediator variable between parental attachment and feelings of alienation in school. For the purpose of this study, emotional adjustment and behavioral adjustment were used to measure the adolescents' global adjustment. Emotional adjustment was determined by using emotional distress and positive self-image, which were deemed convenient indicators for the non-clinical population. As empirical findings show that antisocial behaviors were a crucial predictor of maladjustment in adulthood (e.g., Kokko & Pulkkinen, 2000), this study used anger control problems and antisocial behaviors as a measure of behavioral adjustment.

Self-esteem is an important self-appraisal component of the self (e.g., "How I feel about how I see myself") and is affected by the environmental context (e.g., family and school). A high level of self-esteem has been consistently linked to a low level of adolescent externalizing problem behaviors such as aggression, antisocial behavior, and delinquency in both cross-sectional and longitudinal studies (Donnellan, Trzesniewski, Robins, Mofitt, & Caspi, 2005; Trzesniewski et al., 2006). Empirical findings demonstrate that higher self-esteem and positive appraisal of adolescents own cognitive skills enhance establishing and maintaining friendships (Toth & Cicchetti, 1996). Moreover, Armsden and Greenberg (1987) indicate that attachment to parents relates positively to self-esteem and life satisfaction and negatively to anxiety, depression, and feelings of alienation. Similarly, support has been found for the claim that parental attachment plays a crucial role in adolescent construction and evaluation of self-esteem, which, in turn, influences adolescents' psychological health (Wilkinson, 2004). In another salient study, Doyle and Markiewicz (2005) carried out a longitudinal investigation of parental attachment and its effects on adolescent adjustment among 13-year old adolescents over a two-year period. The results revealed that secure attachment to parents was associated with adjustment in regard to internalizing problems, self-esteem, and self-reported school achievement.

The study presented herein seeks to clarify the roles of attachment to the mother and the father in school alienation of high school students through self-esteem and adjustment. Thus, this study tested the following hypotheses:

*Hypothesis 1*: Attachment to the mother is related to school alienation.

Hypothesis 2: Attachment to the father is related to school alienation.

*Hypothesis 3*: Self-esteem and adjustment mediate the relationship between attachment to the mother and school alienation.

Hypothesis 4: Self-esteem and adjustment mediate the relationship between attachment to the father and school alienation.

Hypothesis 5: Self-esteem mediates the relationship between attachment to the mother and adjustment.

Hypothesis 6: Self-esteem mediates the relationship between attachment to the father and adjustment.

Hypothesis 7: Adjustment mediates the relationship between self-esteem and school alienation.

The direct and indirect nature of these relationships were explored in a structural equation model (Figure 1).

#### Method

#### **Participants and Procedure**

The participants consisted of a samples of adolescents attending a public high school in Canakkale, Turkey. In order to get permission from the authorities, a letter (e.g., including information about the research, contact person, scope of the research) was provided to the school principal. After obtaining permission from the school principal, the students were asked to participate in the study. Although an informed consent was obtained from the parents by the school principal, the voluntary nature of participation and freedom to withdraw from the study at any time was clearly stated prior to the distribution of the scales. Two hundred and twenty-seven students, all from intact families, agreed to participate. All participants were assured of confidentiality. The results were analyzed for the 227 volunteer participants (137 males and 90 females) aged 14 to 18 (M = 16.06, SD = 1.02). The scales were administered anonymously and collectively during class hours.

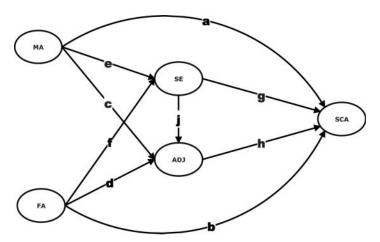


Figure 1. Proposed model of relationships among father attachment (FA), mother attachment (MA), selfesteem (SE), adjustment (ADJ), and school alienation (SCA).



