# The Direct and Indirect Relationships between School Attachment, Constructive Conflict Resolution Behavior and Aggression

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**Abstract**

In this study, the direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression were investigated. 474 sixth grade students participated in the study. According to the findings, there was a negative relationship between school attachment, constructive conflict resolution behavior and aggression, while there was a positive relationship between school attachment and constructive conflict resolution behavior. The direct and indirect relationship between school attachment and constructive conflict resolution behavior and agression. Suggestions on the prevention of violences in schools were discussed in the light of findings.

**Keywords:** School attachment, Teacher attachment, Peer attachment, Constructive conflict resolution behavior, Aggression

Aggression is one of the important social issues in schools and it is seen as a lack of social skills or inappropriate problem solving (Keltikangas-Jarvinen, 2001; Pakaslahti and Keltikangas-Jarvinen, 1996 ). Studies have shown that aggressive children and teenagers perceived events to be hostile and had a lack of constructive problem solving skills Keltıkangas-Jarvinen, 2001; Crick and Dodge, 1994).

The focus on positive behaviors in the school settings reflects the change of perspectives from negative variables to positives that predict the aggression. The present study hypothesis that there is the direct and indirect relationship among school attachment, constructive conflict resolution and aggression.

### Aggression and Attachment

The strong relationship between aggression and attachment has been demonstrated with various studies (Renken, Egeland, Marvinney, Mangelsdorf, and Sroufe, 1989; Doyle and Markiewicz, 2005; Shulman, Elicker, & Sroufe, 1994). The emotional relationship that a baby establishes with its caretaker is defined as secure, anxious-ambivalent, anxious-avoidant (Ainsworth, Blehar, Waters, & Wall, 1978), and another attachment type, disorganized-disoriented was added with further studies (Main, & Solomon, 1986). It has been shown that the attachment type supported the child's sense of security and curiosity toward learning his environment (Ainsworth, Blehar, Waters ve Wall, 1978). According to attachment theories, the type of baby's relationship with its caretaker affects its future relationships (Bowly, 1969), and babies who had insecure attachments are prone to have emotional and behavioral problems in future (Perry, 1996). For example, anxious-avoidant individuals perceive people around them more negatively compared to secure attached individuals (Simpson, Rholes, & Winterheld, 2010; Collins & Feeney, 2004), and are more angry and aggressive toward people around them (Renken, Egeland, Marvinney, Mangelsdorf, and Sroufe, 1989). Some studies suggest that aggressive behaviors, especially during adolescence, are based on insecure attachment (Doyle and Markiewicz, 2005). It has been observed that the attachments in various relationships are closely related to one's attachment relationship with his caretaker (Rosen & Rothbaum, 1993). It has been observed that individuals who had had secure attachments established positive relationships with their peers, had better social competences and were popular among their peers (LaFreniere & Sroufe, 1985).

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Insecurely attached individuals on the other hand, had negative relationships with their peers due to their lower social and emotional competences (Shulman, Elicker, & Sroufe, 1994). It has been observed that there was an important relationship between school attachment and aggression (Hill and Werner, 2006). School attachment has been defined as student's feeling of belonging to school, having positive attitude toward school and most importantly, feeling safe while at school (Maddox and Prinz, 2003). It has been observed in a study that individuals who had high school attachment showed a low level of physical and relational aggression (Hill and Werner, 2006).

**The Relationship Between School Attachment, Constructive Conflict Resolution Behavior and Aggression**

Conflict resolution has been defined as individual's intent or effort to do their best in order to resolve the conflict they are having (Van de Vliert, 1997; Jandt ve Pedersen, 1996). The relationship between constructive conflict resolution behavior and attachment has been theoretically demonstrated. For example, it has been observed that avoidant individuals had showed avoidance behaviour when faced with a conflict, anxious had showed more impolite and aggressive behaviour, and had tended to suppress the conflict since they hadn't trusted others and had had fear of being abandoned. Secure attached individuals on the other hand, hadn't have much problem in conflict management (Simpson et al., 1996). In another study which investigated the relationship between constructive conflict resolution behavior and attachment, secure attached individuals choose more constructive ways when faced with interpersonal conflicts compared to insecure attached individuals (Kobak and Hazan, 1991). There are also findings that shows this relationship is mutual. In a study, it has been observed that conflict resolution programs contributed to improvement of cooperation, attachment and pro-social behaviours (Heydenberk, Heydenberk, 2005), and also reduced the time that teacher spends on a conflict, improved school atmosphere and improved student's problem solving and self-control skills (Bodine, 1996). It has been observed that conflict resolution training improved school attachment and cooperative interaction, and also contributed to creation of a constructive learning environment (Heydenberk & Heydenberk, 2005). This is due to the fact that conflict resolution training enabled students to feel more competent, psychologically and physically more secure, and this feeling of security was an important prerequisite to school attachment (Heydenberk & Heydenberk, 2005).

