

# The Relationship between Family Function and Aggression in Peer Relationships among Adolescents

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**Abstract.** This research studied the influence of family function on adolescents' aggression in peer relationships, including romantic relationships and friendships. 62 participants from different high schools in Beijing fulfilled the Family Assessment Device (FAD) Family Functioning Scale and the Chinese Version of the Buss-Warren Attack Questionnaire (BWAQ). Results showed that in peer relationships, total family function, affective involvement, and general function have weak positive correlations with adolescent aggression; In friendship, affective involvement, and general function have weak positive correlations with adolescent aggression. This study helps identify potential risk factors for aggression in peer relationships, informs the design of effective prevention and intervention strategies, and can contribute to broader research on the impact on adolescent development and well-being.

**Keywords:** Family function; aggression; peer relationship; adolescent.

## 1. Introduction

Adolescence represents a pivotal juncture in physical and psychological development, characterized by the formation of significant peer relationships. These relationships, central to adolescent life, play a crucial role in shaping the psychological and emotional well-being of young individuals [1]. However, the pervasive issue of aggression within these adolescent relationships can inflict harm, often with long-lasting negative consequences for the individuals involved and, by extension, society as a whole.

This study seeks to illuminate the relationship between family function and the manifestation of aggression in adolescent peer relationships. Family function, a determinant of adolescent well-being, pertains to the quality of familial relationships, encompassing aspects such as effective communication, conflict resolution, and psychological support among family members. Dysfunction within the family structure has been linked to various adverse outcomes, including but not limited to anxiety, mania, and depression. Accordingly, our investigation focuses on the seven dimensions of family functioning as delineated by the Family Assessment Device (FAD) — Problem Solving, Communication, Roles, Affective Responsiveness, Affective Involvement, Behavior Control, and General Functioning [2].

Gaining a deeper understanding of the interplay between family functioning and aggression within adolescent peer relationships can significantly contribute to the creation of targeted interventions aimed at ameliorating aggression. By pinpointing specific family functioning dimensions that precipitate aggression, we can devise strategies aimed at enhancing family relationships, thereby reducing the likelihood of aggression in adolescent peer relationships.

Furthermore, this study carries significant implications for the mental health of adolescents. Aggression within peer relationships can result in serious repercussions such as relationship dissatisfaction, emotional distress, and physical harm. By identifying and understanding the factors contributing to aggression within these relationships, we can cultivate healthier relationship behaviors and mitigate the risk of adverse outcomes. This understanding also equips parents and educators with the necessary knowledge to provide guidance and support to adolescents as they navigate the complexities of peer relationships.

## 2. Literature Review

The nexus between family function and aggression in adolescent peer relationships has been a focal point of research across various disciplines. In psychology, studies have delved into personal factors that could potentially predict aggression within peer relationships. As an exemplar, Arriaga & Schkeryantz in their study titled "Intimate Relationships and Personal Distress: The Invisible Harm of Psychological Aggression" found a significant correlation between being a victim of psychological aggression and increased personal distress [3]. However, this correlation became insignificant when tested in conjunction with psychological perpetration. In sociology, the emphasis lies on social and cultural factors that contribute to aggression in peer relationships, with specific focus on elements such as gender roles and societal norms. Archer's study on "Cross-Cultural Differences in Physical Aggression between Partners: A Social-Role Analysis" presents a compelling argument that husbands' physical aggression against wives inversely correlates with women's societal power [4]. Family studies, on the other hand, have explored the impact of family functions on adolescent development. A systematic review on "The Relationship between Family Functioning and Child and Adolescent Overweight and Obesity" revealed a significant correlation between family functioning and alterations in child weight [5].

Contemporary research suggests a strong connection between poor family function and heightened aggression. Labella & Masten underscore that many of the prominent risk and protective factors for aggression and violence development reside within the family system [6]. Specifically, family conflict, diminished parental warmth, and escalated parental control are significant predictors of aggression within peer relationships. According to Maldonado *et al.*, trait anger and a history of childhood physical abuse may amplify tendencies towards partner aggression, while alcohol consumption may diminish individual capabilities to manage these aggressive tendencies [7].