#### **Research Instruments**

Inventory of Parent and Peer Attachment (IPPA; Armsden & Greenberg, 1987). IPPA is derived from the theoretical assumption of attachment theory and assesses separately the positive and negative dimensions of adolescent relations with the mother, the father and close friends. The items in the original version of IPPA, utilized in a sample of high school students aged between 16 and 20, demonstrated good internal consistency and through principal component analysis were clustered into three factors, namely, "Communication ( $\alpha = .91$ )," "Trust ( $\alpha$ =.91)," and "Alienation ( $\alpha$  =.86)" (Armsden & Greenberg, 1987). The overall attachment score is obtained by reverse coding the alienation subscale and then adding the scales together. Only relationships with the mother and the father were assessed in this study.

The Turkish version of IPPA, here termed IPPA-T, includes three scales (father, mother, peers) and was adapted by Kocayörük (2010) from Armsden and Greenberg's (1987) original scale. Each scale consists of 25 items of the 5-point Likert-type and two bilingual Turkish scholars independently translated each item into Turkish using the back-translation procedure. Discrepancies emerging from this back-translation were discussed and adjustments to the Turkish version of IPPA were made. The results show that a high level of internal consistency was obtained for the total mother attachment score of IPPA-T ( $\alpha = .91$ ) but not the new three-factor structure (18 items;  $\alpha$  =.92 for Communication,  $\alpha$  =.63 for Trust, and  $\alpha$  =.61 for Alienation). Similarly, a high level of internal consistency was found for the total father attachment score of IPPA-T ( $\alpha$  =.91) but not the new three-factor structure (18 items;  $\alpha$ =.93,  $\alpha$  =.69, and  $\alpha$  =.66, respectively). In this study, the total score of mother attachment and total score of father attachment were measured separately in order to assess the adolescent's relationship with both mother and father. In addition, IPPA-T responses were coded on a 5-point scale ranging from "almost never or never true" to "almost always or always true."

Student Alienation Scale (SAS; Mau, 1992). The SAS was developed by Mau and is a 24-item self-report scale (e.g., "I feel that I am wasting my time in school") designed to assess adolescent feelings of alienation in the school context with the following subscales: powerlessness, meaninglessness, normlessness, and social estrangement. Items of SAS are answered on a five-point scale from "strongly agree" to "strongly disagree." The measure has been used in many studies including one with children (N = 2,056) from three intermediate grades (7–9) and three high school grades (10-12). The SAS was adapted for the Turkish context by Sanberk (2003) with 17 items. After validity and reliability studies, Sanberk reported that the short form of SAS with four subscales (meaningfulness, powerlessness, normlessness, social estrangement) had adequate reliability for both total score ( $\alpha = .79$ ) and subscales ( $\alpha = .72$ ,  $\alpha = .45$ ,  $\alpha = .73$ ,  $\alpha = .77$ , respectively). The test re-test correlation was reported as 77 and reliability coefficients ( $\alpha$ ) for the scale were.78 and.51,.74,.76, and.68, respectively, for the subscales. In the present study, Cronbach alpha internal consistency was found to be.71 for the total scale and .56 for meaninglessness, 67 for powerlessness, 64 for normlessness, and 69 for social estrangement.

#### **Well-Being Measures**

In order to provide a convenient estimate of adolescents' global well-being, adjustment, and self-esteem were evaluated since these two measures have been used in several past studies to assess well-being (e.g., Chirkov, Ryan, Kim, & Kaplan, 2003; Patrick et al., 2007).

Rosenberg Self-Esteem Scale (RSS; Rosenberg, 1965). RSS is a 10-item self-report scale (e.g., "In general, I am happy with myself") developed by Rosenberg to measure adolescents' global feelings of self-worth and self-regard. RSS items are answered on a 5-point scale from "strongly agree" to "strongly disagree." Five of the items are phrased positively and five are phrased negatively. The RSS was adapted for Turkey by Çuhadaroğlu (1986) using psychometric interviews as criteria for the RSS with ninth, tenth, and eleventh grade students. Results revealed a correlation coefficient between interview scores and scores for the selfesteem scale of.71.

