

Between Transition and Turbulence: Understanding the Emotional and Contextual Roots of Aggression during Adolescence

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Abstract

Adolescence is a period of substantial change in which young people experience new emotional, social, cognitive, and interpersonal demands. Aggressive behavior during this period may arise from the interaction of these demands with the resources available to adolescents for managing them. This theoretical paper aimed to develop a transition–turbulence framework to explain variations in adolescent aggression. A conceptual review and synthesis of existing literature on adolescent development, emotion regulation, social cognition, parenting, peer relationships, and ecological influences were undertaken. The analysis suggests that adolescence itself does not directly or inevitably lead to aggression. Instead, aggressive behavior may occur when developmental pressures become difficult to manage, particularly when emotional regulation, coping abilities, social understanding, or environmental support are limited. The framework also recognizes that adolescents may follow different patterns of aggression, including increasing, decreasing, or relatively stable trajectories. Overall, the proposed framework provides a multidimensional and dynamic perspective for understanding adolescent aggression.

Keywords: adolescence, aggression, emotion regulation, developmental transition, turbulence, social information processing, parenting.

1. Introduction

Adolescence is a significant developmental period marked by rapid biological, psychological, emotional, cognitive, and social changes. During this stage, individuals gradually develop greater independence while learning to manage emotions, relationships, responsibilities, and increasing social expectations. Erikson (1968) identified adolescence as a crucial stage of psychosocial development in which individuals work toward establishing a stable sense of identity. Similarly, Steinberg (2005) emphasized that substantial changes in cognitive, emotional, and social functioning occur during adolescence. Therefore, adolescence can be understood as a multidimensional developmental transition rather than simply a period of physical maturation.

Aggressive behaviour may become more noticeable during adolescence; however, it should not be considered a universal or inevitable feature of this developmental stage. Moffitt (1993) proposed that antisocial behaviour can follow different developmental pathways, with some individuals showing temporary increases during adolescence and others displaying more persistent patterns. Longitudinal research has also demonstrated considerable variation in the development of aggression, including declining, increasing, and consistently elevated patterns (Broidy et al., 2003; Bongers et al., 2004). Such findings indicate that adolescent aggression is influenced by multiple developmental and contextual factors rather than by age alone. One important consideration is the relationship between developmental demands and the resources available to adolescents for managing them. Adolescents may experience academic pressures, changing family expectations, peer evaluation, interpersonal difficulties, identity concerns, and greater demands for autonomy. At the same time, emotional and behavioural regulation skills continue to develop. Steinberg (2008) suggests that adolescent behaviour is shaped by the interaction between developing self-control and increased sensitivity to social and emotional experiences. Difficulties in managing these demands may therefore contribute to emotional and behavioural problems in some adolescents. Emotion regulation provides an important perspective for understanding aggression. Gross (1998) conceptualized emotion regulation as the processes through which individuals influence their emotional

experiences and expressions. Experiences such as anger, frustration, or rejection do not automatically result in aggression. Rather, the behavioural response may depend on how emotional arousal is understood, regulated, and expressed. Eisenberg et al. (2010) similarly highlighted the importance of self-regulation in social and emotional adjustment. Thus, difficulties in regulating intense emotions may increase the likelihood of aggressive responses in challenging situations. Cognitive processes also influence how adolescents respond to interpersonal experiences. Crick and Dodge's (1994) Social Information Processing model proposes that individuals interpret social cues, infer others' intentions, generate possible responses, and select behavioural actions. When ambiguous social situations are interpreted as hostile or threatening, adolescents may be more likely to experience anger and respond aggressively.

The broader social environment further contributes to adolescent development. Bronfenbrenner (1979) emphasized that development occurs within interconnected systems, including family, peers, school, community, and wider society. Bandura (1977) also proposed that behaviour can be acquired through observation, imitation, and reinforcement. Consequently, supportive relationships and positive environments may provide resources for healthy adjustment, whereas conflict, negative peer experiences, and exposure to aggressive behaviour may increase developmental challenges. Building on these perspectives, the present theoretical article introduces the concepts of transition and turbulence. Transition refers to the normative biological, psychological, and social changes associated with adolescence, whereas turbulence describes periods in which developmental demands become difficult to manage using currently available personal and environmental resources. Turbulence is proposed as a conceptual term rather than a diagnostic or clinical construct.

Overall, the framework conceptualizes aggression as one possible behavioural response arising from the interaction between developmental demands, emotional regulation, social interpretation, and environmental conditions. By integrating developmental, emotional, social-cognitive, and ecological perspectives, the framework aims to provide a broader understanding of why aggressive behaviour may emerge, persist, or decline differently across adolescents.

2. Adolescence as a Developmental Transition

Adolescence involves interconnected changes in autonomy, social relationships, cognitive functioning, emotional experience, and expectations for increasing responsibility (Steinberg, 2017; Blakemore & Mills, 2014). The growing desire for independence can provide opportunities to develop competence, self-direction, and decision-making skills, but it may also create disagreements when adolescents' preferences conflict with parental expectations. At the same time, peer relationships become increasingly important, making acceptance, belonging, and social recognition particularly significant. Experiences such as peer rejection, social exclusion, bullying, and interpersonal conflict may therefore contribute to emotional stress and psychological strain.