However, despite the wealth of research available, a comprehensive exploration of the relationship between family function and adolescent aggression within peer relationships remains conspicuously absent from the literature. While ample research has been devoted to childhood experiences and parental relationships, the dynamic and continuous influence of the environment as children transition into adolescence has been overlooked. Further, parental relationships do not equate to family function as they do not account for the role of adolescents. The Family Assessment Device (FAD) provides a more comprehensive view of family function through its seven dimensions, allowing for a more nuanced examination of the impact of each dimension on adolescent aggression in peer relationships [2]. Moreover, the existing body of literature primarily examines the relationship between family function and aggression through mediating effects such as anger expression or self-esteem. The direct impact of family function on adolescent aggression within peer relationships has been sparsely studied. Lastly, much of the relevant research focuses on adults, leaving a gap in our understanding of the impact of family function on aggression within adolescent peer relationships. This study aims to bridge this gap by investigating this relationship from the perspective of adolescents.

In light of the aforementioned gaps in the literature, the current research seeks to explore the relationship between family function and aggression in adolescent peer relationships. The research is guided by three hypotheses: the overall family function is positively correlated with aggression in adolescent peer relationships, the aspect of behavior control within family function is positively associated with aggression, and finally, affective involvement is also positively linked with aggression in these relationships. These hypotheses reflect the potential complexity and multi-dimensionality of family function's influence on adolescent aggression.

## 3. Research Method

### 3.1. Participants

The study included 62 students aged 14-19 from different high schools in Beijing, China. 46 of the teens filled out questionnaires based on their aggression in friendships, and 16 of the teens had

romantic partners who filled out questionnaires based on their aggression in romantic relationships. The sample was 22.6% male and 77.4% female. The sample was randomly sampled from Chinese ordinary high schools and international high schools, and the sample was diverse in social economy, social status, and parental work.

### 3.2. Measures

#### 3.2.1. FAD Family Functioning Scale

According to McMaster's family function model theory, the FAD Family Functioning Scale studies children's family function from the aspects of physiology, psychology, and sociality, including seven dimensions.

Problem solving (PS): a family's ability to resolve problems to a level that maintains effective family functioning. A family problem is seen as an issue that threatens the integrity and functional capacity of the family, the solution of which presents a difficulty for them [2].

Communication (CM): how the family exchanges information [8].

Roles (RL): the repetitive patterns of behavior by which individuals fulfill family functions [2].

Affective Responsiveness (AR): the ability to respond to a range of stimuli with appropriate quality and quantity of feelings [2].

Affective Involvement (AI): the degree to which the family shows interest in and values the activities and interests of family members [2].

Behavior control (BC): the pattern the family adopts for handling behavior in three specific situations-physically dangerous situations, situations involving the meeting and expressing of psychobiological needs and drives, and situations involving socializing behavior both inside and outside the family [2].

General function (GF): it includes some problems in family relations, such as affective expression obstacles.

Participants were asked 60 questions on a scale of one to four based on their family situation, with one being "very much like my family" and four being "not at all like my family." A lower score indicates more normal family functioning. Some of the questions with \* were relatively negative, with 4 indicating "much like my home" and 1 indicating "not at all like my home", with higher scores indicating more normal family functioning.

#### 3.2.2. Chinese Version of Buss-Warren Attack Questionnaire (BWAQ)

The Chinese adaptation of the Buss-Warren Aggression Questionnaire (BWAQ) is employed in this study to assess aggression within peer relationships among adolescents. This instrument encompasses various facets of aggression, presenting participants with 34 items to evaluate their aggressive tendencies in the context of both friendships and romantic relationships. Each item within the questionnaire is rated on a five-point Likert scale, ranging from 1 (Not at all like me) to 5 (Almost exactly like me). In this rating system, a lower score is indicative of lower aggression levels, suggesting healthier interpersonal dynamics. To ascertain the relevance of the aggression within different relationship types, the questionnaire was bifurcated into two categories, each predicated on a specific relationship context. This differentiation was achieved by modifying the referents in the questions; for example, in the context of romantic relationships, the person referenced in the question was replaced with "your romantic partner," and in the context of friendships, the person was replaced with "your friend." This approach ensures the assessment tool's sensitivity to the nuances of aggression within different types of peer relationships among adolescents.

### 3.3. Procedures

The data collection process spanned a period of three weeks. During this time, the questionnaires were disseminated through group chats and distributed among peers. Prior to completing the questionnaire, participants were assured of anonymity and the confidential nature of their responses,

which were to be used solely for research purposes. Depending on their individual circumstances, participants were required to complete two questionnaires.