An additional reliability study was conducted by Celik (2004) where RSS was applied to 733 university students. Results showed a reliability coefficient for RSS of.87. In the present study, the Cronbach Alpha coefficient for RSS ( $\alpha$ ) was found to be 84 which was adequate for the requirements.

Reynolds Adolescent Adjustment Screening Inventory (RAASI; Reynolds, 2001). The RAASI was developed by Reynolds and is a 32-item self-report questionnaire (e.g., "If someone told me to do something, I did the opposite") constructed as a brief screening measure to evaluate adolescents' overall psychological adjustment over the previous six months, including antisocial behaviors, anger control problems, emotional distress, and positive self. Although the original inventory has a 3-option scale [(1) never or almost never, (2) sometimes, (3) nearly all the time)], a 5-point scale [(1) never or almost never, (2) seldom, (3) sometimes, (4) usually, (5) nearly all the time] was used in this study so that results would be more compatible with other measures. The positive self dimension is coded reversely. Achieving a high score on RAASI reveals high negative indicators in the adjustment level of adolescents. RAASI was adopted for Turkey by Meric (2007). Factor analysis resulted in the Turkish version of RAASI consisting of four dimensions as in the original, namely, antisocial behavior, anger control problems, emotional distress, and positive self. The reliability of the total score for RAASI was reported as.92 and the subscales were.84,.84,.88, and.71, respectively. In the present study, the internal consistency of RAASI was found to be.91 for the total score and.64 for positive self,.69 for antisocial behavior,.71 for anger control problems, and.83 for emotional distress.

#### Data Analysis

To test the proposed model (Figure 1), structural equation modeling with latent variables was performed using LISREL 8.54 (Jöreskog & Sörbom, 2001). Anderson and Gerbing (1988) suggested that Confirmatory Factor Analysis be carried out to examine whether the measurement model produces an acceptable fit to the data before the structural model is tested. Therefore, a measurement model which posits the relationship between latent variables and their indicators was then tested, followed by the finalizing of the structural model (Anderson & Gerbing, 1988).

To evaluate the goodness-of-fit of the models, the following were selected: standardized root mean square residual (S-RMR) < .08, root mean square error of approximation (RMSEA) <.06, goodness-of-fit index (GFI) >.90, adjusted goodness-of-fit index (AGFI) >.85, and comparative fit index (CFI) >.95 (Hu & Bentler, 1999).

Table 1. Description of	of gender and la	atent variables (	N = 227).
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Variables	Boys (N = 137) M (SD)	Girls (N = 90) M (SD)	Gender difference <i>F</i> ( <i>p</i> value)
Mother Attachment	4.28 (.62)	4.08 (.53)	5.833 (p =.017)
Father Attachment	3.86 (.76)	3.80 (.71)	0.323 (p = .571)
Adjustment	2.15 (.60)	1.99 (.51)	4.078 (p = .045)
Self-esteem	4.09 (.63)	4.10 (.55)	0.014 (p = .906)
School Alienation	2.83 (.65)	2.82 (.65)	0.012 (p = .915)

*Note.* Wilk's Lambda = .888; F(5, 221) = 5.561. p < .001.

#### Results

#### **Descriptive Analysis**

Gender is deemed an important dimension for psycho-social development and school outcomes during adolescence. In order to understand the relation between gender and the latent variables (i.e., mother attachment, father attachment, adjustment, self-esteem, and school alienation), a multivariate analysis of variance (MANOVA) was performed. Means and standard deviations for the variables are presented in Table 1. The results showed there was no significant difference between boys and girls in regard to the variables, except for mother attachment and adjustment. In fact, the boys presented a higher level of mother attachment and adjustment than the girls (Table 1).