Academic responsibilities and decisions concerning education, career, and the future can create additional sources of pressure. However, developmental change should not be viewed as inherently negative or problematic. Adolescents may experience similar transitions in very different ways depending on their previous experiences, emotional and coping resources, quality of relationships, and broader social circumstances. Thus, adolescence introduces a changing range of developmental demands, but these demands do not inevitably lead to any particular behavioural outcome. This distinction forms an important foundation for the present argument. Rather than viewing adolescence itself as a direct cause of aggression, a transition-based perspective considers how developmental demands interact with the resources available to an individual adolescent at a particular point in time. From this perspective, the emergence of aggressive behaviour depends not simply on experiencing developmental change, but on how effectively adolescents are able to manage changing demands within their emotional, interpersonal, and social contexts.

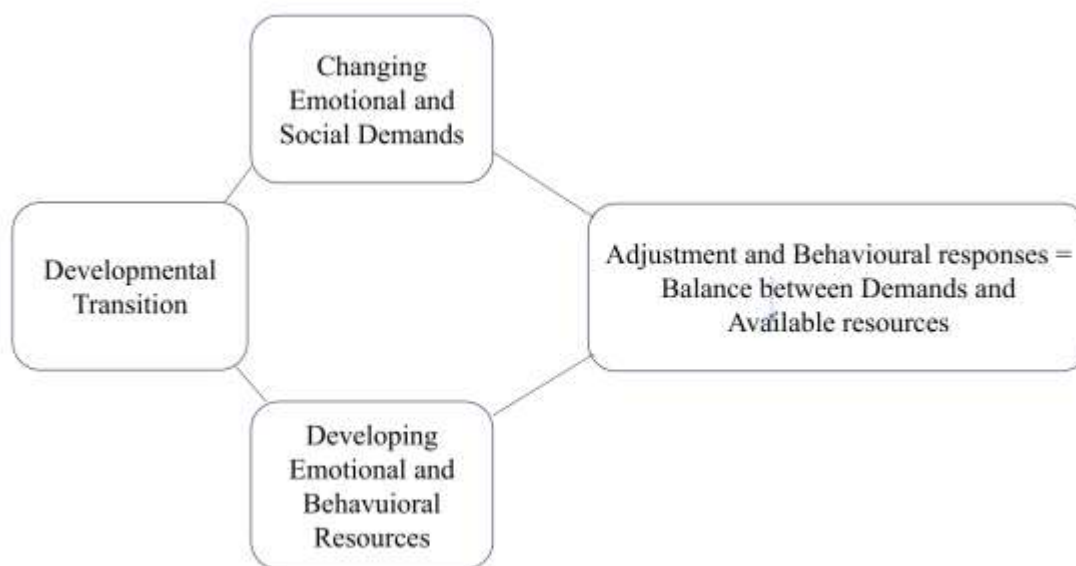


Figure 1. Adolescence as a developmental transition involving changing emotional and social demands.

3. Emotion Regulation and Aggressive Responses

Emotion regulation refers to the processes through which individuals manage their emotional experiences and regulate how emotions are expressed (Gross, 2015). During adolescence, these abilities continue to develop while young people encounter increasingly complex emotional, interpersonal, and social situations. Therefore, experiencing strong emotions such as anger does not necessarily result in aggressive behaviour. Instead, the behavioural response may depend on how emotional arousal is managed and how the situation is interpreted.

For instance, an adolescent who feels angry after a perceived insult may choose to pause, withdraw temporarily, seek clarification, or communicate concerns verbally. In contrast, another adolescent may respond through verbal or physical aggression. This difference illustrates that emotional arousal alone cannot fully explain aggressive behaviour.

Recent evidence supports an association between difficulties in emotion regulation and aggression. A recent systematic review and meta-analysis found a significant positive association between difficulties in emotion regulation and aggression, with the association being particularly pronounced for reactive aggression (Smith et al., 2026). The association was stronger for reactive aggression than for proactive aggression. These findings highlight the importance of emotion regulation while also suggesting that other psychological and contextual processes contribute to aggression.

The Social Information Processing model provides an additional explanation (Crick & Dodge, 1994). It proposes that behaviour is influenced by how individuals interpret social cues, understand others' intentions, generate possible responses, and evaluate their consequences. Hostile interpretations of ambiguous situations may increase the likelihood of aggressive responses.

Crick and Dodge (1996) further differentiated reactive and proactive aggression. Reactive aggression is generally linked to perceived provocation and hostile interpretations, whereas proactive aggression is more associated with anticipated rewards or desired outcomes. Thus, aggression may arise through different psychological pathways.