### 3.4. Data Analysis

Data gleaned from the questionnaires was subjected to correlation analysis. Initially, the data was organized, and responses to questions across various dimensions of family function were selected and aggregated to derive a total score. The final dataset encompassed demographic information such as age range and gender, alongside the total score of family function, the total scores for each of the seven dimensions of family function, and the total aggression score for each participant.

The subsequent analysis examined the correlation between the total score of family function and aggression in peer relationships, and correlations between scores for each dimension of family function and aggression in these relationships. Further, the analysis explored the correlation between the total score of family function and aggression in romantic relationships, as well as correlations between scores for each dimension of family function and aggression in these relationships. Finally, the correlation between the total score of family function and aggression in friendships, and correlations between scores for each dimension of family function and aggression in these relationships were also investigated. This multi-faceted analysis approach sought to provide a comprehensive understanding of the relationship between family function and aggression in various interpersonal contexts among adolescents.

## 4. Results

### 4.1. Descriptive Statistics

Within the 62-sample dataset, the mean score for total family function (on a scale of 240) was calculated as 129, with a median of 128.5. The scores ranged from a minimum of 93 to a maximum of 168.

For the total aggression score (on a scale of 170), the mean value was 87.34, and the median was 86.5. The scores varied from a minimum of 49 to a maximum of 137.

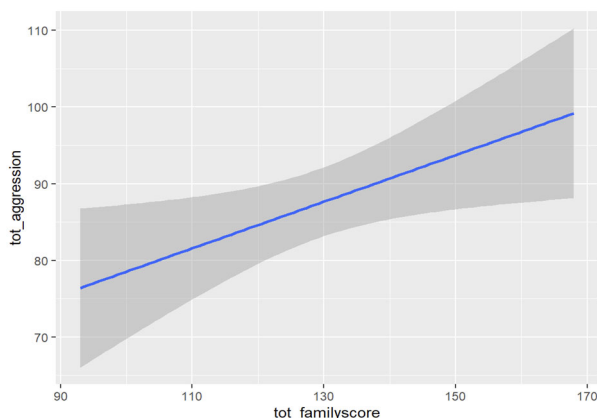
In terms of the specific family function dimensions, the Problem Solving dimension (on a scale of 24) had a mean score of 11.71, a median score of 12, and scores ranging from 6 to 18. The Communication dimension (on a scale of 36) had an average score of 19.74, a median of 19, and scores spanning from 10 to 29. The Roles dimension (on a scale of 44) reported a mean score of 23.06, a median of 23, and scores from 16 to 34.

In the Affective Responsiveness dimension (on a scale of 24), the average score was 13.63, with a median of 13.5, and scores ranging from 7 to 21. For the Affective Involvement dimension (on a scale of 28), the mean score was 15.37, the median score was 16, and the scores ranged from 9 to 23.

The Behavior Control dimension (on a scale of 36) had an average score of 21.1, a median of 21, and scores from 15 to 28. Lastly, the General Function dimension (on a scale of 48) reported a mean score of 24.37, a median of 24, and scores spanning from 15 to 37.

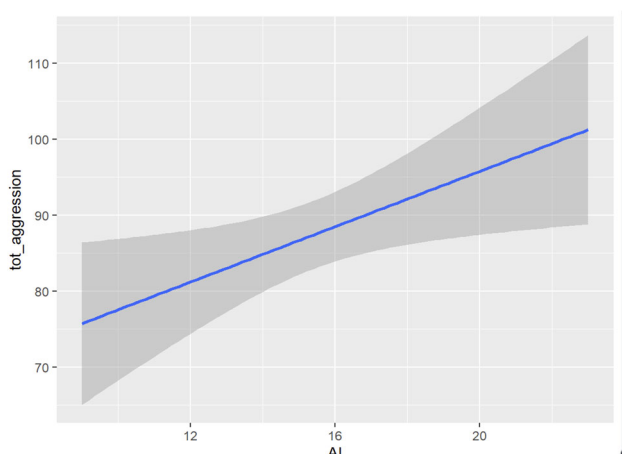
These descriptive statistics provide an overview of the distribution of scores across the different dimensions of family function and aggression in the sample.