#### **Measurement Model**

A measurement model was formulated including latent constructs for mother attachment (MA), father attachment (FA), adjustment (ADJ), self-esteem (SE), and school alienation (SCA). With the exception of self-esteem, which has a one-dimensional measurement model, latent constructs in this model were created by the subscales of instruments as a means of constructing multiple indicators to ensure reliability of the latent variables (Kishton & Widaman, 1994; MacCallum & Austin, 2000). Thus, three subscales of IPPA-T (Communication, Trust, Alienation) were created for MA and FA by computing the mean of the subscales for IPPA-T as indicators of the latent variables. Four observed variables were also created for ADJ by computing the means of the RAASI subscales (Antisocial Behavior, Anger Control Problems, Emotional Distress, Positive Self). Similarly, four observed variables for SCA were created by computing the means of the SCA subscales (Meaninglessness, Powerlessness, Normlessness, and Social Estrangement). With respect to SE (Self-esteem), an item parceling technique was used. The aim of using an item parceling technique was to form multiple groups of items selected at random and then use their sum scores as indicators of the latent constructs. Therefore, two parcels for SE were constructed by calculating the mean of five items for each parcel because of its one dimensional model. Constructing these parcels involved randomly selecting items from both positive and negative dimensions.

The final measurement model had 16 observed and 5 latent variables. The means, standard deviations and zero-order correlations for the observed variables are presented in Table 2. According to Bachman (2004, p. 74), values of skewness and kurtosis between + 2 and - 2 indicate reasonably normal distribution. It was found that all skewness and kurtosis values were less than 2 (ranging from 0.024 to 0.940 for skewness and 0.012 to 1.81 for

Table 2. Mean standard deviation and correlations between observed variables.

Variables	M	SD	-	2	3	4	5	9	7	8	6	10	11	12	13	14	15
Mother Attachment 1 Communication	4.20	.62	۱ ۱														
2 Irust 3 Alienation	4.10	.63 .63	.79	   89:	I												
Father Attachment 4 Communication	3.91	.73	.52	14.	.43	I											
5 Trust	3.84	77.	.47	4.	.47	.82	I										
6 Alienation Adiustment	3.75	.84	.57	.45	<del>4</del> .	98.	.78	I									
7 Antisocial Behavior	2.07	9.	49	47	49	44	44	45	I								
8 Anger Control Prob.	1.91	.57	58	53	54	48	45	52	.79	I							
9 Emotional Distress	2.07	.65	57	51	51	47	43	52	.80	.8	I						
10 Positive self	2.27	99.	53	44	45	48	44	53	9/.	9/.	.79	I					
Self-esteem																	
11 SE1 (Parcel 1)	4.21	.64	.4	.42	.35	.36	36	36	43	50	53	47	I				
12 SE2 (Parcel 2)	3.98	.61	.40	.38	.27	.31	.31	.35	36	44	47	44	.79	I			
School Alienation																	
13 Powerlessness	2.57	.79	13	21	15	19	15	18	.24	30	.23	.31	19	18			
14 Normlessness	2.55	.87	23	28	21	24	20	22	.29	.41	.31	.37	21	19	.74		
15 Social Estrangement	3.75	.82	27	28	26	34	32	36	38	<del>4</del> .	39	.43	27	27	.63	69:	1
16 Meaninglessness	2.75	.98	13	15	15	23	23	27	.20	.27	.19	.23	12	13	<del>4</del> .	.37	.43

parcels are from Rosenberg Self-Esteem Scale (RSS). Higher scores on RSS indicate higher levels of global self-esteem. Meaninglessness, Powerlessness, Normlessness and Social Estrangement observed variables are from the sub-scales of the Student Alienation Scale (SAS). Higher scores on SAS indicate higher levels of feeling of alienation in the school context. Absolute values of cor-Adjustment Screening Inventory (RAASI; 2001). Higher scores on RAASI indicate a higher negative adjustment level of adolescents. SEI (items: 1, 3 °, 5 °, 7, 9 °) and SE2 (items: 2, 4, 6, 8 °, 10 °) Notes. N = 227. Communication, Trust, and Alienation are observed variables from the Inventory of Parent and Peer Attachment (IPPA). Higher scores on these factors indicate higher levels of attachment to both father and mother. Antisocial Behavior, Anger Control Problems, Emotional Distress, and Positive Self are observed variables from the sub-scales of Reynolds Adolescent relation greater than or equal to 15 were significant at p<.05, to 17 at p<.01, and to 21 at p<.001. kurtosis), indicating that data obtained in the present study complied with the normality assumption.

