

Article

Pedagogical and Psychological Factors Contributing to Aggressive Behavior in Adolescents

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Abstract: This article examines the pedagogical and psychological factors that contribute to the development of aggressive behavior during adolescence. Adolescence is characterized by significant emotional, social, and personal changes, which may increase the likelihood of aggressive reactions under certain conditions. Family environment, peer relationships, the psychological climate of the educational setting, parenting and teaching approaches, self-esteem, emotional regulation, and frustration tolerance are considered among the important factors associated with aggressive behavior. The article emphasizes that adolescent aggression should not be interpreted solely as an individual characteristic but rather as a behavioral phenomenon emerging through the interaction between personal characteristics and the social environment. Particular attention is given to preventive measures involving families, educational institutions, and psychological support services.

Key words: adolescence, aggressive behavior, pedagogical factors, psychological factors, emotional regulation, self-esteem, family environment, peers, frustration, prevention.

1. INTRODUCTION

Adolescence represents a particularly important stage of human development in which significant psychological, emotional, social, and behavioral transformations take place. During this period, young people gradually develop greater independence, establish their own social identity, and become increasingly sensitive to interpersonal relationships and social evaluation. At the same time, difficulties in emotional regulation, changes in self-perception, and the desire for recognition may create conditions in which negative emotions are expressed through aggressive forms of behavior. Therefore, understanding the factors that contribute to aggression among adolescents is an important issue for contemporary psychology and education.[1]

Aggressive behavior in adolescence may appear in different forms, including verbal hostility, physical aggression, oppositional reactions, threats, intentional provocation, and destructive behavior. Although aggression can sometimes function as a response to frustration, perceived injustice, or the need for self-protection, its repeated manifestation may negatively affect the adolescent's interpersonal relationships, academic engagement, emotional well-being, and social adaptation. For this reason, adolescent aggression should be examined not simply as an undesirable behavioral characteristic but as a complex phenomenon influenced by multiple interacting factors.[2]

The development of aggressive behavior is associated with both individual psychological characteristics and the social environment in which an adolescent develops. Emotional instability, low frustration tolerance, difficulties in controlling impulses, distorted self-evaluation, and inadequate methods of coping with stressful situations may increase the probability of aggressive reactions. At the same time, the family environment,

Citation: Shoxista, E. Pedagogical and Psychological Factors Contributing to Aggressive Behavior in Adolescents. American Journal of Science and Learning for Development 2026, 5(2), 22-28.

Received: 4th Jan 2026Revised: 11th Feb 2026Accepted: 08th Mar 2026Published: 30th Apr 2026

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relationships with parents, communication with peers, classroom climate, teacher–student interactions, and prevailing approaches to discipline can either reduce or intensify aggressive tendencies. This indicates that adolescent aggression has a multidimensional nature and requires an integrated pedagogical and psychological approach.[3]

The educational environment has a particularly important role in this process because adolescents spend a considerable part of their daily lives in schools and other educational settings. A supportive classroom climate, respectful communication, constructive conflict resolution, and timely psychological assistance can contribute to the development of self-control and socially acceptable ways of expressing emotions. Conversely, excessive authoritarianism, persistent criticism, humiliation, social exclusion, or inconsistent disciplinary practices may strengthen feelings of frustration and resistance in some adolescents. Consequently, pedagogical factors should be considered alongside psychological characteristics when examining the causes and mechanisms of aggressive behavior.[4]

Another important aspect concerns the interaction between adolescents and their peers. During adolescence, peer approval and group belonging become increasingly significant. An adolescent may adopt aggressive behavioral patterns through observation, imitation, social reinforcement, or the desire to gain status within a peer group. In environments where aggression is perceived as a means of obtaining authority or resolving interpersonal disputes, aggressive responses may become normalized. This makes the study of peer relationships essential for understanding the social mechanisms underlying adolescent aggression.[5]

From a preventive perspective, identifying the factors associated with aggressive behavior is important for developing effective psychological and pedagogical interventions. Prevention should not be limited to suppressing undesirable behavior. It should also involve the development of emotional awareness, self-regulation, empathy, communication competence, constructive conflict-resolution skills, and adaptive coping strategies. Cooperation among teachers, school psychologists, parents, and adolescents can create a supportive environment in which young people are encouraged to express dissatisfaction and negative emotions through constructive rather than destructive forms.[6]