## 4.2. Family Function and Aggression in Peer Relationships



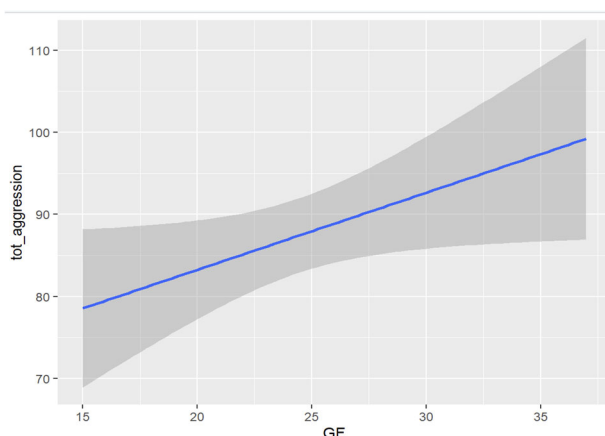
**Fig. 1** Correlation analysis between the total family function score (tot\_familyscore) and aggression score (tot\_aggression).

Correlation analysis shows that there is a significant positive correlation between the total family function score (tot\_familyscore) and aggression score (tot\_aggression) ( $r=.29, p<0.05$ ) (see Fig.1). That is, the healthier the family function is (the lower the score in the FAD Family Functioning Scale (Epstein et al., 1983)), the weaker the aggression of adolescents in peer relationships.



**Fig. 2** Correlation between Affective Involvement (AI) and aggression score (tot\_aggression).

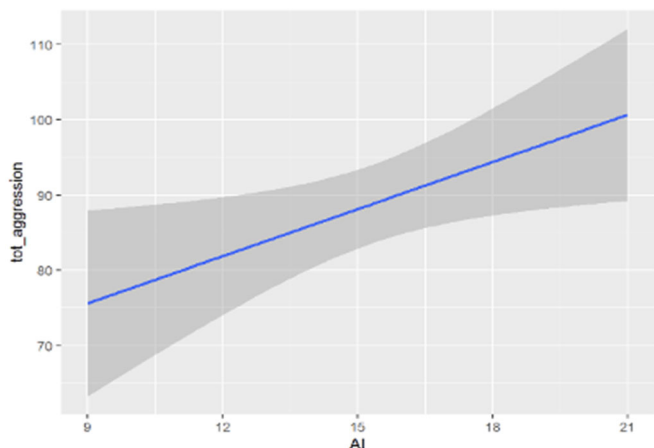
Moreover, studies show that there is a significant positive correlation between Affective Involvement (AI) and aggression score (tot\_aggression) ( $r=.30, p<0.05$ ) (shown in Fig. 2). Therefore, the higher the degree of concern that family members have for each other's stuff and some things (the lower the score on the FAD Family Functioning Scale), the lower the aggression that adolescents show in close relationships.



**Fig. 3** Correlation between General Function (GF) and aggression score (tot\_aggression).

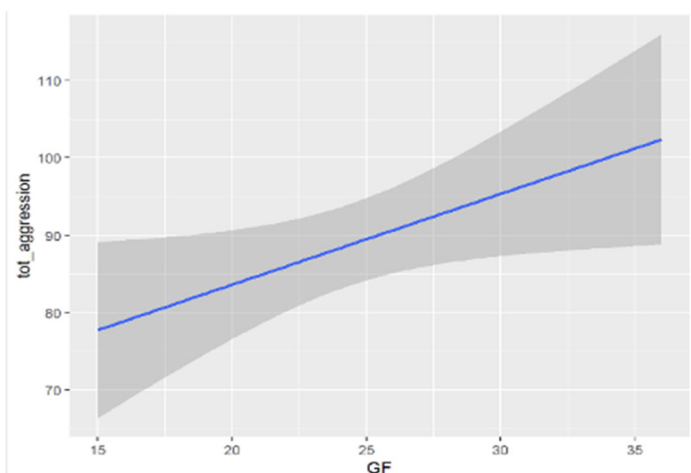
At the same time, it is found that there is a significant positive correlation between General Function (GF) and aggression score (tot\_aggression) ( $r=.26$ ,  $p<0.05$ ). Thus, the more serious the problems existing in the family system, such as misunderstanding, communication disorder, emotional expression disorder, poor emotional atmosphere, and low tolerance of each other (the higher the score on the FAD Family Functioning Scale), the higher the aggression of adolescents in peer relationships. Finally, in the correlation analysis of the relationship between Problem Solving, Communication, Roles, Affective Responsiveness, Control Behavior and aggression in peer relationships, no significant relationship was found.