The measurement model was evaluated using the maximum likelihood method, which produced a relatively good fit to the data  $\chi^2$  (80, N = 227) = 154.68, p < .001, CFI = .97, RMSEA = .064, (90% CI:.049;.079), SRMR = .024, AGFI = .087, GFI = .92]. Factor loadings of the indicators on the latent variables were all statistically significant. Thus, all latent variables were shown to have been adequately operationalized by their observed indicators.

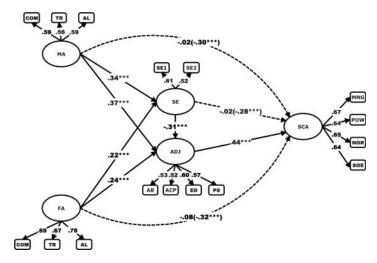
The results also revealed that correlations among the independent (MA and FA), mediator (ADJ and SE), and dependent latent variables (SCA) were all significant and range between -.28 and -.66 (p < .001). These results supported Hypothesis 1 and Hypothesis 2. In sum, a reliable measurement model was obtained for the constructs in the present study and the findings of the measurement model provide an acceptable fit to the data in order to test the structural model.

#### Structural Model

The structural model produced exactly the same results as those produced by the measurement model, given that it has the same number of parameters. Results indicated a more parsimonious model because the inclusion of indirect effects resulted in three nonsignificant paths (Figure 1), namely paths from MA and FA to SCA (paths a and b) and the path from SE to SCA (path g).  $\chi^2$  difference tests were used to decide whether constraining these three paths (paths a, b, g) to zero would affect the fit of the model to the data. The  $\chi^2$  difference test statistics for the direct paths MA to SCA (0.14, 1: p > .05; modification 1), FA to SCA (0.18, 1: p > .05: modification 2), and SE to SCA (0.26, 1: p > .05: modification 3) were computed. It was evident from the results that none of these three paths should be retained in the structural model as constraining them to zero did not affect the fit of the model statistically. The three direct paths, from MA and FA to SCA, and SE to SCA, did not significantly contribute to the fit of the model. These results supported Hypotheses 3, 4, and 7, consequently.

The model also examined the importance of paths from MA and FA to ADJ with the mediator role of SE (path j). When both direct and indirect paths were included in the model, the relation of MA to ADJ was reduced from -.66 to -.37 and remained significant (p < .01), which supports Hypothesis 5. The relation of FA to ADJ, on the other hand, was reduced from -.58 to -.24 and also remained significant (p < .01), thereby indicating a partial mediation situation. This result supported Hypothesis 6. The final model with standardized coefficients is presented in Figure 2. It is worth noting that 26% of the variance in SE was accounted for by MA and FA. Concurrently, MA, FA, and SE accounted for 56% of the variance in ADJ. ADJ accounted for 21% of the variance in SCA.

Additional analyses were carried out using the bootstrapping method (MacKinnon, Lockwood, Brown, Wang, & Hoffman, 2002; Shrout & Bolger, 2002) to provide support for the indirect effects noted in the model. The bootstrapping procedure tests whether or not indirect pathways are significantly different from zero. In this study, significant mediation is indicated when the upper and lower limits of the 95% confidence interval (CI) do not include zero (Table 3). The confidence intervals (95% CI (Lower-Upper)) for the indirect effects also provided support for the mediation hypotheses (Hypothesis 3-Hypothesis 7) proposed in the present study.



