# PSYCHOLOGICAL FACTORS UNDERLYING THE EMERGENCE OF AGGRESSIVE BEHAVIOR IN ADOLESCENTS

Gulbakhor Murodovna Shukurova

*Second-year Master's Student in Psychology, Tashkent International University of Financial Management and Technologies*

DOI: https://doi.org/10.5281/zenodo.24118585 · Received: 30 October 2026 · Accepted: 2 November 2026 · Published: 5 November 2026

**Abstract:** This article analyzes the theories and underlying factors of aggressive behavior in adolescents. Furthermore, it establishes an ecological model for studying these factors, supported by a comprehensive set of questionnaires, projective techniques, and expert assessment methods.

**Keywords:** aggression, aggressive behavior, adolescence, psychological factors, ecological model, Buss-Durkee Hostility Inventory, family relations

## I. Introduction

Adolescence (ages 11–15) is one of the most sensitive stages of personality development; it is during this period that aggressive manifestations intensify, increasing the risk of becoming entrenched in the personality structure. According to the 2021/2022 HBSC survey conducted by the World Health Organization Regional Office for Europe (spanning 44 countries and regions, with over 279,000 respondents aged 11, 13, and 15), approximately 11% of students experienced bullying at school, 15% experienced cyberbullying, and 6% bullied others [1]. These figures highlight the widespread nature of the problem and the need to investigate its psychological roots.

Although some studies have addressed adolescent aggression in Uzbekistan, the personal, familial, and social factors influencing its emergence—along with their interplay—have not been sufficiently examined in a comprehensive manner [2]. The purpose of this article is to conduct a theoretical analysis of the psychological factors underlying aggressive behavior in adolescents and to establish a research model and a methodological framework for their empirical investigation.

To achieve this goal, the following objectives were set: to clarify the concepts of aggression, aggressiveness, and aggressive behavior; to conduct a comparative analysis of the primary theoretical approaches to aggression; to systematize the factors influencing the emergence of aggression during adolescence; and to establish a research model and a set of methods for the empirical study of these factors. The scientific novelty of this article lies in examining these factors not in isolation, but as a three-tiered system based on an ecological approach, while proposing an age-appropriate methodological framework to measure them.

## II. Methods

This article is theoretical in nature and does not present empirical data. The study employed several methods of theoretical analysis: reviewing international, Russian, and Uzbek scientific literature on aggression; conducting a comparative analysis of theoretical approaches; systematizing and synthesizing the underlying factors; and theoretically constructing the research model.

The primary sources selected for the analysis included reviews of classical and modern theories of aggression, developmental taxonomies of adolescent antisocial behavior, meta-analyses on family factors, international epidemiological surveys, and both original and adapted versions of aggression assessment instruments. The main criteria for source selection were publication in peer-reviewed academic outlets and verifiability.

Based on the results of the theoretical analysis, a research design was developed for the subsequent empirical phase. The study is planned to be conducted anonymously among 11–15-year-old students from secondary schools in Tashkent (a planned sample of 220–240 participants, divided into equal groups by age and gender), subject to written parental consent and student assent.

## III. Results

The Concept and Forms of Aggression. The analysis highlighted the need to distinguish between the concepts of "aggression," "aggressiveness," and "aggressive behavior." Aggression is an action intended to harm another person; aggressiveness is an individual's relatively stable readiness to respond aggressively across various situations; and aggressive behavior is the external, observable manifestation of this predisposition [3]. A distinction is made between physical and verbal, direct and indirect, and reactive and proactive forms of aggression. To measure these, questionnaires have been developed that isolate the physical, verbal, anger, and hostility components of aggression [4].

Comparative Analysis of Theoretical Approaches. Table 1 summarizes how major theories explain the origins of aggression.

**Table 1.** Major theoretical approaches to aggression

| Theory | Authors | Source of aggression |
|---|---|---|
| Psychoanalytic | Z. Freyd | Internal destructive drive |
| Ethological | K. Lorens | Innate instinct |
| Frustration-aggression | J. Dollard va boshq., L. Berkovits | Goal-blocking obstacle (frustration) |
| Social learning | A. Bandura | Observation, imitation, and reinforcement |
| Social information processing | N. Krik, K. Dodj | Hostile interpretation of the situation |
| General aggression model | K. Anderson, B. Bushman | Interaction of personal and situational factors |

© 2026 Bulletin of International Journals · Germany · ISSN 2750-3402 (online) · CC BY 4.0

The modern General Aggression Model (GAM) integrates previous approaches: personal and situational factors influence an individual's internal state (cognitions, emotions, and physiological arousal), which in turn determines the type of response through the appraisal of the situation [5]. Meanwhile, the Social Information Processing model identifies the tendency of aggressive children to interpret others' intentions as hostile as a primary cognitive mechanism [6].