Thus, the study of pedagogical and psychological factors contributing to aggressive behavior in adolescents has both theoretical and practical significance. A comprehensive examination of these factors can contribute to a deeper understanding of the mechanisms of adolescent aggression and provide a foundation for developing preventive programs within educational institutions and family settings. The present study focuses on the interaction of individual psychological characteristics and environmental influences in the emergence of aggressive behavior among adolescents, with particular attention to the role of emotional regulation, self-esteem, family relationships, peer interaction, and the pedagogical environment.[7]

The problem of aggressive behavior in adolescence has been examined from psychological, pedagogical, social, and developmental perspectives. Researchers generally emphasize that adolescent aggression cannot be explained by a single cause because it develops through the interaction of personal characteristics, emotional processes, family relationships, peer influence, and environmental conditions. This multidimensional perspective makes it necessary to consider both internal psychological mechanisms and external pedagogical influences when studying aggressive behavior.

One of the influential approaches to understanding aggression is associated with social learning theory. From this perspective, aggressive behavior can be acquired through observation, imitation, and reinforcement. Adolescents may reproduce behavioral patterns demonstrated by parents, peers, media figures, or other socially significant individuals, particularly when such behavior appears to produce desirable outcomes such

as authority, attention, or social status. This theoretical position suggests that the social environment does not merely surround adolescent behavior but actively participates in shaping behavioral responses.[8]

The frustration-aggression perspective provides another important explanation. According to this approach, aggression may emerge when an individual experiences obstacles, rejection, perceived injustice, failure, or an inability to achieve an important goal. However, frustration does not automatically result in aggressive behavior. The way an adolescent interprets a stressful situation, regulates emotional arousal, evaluates available behavioral alternatives, and perceives the intentions of others can influence whether frustration develops into aggression. Consequently, psychological self-regulation represents an important variable in understanding individual differences in aggressive reactions.

Contemporary research has also emphasized the role of emotional processes. Adolescents who experience difficulties in identifying, controlling, and appropriately expressing negative emotions may have greater difficulty responding constructively to interpersonal conflicts. Anger, emotional impulsivity, and limited self-control can increase the likelihood of hostile responses, especially in situations involving provocation or social rejection. From this perspective, aggression may partly reflect insufficiently developed mechanisms for emotional regulation rather than simply an intentional tendency to harm others.[9]

Self-esteem and self-perception have likewise attracted considerable attention in studies of adolescent aggression. The relationship between self-esteem and aggressive behavior is complex. Both unstable self-evaluation and a strong defensive reaction to threats against one's self-image may contribute to hostile behavior under particular circumstances. An adolescent who perceives criticism or disagreement as a threat to personal value may respond defensively or aggressively. Therefore, the study of aggression requires attention not only to whether adolescents evaluate themselves positively or negatively but also to the stability and flexibility of their self-concept.

Family relationships constitute another significant area in the literature. The emotional climate of the family, quality of parent-adolescent communication, consistency of parental expectations, and methods of discipline may influence the development of behavioral regulation. Supportive and respectful communication can provide adolescents with models of constructive interaction, whereas persistent hostility, harsh punishment, inconsistent boundaries, or emotionally distant relationships may contribute to maladaptive behavioral responses. Nevertheless, family influence should not be interpreted deterministically because adolescents also interact with schools, peers, digital environments, and broader social contexts.

Peer relationships become increasingly influential during adolescence. Acceptance by peers, group belonging, and social status may affect the behavioral choices of young people. In some peer groups, aggression may be rewarded or interpreted as a sign of strength, confidence, or social dominance. Under such circumstances, adolescents can learn to use aggressive strategies as a means of gaining recognition or resolving disputes. Conversely, positive peer relationships may provide emotional support and opportunities for learning cooperation, empathy, negotiation, and peaceful conflict resolution.[10]

The educational environment is particularly important from a pedagogical perspective. Teacher-student relationships, classroom management, disciplinary practices, academic pressure, and the overall psychological climate of an educational institution may influence adolescent behavior. A school environment characterized by respect, fairness, psychological safety, and constructive communication can support the development of self-regulation and prosocial behavior. In contrast, repeated humiliation, excessive control, social exclusion, or unfair treatment may intensify negative emotional

reactions in vulnerable adolescents. This indicates that preventing aggression requires attention to the organization of interpersonal relationships within educational settings.