**Figure 2.** Structural model of associations between MA, FA, SE, ADJ, and SCA. Numbers in parentheses refer to coefficients for measurement model. \*\*\*p<.001; Dashed lines refer to nonsignificant paths when the mediator variables were included into the equation: MA = Mother Attachment, FA = Father Attachment, SE = Self-Esteem, ADJ = Adjustment, SCA = School Alienation, COM = Communication, TR = Trust, AL = Alienation, SE1-SE2 = Parcels from the Rosenberg Self-Esteem Scale, AB = Antisocial Behavior, ACP = Anger Control Problems, ED = Emotional Distress, PS = Positive Self, MNG = Meaninglessness, POW = Powerlessness, NOR = Normlessness, SOE = Social Estrangement.

#### **Discussion**

The findings of the study confirm that parental attachment correlates significantly with adolescents' levels of self-esteem and adjustment, which in turn correlates significantly with levels of school alienation. Specifically, the results reveal that adjustment was a significant mediator in the relationship between attachment to parents and school alienation, which indicated the crucial role of internal working models in the school context (Bowlby, 1969). It seems likely that adolescents with high levels of secure attachment tend to have a positive working model of self and are more likely to express their feelings and exhibit more positive social behaviors. Such adolescents also have a tendency to believe that others (e.g., teachers, peers, classmates) are available to fulfill their needs for sharing feelings, social interaction, and friendship (Brown, Higgins, & Paulsen, 2003; Pianta, 1999). In turn, they are more likely to express their feelings, take part in school activities, and manage their distress in order to reduce any feeling of alienation in the school environment. Addionally, it is worth mentioning here that self-esteem has no significant direct effect on SCA but has an indirect effect through adjustment. Thus, the findings reveal that the direct path from mother and father

Table 3. Parameters and 95% confidence intervals (cis) for paths of proposed model.

IV		DV	95% CI (Lower–Upper)
MA	→	SCA	(334126)
FA	→	SCA	(221070)
SE	→	SCA	(241062)

Notes. MA = Mother Attachment, FA = Father Attachment, SCA = School Alienation, SE = Self-Esteem. All indirect effects are significant at p = .01.

attachment to school alienation is not statistically significant, suggesting that this relationship could be depicted exclusively in terms of the indirect effects of self-esteem and adjustment.

This study may be significant for school counselors when interviewing less securely attached students with feelings of alienation at school. An understanding of the nature of the dynamics of the attachment system provides the school counselor with a comprehensive view of the students' ability to function within various school contexts. Attachment-based assessment helps school counselors develop effective and individualized intervention strategies for students. Counselors may provide corrective relational experiences for students who have experienced an unresponsive or harshly responsive relationship with an attachment figure (Bowlby, 1988). Thus, such a corrective relationship might be an effective intervention to help the student improve their self-esteem and level of adjustment, which in turn may enhance emotional and social functioning. School counselors can support students by informing them of the importance of extracurricular activities and encourage them to become involved in such activities. School counselors working with students who are less securely attached to their parents may help them reduce their feelings of alienation by encouraging them to express their feelings, participate in organized activities, develop basic skills for learning and effective communication with others (Marcus & Sanders-Reio, 2001) and help them develop a positive concept of self (Tarquin & Cook-Cottone, 2008). Furthermore, it may be beneficial for school counselors to collaborate with their students in examining closely the manner in which they attempt to develop adjustment skills at school. As Pianta (1999) stated, school counselors guide teachers to understand their own internal working models as well as those of their students. In fact, school counselors may support teachers in recognizing the negative emotions of students both in the classroom context, such as not attending activities and doing homework, and in the social interaction context, such as social skills deficits or lack of assertiveness. The benefits of positive student-teacher interactions may enhance teachers' sensitivity to student needs and their own capabilities.

Given the findings of the present study, school counselors may also design, prepare, and implement psycho-educational training aimed at helping parents to improve their children's self-esteem and adjustment levels via school activities. School counselors may also arrange training for parents to help improve specific parenting skills such as psychological availability, warmth, active listening, behavior monitoring, acceptance of individuality, and negotiation of rules and responsibilities to promote attachment security, self-esteem, and adjustment (Allen & Hauser, 1996; Karavasilis, Doyle, & Margolese, 1999). The results of this study are also expected to encourage further efforts to develop and implement parent education or training programs to promote not only the mother-child relationship but also the father-child relationship. Particularly by understanding the way in which adolescents perceive their relationship with their father, school counselors may develop workshops or group training sessions where adolescents and fathers can learn various skills to improve the quality of their relationship, including components such as communication skills, positive discipline, and social interaction management (Kocayörük, 2009).