With regards to the relationship between constructive conflict resolution and aggression, it has been observed that aggressive children and teenagers behaved more destructively and violently when faced with interpersonal conflicts and had more aggressive problem solving options in their social-cognitive memories (Lochman and Dodge, 1994; Pakaslahti and Keltikangas-Järvinen, 1996; Crick and Dodge, 1994; Huesmann, 1988), while non-aggressive children and teenagers found collaborative and friendly solutions (Lochmann & Dodge, 1994). According to the findings of a longitudinal study, aggressive children and teenagers use aggressive problem solving strategies (Keltikangas-Järvinen & Pakaslahti, 1999).

The aim of this study is to show the direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression. The importance of improving constructive conflict resolution behaviour alongside school attachment in preventive guidance and psychological counseling efforts was discussed in the context of reducing the number of violent incidents in schools.

## 2. Method

### 2.1. Participants

The participants of the study were 474 6th grade students who attend to 3 different middle school in the province of Aydın. 48.9% of the participants (232) were female and 50.6% (240) of the participants were boys. The average age of the participants was 12 (SD=.505) and the age range was between 11 and 14. The students were picked ramdonly.

### 2.2 Process

The data was collected with the help of psychological counselors who worked at the schools where the data was collected from. The students were informed about the process and assured that the data would have been kept confidential. The students were told the participation was voluntary and those who didn't wish to participate was free to do so. The interviews took about 40 minutes.

### 2.3. Data Collection Tools

### 2.3.1. Conflict Resolution Behavior Determination Scale

The Conflict Resolution Behavior Determination Scale (CRBDS) ,developed by Koruklu (1998), consists of two sub-dimensions; aggression (swearing, fighting, threatening, silent aggression) and problem solving (compromise, collaboration). CRBDS consists of 24 items and is a 5-grade likert scale. The highest score that can be reached in each sub-scale was 60 and the lowest score was 12. The internal consistency of CRBDS was examined with Cronbach-Alpha and the internal consistency for aggression dimension was .85, the internal consistency for problem solving dimension was.83.

### 2.3.2. School Attachment Scale for Children and Adolescents

"The School Attachment Scale", developed by Hill (2005) was used in the study. The scale consists of 3 sub-dimensions; school attachment, teacher attachment and peer attachment. The scale is 5-grade (1- never, 5- always). The Turkish version of the scale has 12 items and consists of 3 dimensions. Its internal consistency coefficient is .84, and test retest coefficient is 85 (Savi, 2011). The total score is obtained by adding all the items and the higher the score is, the higher the school attachment is.

### 2.3.3. Aggression Scale

Aggression Scale(Orpinas ve Frankowski, 2001) is a 11-item scale which aims to measure the aggressive behaviour in adolescents. The scale includes anger as well as verbal and physical aggression. 2-factor structure was confirmed with CFA. The factor loads of the items were between .54 and .74 for verbal and physical aggression and between .63 and .70 for anger. Cronbach Alpha internal consistency coefficients were .87 for the first sample and .88 for the second sample.

### 3. Results

Firstly, the direct and indirect correlations between school attachment, constructive conflict resolution behavior and aggression were investigated (Table 1). Based on the findings, it was found that school attachment (school, teacher and peer attachments) had had a positive relationship with constructive conflict resolution behavior, and a negative relationship with aggression. In addition to this, it was found that the sub-dimensions of school attachment (school, teacher and peer attachments) had had negative relationships with aggression.