### 4.3. Family Function and Aggression in Friendships



**Fig. 4** Correlation between Affective Involvement (AI) and aggression (tot\_aggression).

In terms of friendship only, as shown in Fig.4, correlation analysis shows that there is a significant positive correlation between Affective Involvement (AI) and aggression (tot\_aggression) ( $r=.36$ ,  $p<0.05$ ). Therefore, the higher the degree of mutual understanding and mutual concern among family members (the lower the score on the FAD Family Functioning Scale), the lower the aggression of adolescents in friendships.



**Fig. 5** Correlation between General Function (GF) and aggression score (tot\_aggression).

At the same time, it is found that there is a significant positive correlation between General Function (GF) and aggression score (tot\_aggression) ( $r=.31$ ,  $p<0.05$ ) (see Fig. 5). Therefore, the more serious the problems existing in the family system, such as misunderstanding, communication disorder, emotional expression disorder, poor emotional atmosphere, and low tolerance of each other (the higher the score on the FAD Family Functioning Scale), the higher the aggression of adolescents in peer relationships. Finally, in the correlation analysis of the relationship between family functioning score, Problem Solving, Communication, Roles, Affective Responsiveness, Control Behavior and aggression in friendship, no significant relationship was found.

#### 4.4. Family Function and Aggression in romantic relationships

As for romantic relationships, different from the results in friendships, no significant correlation was found between any aspect of family function and aggression.

### 5. Discussion

The principal aim of this study is to investigate specific factors within the seven dimensions of the FAD that influence adolescent aggression in peer relationships. As the results elucidate, Affective Involvement and General Function are significant contributors to adolescents' aggressive tendencies within the family context, which subsequently affect their peer relationships. By pinpointing these factors, such as impediments to communication and emotional expression, this research can help to devise intervention strategies [9]. For instance, interventions focusing on enhancing communication skills and emotional expression may be effective in reducing the incidence of aggression among adolescents. Furthermore, this research emphasizes the importance of addressing family functioning in the prevention of aggression in adolescent peer relationships. Interventions aimed at improving family functioning, which promote healthy communication patterns and positive relationships, may help reduce the incidence of aggression in peer relationships among adolescents [10].

In addition, the research results can provide insights into an adolescent's propensity to seek help and support. Adolescents from families with healthy communication patterns and positive relationships may be more likely to seek help when faced with relationship difficulties, while those from families with dysfunctional communication and negative relationships may be less inclined to do so. This research provides valuable evidence of the specific dimensions that contribute to aggression in peer relationships among adolescents [11].

This study found a correlation between affective involvement and general function and adolescent aggression in friendships. However, no correlation was found between each family function dimension and adolescent aggression in romantic relationships. This can be attributed to the differences between the nature of friendships and romantic relationships. Friendships, defined by mutual trust, support, and shared interests or experiences [9], are closer to family relations than romantic relationships, which involve deeper emotional and physical intimacy and a commitment to exclusivity and long-term partnership [10]. Therefore, friendships are more likely to exhibit influences from family functioning in terms of aggression than romantic relationships.

The limitations of this study encompass the sample size, sample balance, control variables, and research methodology. The sample size, consisting of only 62 participants, may affect the persuasiveness of the results. The unequal gender balance of the sample is another limitation, as male and female students often exhibit differences in aggression. When comparing the influence of family function on adolescents' aggression in friendships and romantic relationships, there was a significant difference in the number of questionnaires, with the data on adolescents in romantic relationships being relatively sparse. Furthermore, the duration of the romantic relationships was not investigated, which could have served as a potential control variable. Regarding the research methods, this study relied on a single self-report method, which may lead to inaccurate data due to the participants confusing their actual circumstances with their expectations.

### 6. Conclusion

This study examines the correlation between family functioning and adolescent aggression within peer relationships. Utilizing the FAD Family Functioning Scale and the Chinese Version of the Buss-Warren Aggression Questionnaire (BWAQ), a survey was conducted among a sample of 62 teenagers. This research sought to discern the specific dimensions of family functioning that impact aggression in peer relationships and further conducted a comparative analysis between adolescents engaged in romantic relationships and those involved in friendships. The findings reveal that Affective Involvement and General Function, as identified in the FAD Family Functioning Scale, exhibit a

significant positive correlation with aggression within peer relationships and friendships. In doing so, this study delineates the specific elements that contribute to aggressive conduct within adolescent peer relationships. Moreover, the results of this research could inform preventive measures aimed at mitigating the negative consequences of such aggressive behavior. Specifically, strategies that emphasize fostering emotional expression and engagement could potentially reduce the incidence of aggressive conduct within adolescent peer relationships.

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