their personological nature. Specifically, impulsive aggression was associated with high neuroticism, and premeditated aggression was associated with low agreeableness and high extraversion. Adolescents with impulsive aggressiveness had a pattern of personality characteristics considered socially distant and emotionally unstable. In contrast, adolescents with premeditated aggression presented a pattern of egocentric and socially competent characteristics but without concern for others.

Despite the relative phenomenological and neurobiological independence of premeditated and impulsive aggression, the two are correlated (Poulin & Boivin, 2000) and can be combined with some frequency. This has been confirmed in a sample of adolescents by Andreu, Peña, and Ramírez (2009), which does not prevent some adolescents from showing predominant aggressiveness, justifying the study presented here.

We face a disturbing phenomenon in any aggressiveness since all modalities are harmful. A better understanding of aggressiveness in adolescence is a necessary step towards its prevention.

## Aggression in adolescence - sources and causes

Aggression in adolescence hinders interpersonal relationships. An analysis of the scientific literature reveals that aggression in adolescence is a significant public health problem that is increasingly being addressed with the most significant interest, despite the fact that there are not enough studies to prevent it, nor are the necessary alternative social orientations promoted in this age group (Pekince & Erci, 2021). Given the above data, the question arises as to what education, perhaps very rationalistic and overwhelmed by the dizzying social and technological changes taking place, can do to be effective in its commitment towards personal development and coexistence in a stage of life in which there is no shortage of conflicts and emotional overload. When these problems and dysregulations are not prevented or channeled, the risk of triggering aggressiveness is much greater (Rothenberg et al., 2019).

Aggressive behavior is of concern in adolescence and can be increased and aggravated by the consumption of alcohol and other drugs. Modern research confirms the existence of a strong link between the use of psychoactive substances for non-medical purposes, alcohol intoxication, and violent behavior among adolescents (Benedetti et al., 2022). Alonso Fernández (2002) points out that drug-generated violence is distributed into two main types, which can be combined: chemical, which generates a disinhibiting effect (e.g., ethyl alcohol and cannabis), and subcultural when the drug-induced activity links the subject to a criminal network (e.g., gangs, mafias) that generally exerts territorial control. About the specific association of drugs and alcohol with violent behavior, it should, therefore, be noted that both the environment and psychoactive substances can encourage violent behavior. As mentioned above, the causes of aggression and violence can vary greatly.

From a biopsychosocial perspective, the determinants of adolescent aggression include relevant biological, psychological, and social factors, which together explain the aggressive manifestations (Fauzi et al., 2023).

When aggression is severe, it is preferred to speak of violent behavior (from vis, strength; Corominas, 1987). In this regard, Allen and Anderson (2017) argue that aggressive and violent behaviors are best distinguished if they are placed on a continuum of severity, with relatively minor acts of aggression (e.g., shoving) at the lower end of the spectrum and violence (e.g., homicide) at the higher end or end of the spectrum. In a way, these authors add that all acts of violence are instances of aggression, but not all acts of aggression are considered instances of violence.

According to WHO (2023), interpersonal violence is one of the leading causes of death among adolescents and young people worldwide, although the data vary substantially by world region. For example, violence accounts for almost one-third of all adolescent male deaths in low- and middle-income countries in the Region of the Americas. It is appropriate to offer some more data provided by WHO:

- 1. Violence during adolescence increases the risks of injuries, HIV and other sexually transmitted infections, mental health problems, poor school performance and school dropout, early pregnancies, reproductive health problems, and communicable and non-communicable diseases.
- 2. In addition to deaths, youth violence results in injury, disability, and long-term health consequences that include mental health problems and increased risk behaviors. It is also associated with higher school dropout rates and negative impacts on cognitive development and social behavior.
- 3. 37% of the total number of annual homicides worldwide, more than 176,000 homicides, occur among young people between the ages of 15 and 29.
- 4. Homicide is the third most frequent cause of death among 15-29-year-olds, with a large majority of victims and perpetrators being male.
- 5. For every young person killed, many others are injured.
- 6. When not lethal, youth violence has a profound, often lifelong, physical, psychological, and social impact on the individual.
- 7. Sexual violence also affects a significant proportion of young people. For example, 1 in 8 young people report having been sexually abused.
- 8. Physical fighting and bullying are also widespread. A study conducted in 40 developing countries revealed that, on average, 42% of boys and 37% of girls suffered from it.
- 9. Youth violence increases costs in health services, social protection, and justice, and decreases productivity and property values.

The magnitude of the problem is such that it needs to be prevented through a multilevel, multisectoral, and multidisciplinary strategy. In this paper, we propose an educational approach. To this perspective, we will dedicate the final reflections. However, first, we return to the conceptual field to analyze, clarify, and, subsequently, provide some guidance to help prevent aggressive adolescent behavior.

## Conclusions: An Educational Approach to Aggression

In general, we emphasize the need to establish pedagogical foundations conditioning active involvement of minors in preventing aggressive behavior and eliminating its negative consequences for the sense of well-being and simultaneous coordination of activities from the family, school and social environments - so that the activities of all environments participating in the education of children and adolescents are harmonized, unified.

After reviewing various aspects of aggressive behavior in adolescence, we highlight the importance of a comprehensive educational approach that is humanistic, multidimensional, and systemic. In this approach, the interconnection between different actors and environments plays a pivotal role.

While the manifestations of aggression vary depending on age and circumstances, early educational intervention throughout development is crucial. The general strategy should be supported by personalized psychological measures in a warm and safe relational environment. In this environment, both parents and teachers must actively participate and possess appropriate pedagogical competencies, which can prevent the emergence or consolidation of aggressive tendencies.

Research indicates that early aggressive behavioral problems increase the risk of antisocial behavior in later stages of life (Ettekal & Ladd, 2015). Children and their environments who can benefit from early interventions involving the family and school (teachers and peers), especially when signs such as irritability, oppositional-defiant behavior, and various forms of aggression appear, gain the opportunity to free themselves in later development from the negative effects of early experiences of being a victim or perpetrator of aggression.

Aggressive behavior, which can significantly impact health, social, educational, and legal systems, often manifests through risky and antisocial actions such as criminal behavior, substance abuse, fighting, and harassment. The causal factors include family dysfunction, socioeconomic hardship, childhood trauma, neuropsychological deficits, and the negative influence of technologies and mass media due to exposure to violent content, as well as peer pressure. These factors interact in complex ways.

Continuous and intense adverse situations during childhood, often linked to risk contexts and dysfunctional child-parent relationships, tend to increase aggressive behaviors. Conversely, positive family and school environments characterized by affectionate interpersonal relationships, cohesion, a positive and guiding disciplinary style, shared values, engaging activities, and open communication can help prevent the development of aggressive behaviors.

In conclusion, the serious concerns and disruptions caused by aggression in school, family, and social settings cannot be alleviated without implementing preventive educational strategies. These strategies must be multidimensional and systemic, integrated into the broader pedagogical framework designed to promote personal development and social coexistence.

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Receipt date: 20th June 2024

Receipt date after correction: 27th August 2024 Print Acceptance Date: 28th August 2024