Another important direction in the literature concerns the interaction between psychological vulnerability and environmental stressors. Not every adolescent exposed to family conflict, peer pressure, academic difficulties, or negative social experiences develops persistent aggressive behavior. Individual differences in temperament, coping strategies, emotional competence, social skills, and resilience may determine how environmental challenges are interpreted and managed. Therefore, current approaches increasingly favor interactional models rather than explanations based on isolated risk factors.

The analysis of existing theoretical perspectives demonstrates that adolescent aggression is best understood as a dynamic behavioral phenomenon resulting from the interaction of psychological predispositions and social-pedagogical conditions. The literature points to several interconnected areas requiring attention: emotional regulation, self-esteem, frustration tolerance, family relationships, peer influence, teacher–student interaction, and the psychological climate of the educational environment. At the same time, there remains a practical need to integrate these factors into preventive approaches that can be implemented within schools and family settings.[11]

Thus, the reviewed theoretical perspectives provide a conceptual foundation for examining the pedagogical and psychological determinants of adolescent aggressive behavior. Rather than treating aggression as an isolated personal defect, an integrated approach allows researchers and practitioners to identify the conditions that strengthen or reduce aggressive tendencies. Such an approach is particularly relevant for designing preventive and corrective programs aimed at improving adolescents' emotional self-regulation, interpersonal competence, conflict-resolution abilities, and constructive participation in educational and social environments.

2. RESEARCH METHODOLOGY

The study was designed to examine the pedagogical and psychological factors associated with aggressive behavior among adolescents. The research was based on a quantitative approach and focused on identifying relationships between adolescents' aggressive tendencies and selected psychological and educational-environmental characteristics. The methodological framework was developed with consideration of theoretical approaches to aggression, emotional regulation, interpersonal interaction, and adolescent development. In particular, the study drew on the ideas of A. Bandura concerning social learning, L. Berkowitz's views on aggression and emotional responses, and contemporary approaches emphasizing self-regulation and social interaction as important components of adolescent behavior.[12]

The study involved 72 adolescents aged between 13 and 16 years. The participants were students enrolled in general secondary education. Participation was voluntary, and the research procedures were explained to the participants before data collection. The relatively limited sample size was selected to ensure that the study could be realistically conducted within an educational setting while allowing for the identification of meaningful tendencies in the collected data.

3. RESULT AND DISCUSSION

Several complementary methods were used to examine the psychological and pedagogical factors associated with adolescent aggression.

First, an aggression assessment questionnaire was administered to determine the general level and predominant manifestations of aggressive behavior. The instrument assessed tendencies related to verbal aggression, physical aggression, irritability, hostility, and indirect forms of aggressive response.

Second, an emotional regulation assessment was used to examine the adolescents' ability to recognize, control, and appropriately express negative emotional states. This measure was included because difficulties in emotional regulation may increase the probability of impulsive or hostile reactions in conflict situations.

Third, a self-esteem assessment was applied to identify differences in adolescents' perceptions of their own abilities and personal value. The inclusion of this variable made it possible to examine whether unstable or inadequate self-evaluation was associated with aggressive tendencies.

Fourth, a short pedagogical-environment questionnaire was developed for the purposes of the study. It focused on adolescents' perceptions of teacher-student relationships, classroom psychological climate, disciplinary practices, peer interaction, and the degree of perceived support within the educational environment.

Data collection was conducted in several consecutive stages. At the initial stage, participants were informed about the general purpose and procedure of the research. The psychological questionnaires were then administered under similar conditions in order to minimize the influence of external factors. Participants were encouraged to provide responses reflecting their actual experiences rather than socially desirable answers.