The specifics of adolescence. T. Moffitt distinguishes two pathways of antisocial behavior: adolescence-limited behavior and life-course-persistent behavior that begins in childhood [7]. This classification indicates that not every aggressive act in an adolescent should be evaluated as a persistent disorder; however, early-onset and stable forms must be identified separately.

Age-specific characteristics that heighten the predisposition to aggression during adolescence were also identified. At this age, a "sense of adulthood" emerges, causing the adolescent to strive for independence and begin perceiving adult supervision as a restriction. The search for identity, sensitivity to physical appearance and status, and emotional instability linked to hormonal changes intensify. Because peer interaction takes on paramount importance, being belittled or rejected within a group becomes a powerful source of frustration, and even a minor conflict can trigger a disproportionately aggressive response.

Systematization of factors. As a result of the analysis, the factors of aggression were integrated into a three-level model:

1. Macro-level — the sociocultural environment, school, and digital environment (bullying, cyberbullying, aggressive content).

2. Meso-level — family (parenting style, parental hostility, directiveness, and inconsistency, corporal punishment) and the peer group. The link between corporal punishment and childhood aggression has been noted in meta-analytic studies, although this relationship is primarily correlational in nature [8].

3. Micro-level — personal characteristics: anxiety, self-esteem, type of response to frustration, emotional self-regulation; age and gender are treated as moderators.

Alongside risk factors, the model also accounts for protective factors: a warm and trusting relationship with parents, the presence of at least one close adult or friend in the adolescent's life, empathy and the ability to verbalize emotions, and a safe, supportive school environment. National upbringing traditions and the mahalla institution can also act as factors that curb aggression through social control.

Battery of assessments. Based on the model, the following instruments were selected: the Buss–Durkee Hostility Inventory (forms of aggression, aggressiveness and hostility indices; a standardized Russian version is available [9]), the Buss–Perry Aggression Questionnaire [4], S. Rosenzweig's Picture-Frustration Study (direction of reaction to frustration), the "Adolescents About Parents" (ADOR) inventory (5 scales of parental attitudes) [10], the Spielberger–Khanin Anxiety Scale, the Dembo–Rubinstein Self-Esteem Assessment, and an expert evaluation questionnaire for the homeroom teacher. Since the Russian version of ADOR is designed for 13–18-year-olds, the comprehensibility of the items for 11–12-year-olds will be tested in a pilot study [10]. For data analysis, the use of group comparisons, correlation, hierarchical regression, and mediation analysis is planned.

## IV. Discussion

Theoretical analysis demonstrated that adolescent aggression cannot be explained by a single cause: instinct, frustration, social learning, and cognitive theories each illuminate one aspect of the phenomenon, whereas the generalized model integrates them as a complex of factors [5]. Therefore, the proposed three-level model is designed to examine these factors in their interaction rather than in isolation. For instance, hostile family relationships may heighten anxiety, and anxiety, in turn, may intensify reactive aggression during peer conflicts; this hypothesis will be tested through mediation analysis.

From the author's perspective, three key aspects warrant special attention. First, adolescent aggression should be interpreted not merely as a punishable offense, but as a signal of unmet needs—specifically, the need for recognition, autonomy, and security. Second, in the context of Uzbekistan, children being left in the care of relatives due to parental labor migration is a factor that requires separate study; here, the primary risk lies in the disruption of supervision and emotional closeness. Third, the impact of the digital environment should not be limited to video games, as it is also necessary to account for ridicule and cyberbullying on social media.

The theoretical conclusions drawn are also relevant for practice. In a school psychologist's work, identifying an aggressive adolescent should not rely on the results of a single assessment tool, but rather on a combination of self-assessment, projective testing, and observations by the homeroom teacher; comparing information from multiple sources reduces the risk of misdiagnosis. Furthermore, preventive work should target not only the adolescent but also the family, incorporating sessions with parents on parenting styles and conflict resolution. Training in digital literacy is also necessary for both students and parents to address the risks of the digital environment.