**TABLE 1. Correlations between variables**

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| 1. Gender | 1 |  |  |  |  |  |  |
| 2 School Attachment Total | -.171** | 1 |  |  |  |  |  |
| 3 Teacher Attachment | -.164** | .820** | 1 |  |  |  |  |
| 4 School Attachment | -.167** | .855** | .603** | 1 |  |  |  |
| 5 Peer Attachment | -.112* | -.819** | .499** | .511** | 1 |  |  |
| 6 Constructive Conflict Resolution | -.198** | .309** | .274** | .255** | .238** | 1 |  |
| 7 Aggression | 213** | .-278** | .-338** | .-312** | .-061 | .-145** | 1 |

**p<.01   *p<.05

According to correlation results, while there is a positive relationship between school attachment and constrıctive conflict resolution (r=.309), there is a negative relationship between aggression and school attachment (r=.278), and between aggression and constructive conflict resolution (r=.145) (p<.01). There wasn't a statistically significant relationship between peer attachment sub-dimension and aggression (r=.-061, p>.05).
The structural model was tested and the results are shown in Table 2.

**TABLE 2. Direct and Indirect Relationships Between School Attachment, Constructive Conflict Resolution and Aggression**

| | | Non-standardized values | | | Standardized value |
|---|---|---|---|---|---|
| | | B | SE | CR | |
| School attachment total → | Peer Attachment | 1.000 | | | .614 |
| School attachment total → | Teacher Attachment | 1.069 | .092 | 11.614 | .776 |
| School attachment total → | School Attachment | 1.323 | .114 | 11.618 | .787 |
| Aggression → parcel 1 | | 1.000 | | | .837 |
| Aggression → parcel 2 | | 1.203 | .059 | 20.283 | .848 |
| Aggression → parcel 3 | | .949 | .047 | 20.087 | .837 |
| Constructive Conflict Resolution → | parcel 1 | 1.000 | | | .797 |
| Constructive Conflict Resolution → | parcel 2 | .991 | .089 | 11.131 | .673 |
| Constructive Conflict Resolution → | parcel 3 | .792 | .072 | 10.939 | .645 |

All values are significant at the level of P<.001. SE: Standard Error; CR: Critical Ratio

The values [ χ2 (24, N= 474) = 64.029, χ2 /df= 2.668; CFI= .97; RMSEA=.059 ] obtained from analysis were good according to goodness of fit of the measurement model.

Path analysis was made on the values of two different models using AMOS 21 software in order to determine the direct and indirect relationships. The direct and indirect relationships were examined together in Model 1. The goodness of fit values of Model 1 were calculated to be [χ2 (24, N= 474) = 61.56, χ2 /df= 2.56; CFI= .98; RMSEA=.058]. CFI (.98) was over .90, and RMSEA was 0.05 which shows that the model had a enoughgoodness of fit. In Model 1, the standardized value of the path from school attachment to constructive conflict resolution behaviour was .38, the standardized value of the path from constructive conflict resolution behaviour to aggression was .13, and the standardized value of the path from school attachment to aggression was .33. In Model 2, only the indirect effect was analyzed and the goodness of fit values [χ2 (25, N= 474) = 94.344, χ2 /df= 3.77; CFI= .96; RMSEA=.077] were acceptable. The value of the path from school attachment to constructive conflict resolution behaviour was .40, and the value of the path from constructive conflict resolution behaviour to aggression was .28.

Bootstrapping was used in order to determine whether there was a indirect effect in Model 1 and 2 (Shrout & Bolger. 2002). In Model 1, the effect value (.-047) of the path from school attachment to aggression through constructive conflict resolution behaviour was statistically insignificant (p=.072), however in Model 2, the effect value (.11) of the path from school attachment to aggression through constructive conflict resolution behaviour was statistically significant (p=.002). In Model 1, the upper and lower bounds of the 95% confidence interval for the path from school attachment to aggression through constructive conflict resolution behaviour were .-106 and .005; p=.072 respectively, while in Model 2, the upper and lower bounds of the 95% confidence interval for the path from school attachment to aggression through constructive conflict resolution behaviour were .-176 and .057; p=.002. While Model 1 contains 0, Model 2 does not. While the indirect effect was insignificant in Model 1, it was significant in Model 2.

With respect to variances related to aggression in Model 1 and Model 2; in Model 1, school attachment explains 14% of the variation in aggression, and school attachment together with constructive conflict resolution behaviour explain 16% of the variation in aggression. In Model 2, school attachment explains 16% of the variation in aggression, while school attachment together with constructive conflict resolution behaviour explain 7% of the variation in aggression.