At the second stage, the collected responses were organized and coded for statistical processing. Particular attention was given to the relationships between aggressive behavior and emotional regulation, self-esteem, peer relationships, and perceptions of the educational environment.

At the final stage, the obtained results were statistically analyzed and interpreted in relation to the theoretical assumptions of the study. The interpretation emphasized associations between variables rather than treating any single factor as the sole cause of aggressive behavior.

The collected data were processed using SPSS statistical software. Descriptive statistics, including the mean value and standard deviation, were calculated to determine the general distribution of the measured characteristics.

To examine relationships among the principal variables, the Pearson correlation coefficient (r) was applied. This analysis made it possible to determine whether higher levels of aggression were associated with lower emotional regulation, differences in self-esteem, or unfavorable perceptions of the pedagogical environment.

Table 1. For comparing groups with different levels of aggressive behavior, an independent-samples t-test was used where appropriate. Statistical significance was evaluated at the conventional $p < 0.05$ level.[13]

Table 1. Structure of the Main Variables[14]

Variable	Indicators	Research method	Statistical procedure
Aggressive behavior	Verbal, physical, indirect aggression, hostility	Aggression questionnaire	Mean, SD
Emotional regulation	Emotional awareness, impulse control, emotional expression	Emotional regulation scale	Pearson correlation
Self-esteem	Self-perception, personal value, confidence	Self-esteem scale	Pearson correlation
Educational environment	Teacher-student relations, classroom climate, discipline	Pedagogical-environment questionnaire	Mean, SD, correlation

Peer interaction	Peer acceptance, conflict, social support	Questionnaire	Pearson correlation
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The methodological design therefore combined psychological assessment with an examination of the educational environment. This allowed the study to move beyond a purely individual explanation of aggression and consider how adolescents' emotional and personal characteristics interact with their social and pedagogical experiences. The selected methods were also intended to provide a practical basis for identifying adolescents who may benefit from psychological and pedagogical preventive interventions.[15]

4. CONCLUSION

The study demonstrates that aggressive behavior in adolescents should be understood as a multidimensional phenomenon influenced by the interaction of psychological characteristics and pedagogical conditions. Aggression does not generally emerge from a single factor; rather, it may develop through the combined effects of emotional difficulties, self-perception, interpersonal relationships, family experiences, peer influence, and the quality of the educational environment.

The analysis indicates that difficulties in emotional regulation may increase adolescents' vulnerability to impulsive and hostile reactions, particularly when they encounter frustration, criticism, interpersonal disagreement, or perceived rejection. The ability to recognize and manage negative emotions therefore represents an important protective resource against aggressive responses. Developing emotional self-control can help adolescents replace immediate reactive behavior with more constructive forms of communication and problem solving.

The study also highlights the importance of self-esteem and interpersonal experiences. Adolescents who experience instability in their self-perception or interpret social interactions as threatening may be more likely to respond defensively in challenging situations. At the same time, supportive relationships with parents, teachers, and peers can create conditions that encourage psychological security and socially appropriate behavior.

From a pedagogical perspective, the psychological climate of the educational institution plays a significant preventive role. Respectful teacher–student communication, consistent and fair disciplinary practices, opportunities for dialogue, and timely psychological support can contribute to the development of adolescents' self-regulation and interpersonal competence. Preventive work should therefore focus not only on correcting aggressive behavior after it appears but also on creating an educational environment that reduces the conditions contributing to its development.

The findings further suggest that effective prevention requires cooperation between the adolescent, family, school, teachers, and psychological support specialists. Preventive programs should include activities aimed at strengthening emotional regulation, empathy, communication skills, frustration tolerance, constructive conflict resolution, and adaptive coping strategies. Such interventions can help adolescents develop alternative behavioral responses when experiencing anger, disagreement, or emotional pressure.

In conclusion, addressing adolescent aggression requires an integrated pedagogical and psychological approach. Early identification of risk factors, supportive interpersonal relationships, emotionally responsive teaching practices, and systematic psychological prevention can reduce the likelihood of persistent aggressive behavior. Future research may expand the present approach by examining larger and more diverse adolescent groups, comparing different educational environments, and evaluating the long-term effectiveness of targeted preventive programs.

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