The study also has certain limitations: there are no official Uzbek versions of the selected assessment tools, meaning they must be adapted through back-translation and a pilot study; additionally, the cross-sectional design does not allow for definitive conclusions regarding cause and effect. Therefore, the forthcoming results will be interpreted as statistical correlations consistent with the model.

## V. Conclusion

1. Aggressive behavior in adolescents is determined by the interaction of personal, family, school, and digital environment factors; the General Aggression Model serves as the most comprehensive theoretical framework to explain it.

2. Distinguishing between temporary and persistent aggressive behavior during adolescence is crucial for properly targeting preventive efforts.

3. The proposed macro–meso–micro-level model, along with the battery of questionnaires, projective tests, and expert assessments, provides a foundation for empirically testing these factors in a sample of Uzbek adolescents.

## References


[1] World Health Organization Regional Office for Europe. A focus on adolescent peer violence and bullying in Europe, central Asia and Canada. Health Behaviour in School-aged Children international report from the 2021/2022 survey. Vol. 2. – WHO Regional Office for Europe, 2024.

[2] Omonova M.D., Sotvoldiyev Sh.N. o‘smirlarda agressiyaning psixologik xususiyatlari // Technical Science Research in Uzbekistan. – 2025. – Vol. 3, № 3. – B. 80–85.

[3] Реан А.А. Агрессия и агрессивность личности // Психологический журнал. – 1996. – Т. 17, № 5. – С. 3–18.

[4] Buss A.H., Perry M. The Aggression Questionnaire // Journal of Personality and Social Psychology. – 1992. – Vol. 63, № 3. – P. 452–459.

[5] Anderson C.A., Bushman B.J. Human aggression // Annual Review of Psychology. – 2002. – Vol. 53. – P. 27–51.

[6] Crick N.R., Dodge K.A. A review and reformulation of social information-processing mechanisms in children’s social adjustment // Psychological Bulletin. – 1994. – Vol. 115, № 1. – P. 74–101.

[7] Moffitt T.E. “Life-course-persistent” and “adolescence-limited” antisocial behavior: A developmental taxonomy // Psychological Review. – 1993. – Vol. 100. – P. 674–701.

[8] Gershoff E.T. Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review // Psychological Bulletin. – 2002. – Vol. 128.

[9] Хван А., Зайцев Ю., Кузнецова Ю. Стандартизация опросника А. Басса и А. Дарки // Психологическая диагностика. – 2008. – № 1.

[10] Вассерман Л.И., Горьковая И.А., Ромицына Е.Е. Психологическая методика «Подростки о родителях» и её практическое применение. – СПб., 1994.


## References (transliterated)


[1] World Health Organization Regional Office for Europe. A focus on adolescent peer violence and bullying in Europe, central Asia and Canada. Health Behaviour in School-aged Children international report from the 2021/2022 survey. Vol. 2. – WHO Regional Office for Europe, 2024.

[2] Omonova M.D., Sotvoldiyev Sh.N. o‘smirlarda agressiyaning psixologik xususiyatlari // Technical Science Research in Uzbekistan. – 2025. – Vol. 3, № 3. – B. 80–85.

[3] Rean A.A. Agressiya i agressivnost lichnosti // Psikhologicheskii zhurnal. – 1996. – T. 17, № 5. – S. 3–18. (In Russ.)

[4] Buss A.H., Perry M. The Aggression Questionnaire // Journal of Personality and Social Psychology. – 1992. – Vol. 63, № 3. – P. 452–459.

[5] Anderson C.A., Bushman B.J. Human aggression // Annual Review of Psychology. – 2002. – Vol. 53. – P. 27–51.

[6] Crick N.R., Dodge K.A. A review and reformulation of social information-processing mechanisms in children’s social adjustment // Psychological Bulletin. – 1994. – Vol. 115, № 1. – P. 74–101.

[7] Moffitt T.E. “Life-course-persistent” and “adolescence-limited” antisocial behavior: A developmental taxonomy // Psychological Review. – 1993. – Vol. 100. – P. 674–701.

[8] Gershoff E.T. Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review // Psychological Bulletin. – 2002. – Vol. 128.

[9] Khvan A., Zaitsev Yu., Kuznetsova Yu. Standartizatsiya oprosnika A. Bassa i A. Darki // Psikhologicheskaya diagnostika. – 2008. – № 1. (In Russ.)

[10] Vasserman L.I., Gorkovaya I.A., Romitsyna E.E. Psikhologicheskaya metodika «Podrostki o roditelyakh» i ee prakticheskoe primenenie. – SPb., 1994. (In Russ.)