## 4. Discussion

In this study, the direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression were tested using two different models, and it was observed that school attachment had a positive relationship with constructive conflict resolution and a negative relationship with aggression, while constructive conflict resolution had a negative relationship with aggression. The direct and indirect relationship between school attachment and aggression was investigated in Model 1 and it was seen that the relationship between the two was very strong and the indirect effect of the path from school attachment to aggression through constructive conflict resolution behaviour was statistically significant.

Then, in Model 2, only the indirect effect of the path from school attachment to aggression through constructive conflict resolution behaviour was tested. Based on the findings, the path through constructive conflict resolution was significant. The native relationship between aggression and attachment has been demonstrated with various studies in the literature (Renken, Egeland, Marvinney, Mangelsdorf, and Sroufe, 1989; Doyle and Markiewicz, 2005; Shulman, Elicker, & Sroufe, 1994). It was found that there was a strong relationship between school attachment and aggression (Hill and Werner, 2006), and individuals with high school attachment had a lower tendency to resort to physical and relational aggression (Hill and Werner, 2006). This can be associated with children's types of attachment. The fact that anxious-avoidant individuals perceive people around them more negatively compared to secure attached individuals (Simpson, Rholes, & Winterheld, 2010; Collins & Feeney, 2004), and are more angry and aggressive toward people around them (Renken, Egeland, Marvinney, Mangelsdorf, and Sroufe, 1989), and opinions that suggest the aggressive behaviours especially in adolescence are related to insecure attachment (Doyle and Markiewicz, 2005) explain the aggressive behaviours in schools partly. The fact that individuals with secure attachments have good relationships with their peers and high social competence (LaFreniere & Sroufe, 1985) while insecurely attached individuals have negative relationships with their peers due to their lower social and emotional competences (Shulman, Elicker, & Sroufe, 1994) may be associated with aggression.

Another finding is that there was a positive relationship between school attachment and constructive conflict resolution behaviour. There has been studies that supports this finding in the literature. For example, secure attached individuals chose more constructive ways when faced with interpersonal conflicts compared to insecure attached individuals (Kobak and Hazan, 1991). In another study, it was observed that conflict resolution training enabled students to feel more competent, psychologically and physically more secure, and this feeling of security was an important prerequisite to school attachment (Heydenberk & Heydenberk, 2005).

Finally, there was a negative relationship between constructive conflict resolution behavior and aggression. In a study in the literature, it has been observed that aggressive children and teenagers behaved more destructively and violently when faced with interpersonal conflicts and had more aggressive problem solving options in their social-cognitive memories (Lochman and Dodge, 1994; Pakaslahti and Keltikangas-Järvinen, 1996; Keltikangas-Järvinen, & Pakaslahti, 1999, Crick and Dodge, 1994), while non-aggressive children and teenagers found collaborative and friendly solutions (Lochmannve Dodge, 1994).

In this study, the direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression were tested using two different models. In Model 1, the effect value of the path from school attachment to aggression through constructive conflict resolution behaviour was statistically insignificant, however in Model 2, the effect value of the path from school attachment to aggression through constructive conflict resolution behaviour was statistically significant. The fact that the direct effect between school attachment and aggression was significant, the indirect path from school attachment to aggression through constructive conflict resolution behaviour was insignificant may be interpreted as there was a strong relationship between school attachment and aggression (Hill and Werner, 2006).

Although this study contributes to the literature by investigating the direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression, it has certain limitations. The relationships were tested with path analysis. Path analysis is used in order to analyze theoretical relationships rather than causal relationships (Schmacter & Lomax, 1996). In this study, two different models were tested theoretically in order to investigate the direct and indirect relationships between school attachment, constructive conflict resolution behavior and aggression. Another limitation of the study is the fact that it depends on cross-sectional data. If the relationships between variables are handled longitudinally, this should allow to establish causal relationships.

In conclusion, students who adopt constructive conflict resolution behaviour and have high school attachment tend to adopt less aggressive behaviours in order to resolve interpersonal conflicts. This conclusion may be interpreted as an important contribution to reducing violences in schools by encouraging constructive conflict resolution behavior and increasing school attachment levels of the students.

As a practical suggestion, the importance of encouraging constructive conflict resolution behavior and increasing school attachment levels of the students should be emphasised while preparing training programs in order to reduce aggression. Based on this, it is suggested that psychological counselors in schools give priority to programs which encourages students to adopt constructive conflict resolution behavior and increases school attachment levels of the students.

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