In the same vein, parents who have a child experiencing difficulty with friendships, emotional regulation, or school performance may be provided information to increase their own understanding of their child's behavior and adjustment difficulties. The efforts of school counselors to improve and maintain relations between parents and teachers during parent-teacher meetings enhance the development of positive self-worth and social skills of children

in school. In the relations between parents and teachers, school counselors would be of great benefit by providing information on the "hows" of skills training. Consistent with Greenberg and Hickman's (1991) suggestion, a positive relation between parents and teachers may be positively related to increased student achievement, positive student attitudes, self-concept, and positive attitudes toward the school.

Additionally, there was a significant difference between boys and girls on the mother attachment and adjustment scores. The findings in this study showed that boys present a higher level of mother attachment and adjustment than girls. One possible explanation for this result is that the quality of attachment with the same sex parent declines and reveals more conflict during adolescence (Buist, Dekovic, Meeus, & Van Aken, 2002) and also that boys present a higher level of adjustment than girls during adolescence (Mattanah, Hancock, & Brand, 2004). One of the other important findings was that no differences were found between boys and girls concerning school alienation, while there were significant differences for parental attachment and adjustment. Other factors likely have an effect on school alienation such as peer relationships, academic achievement, teacher student relations, and school activities.

#### Limitations

The present study has several limitations. Firstly, the data were collected from middle-adolescents with a moderate number of participants. Replications with diverse samples and a larger number of participants, such as college students and early adolescents, are needed before the results can be generalized to adolescence as a whole. Additionally, the four-factor solution to the RAASI did not produce a good fit to the data suggesting RAASI might not perform well in this population. Similarly, the data collection procedure in the current study was limited to the self-report measure and also the reliability of the Student Alienation Scale. Further studies should collect data from multiple sources such as parents, teachers, peers, and other school staff to remove possible self-report bias. Another suggestion concerns the timing of the attachment assessment. Attachment to parents was measured at only one point. Prospective, longitudinal studies might be required to specifically describe attachment style and its influence on school outcomes during adolescence. In the same way, studies need to be conducted on the importance of the quality of the adolescent relationship with parents, teachers, and peers in relation to school alienation. Research studies may also examine the nature of teacher-adolescent and peer-adolescent relationships, how they compare to the parent-adolescent relationship, and how these relationships develop and change over time.

#### Conclusion

In accordance with the literature, this study confirmed indirect relations between mother and father attachment and school alienation. In particular, these relations are characterized by a mediational model in which self-esteem and adjustment levels of adolescents were found to be the mediators. In other words, the findings of the present study suggest that skills for adjustment and self-esteem in the school context that target expressing feelings, social skills activities, and relationship with peers might be important in reducing feelings of alienation.

In fact, two practical applications are suggested to evaluate and reduce school alienation: (I) promoting parental attachment (family dimension) and (II) promoting self-esteem and adjustment (school dimension). Promoting parental attachment may be an important dimension in reducing feelings of alienation because of its indirect association with adjustment and self-esteem. A healthy and adaptive parent-adolescent relationship contains all the characteristics of secure attachment including low-conflict, warmth, effective communication, and autonomy supportiveness. Therefore, school counselors in collaboration with teachers should develop (1) interventions and practices that may help parents achieve a secure attachment relationship with their children, and (2) foster both the self-esteem and adjustment level of adolescents in the classroom and school context. In addition, effective counseling and collaboration between school staff (teacher and counselor) and families of adolescents may improve and develop adjustment and social skills in the school and help adolescents to establish a positive relationship with teachers, peers, and other school staff, resulting in reduced school alienation.

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#### **Funding**

This study was supported by TUBITAK-Grant: 109K558.

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