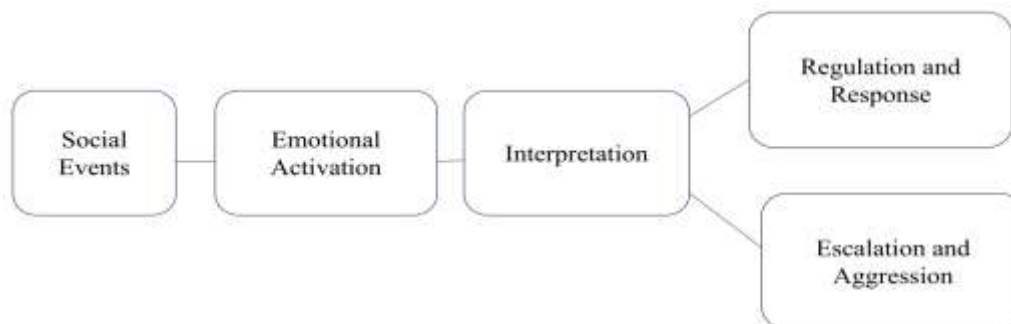


Figure 2. From social event to behavioural response: the role of emotion regulation and interpretation.

4. The Social and Contextual Environment

Adolescent development occurs within interconnected social settings, including the family, peers, school, and wider community. These environments influence how adolescents manage developmental challenges, regulate emotions, and respond to social situations. Smetana and Rote (2019) emphasize that parent–adolescent relationships remain important even as young people seek greater independence. Supportive communication, healthy conflict resolution, appropriate autonomy, and positive family relationships can promote emotional regulation and adaptive behaviour. In contrast, persistent conflict and problematic parental control may contribute to adjustment difficulties.

Parenting practices are also associated with adolescent aggression. Masud et al. (2019) found that parenting styles were related to behavioural outcomes, with authoritarian and permissive approaches generally associated with less favourable outcomes, while authoritative parenting was linked with more positive adjustment.

Peer relationships are equally important. Acceptance, belonging, rejection, bullying, and interpersonal conflict can influence adolescents’ emotional experiences and interpretations of social situations. Schools may similarly function as sources of stress or provide support, belonging, and opportunities for positive development.

These contexts are interconnected rather than independent. Difficulties in one setting may affect functioning in another. Overall, adolescent aggression should be understood within a broader social environment.



Figure 3. Contextual conditions that may amplify or reduce developmental strain.

5. From Transition to Turbulence

The concept of Turbulence describes periods when the demands of adolescent development become difficult to manage with available personal and social resources. Multiple challenges, such as academic pressure, family conflict, peer difficulties, or identity concerns, may become particularly demanding when they occur simultaneously. However, turbulence does not necessarily result in aggression. Adolescents may respond through withdrawal, emotional distress, irritability, impulsivity, conflict, or other behaviors depending on their coping abilities, emotional regulation, previous experiences, and social support. Thus, turbulence is presented as a conceptual framework for understanding changing relationships between developmental demands and available resources over time, rather than as a validated causal or clinical construct.

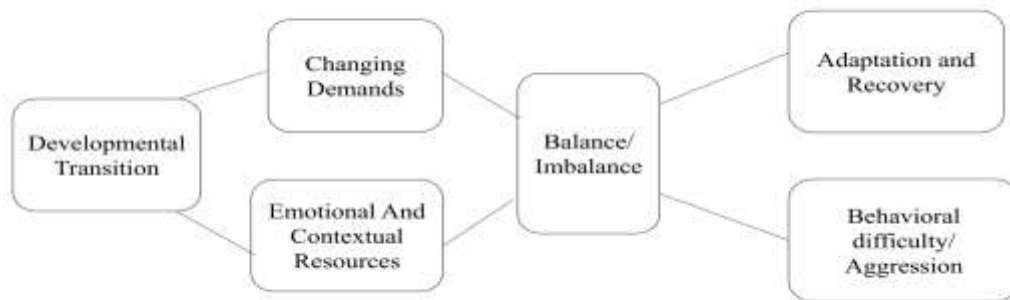


Figure 4. From developmental transition to turbulence and behavioural response.

6. Aggression Is Not a Single Developmental Pathway

Aggression is a complex behaviour that varies in form, function, intensity, and developmental course. Crick and Dodge (1996) distinguished reactive aggression, which commonly occurs in response to perceived threat, frustration, or provocation, from proactive aggression, which is more deliberate and goal-oriented. These forms may involve different emotional and cognitive processes, indicating that aggression cannot be explained solely by difficulties in emotion regulation. Research by Xie et al. (2011) also identified different developmental patterns of aggression from childhood to adolescence, suggesting that adolescents may show low, declining, increasing, or persistently elevated levels of aggressive behaviour.

7. Emotional and Contextual Resources: A Developmental Interpretation

Developmental demands alone do not explain differences in adolescent aggression. Adolescents vary in their emotional skills, coping abilities, relationships, and environmental support. Saarni (1999) described emotional competence as the ability to understand, express, and manage emotions effectively. Difficulties in these abilities may increase vulnerability to aggressive responses, particularly during stressful situations. Contextual resources are also important. Parenting, peer relationships, and school experiences can either support adjustment or increase developmental strain (Masud et al., 2019; Smetana & Rote, 2019). These influences interact rather than operate independently. As emotional skills and social support change over time, aggressive behaviour may also increase, decrease, or remain stable. Therefore, the transition–turbulence framework views adolescent aggression as a dynamic and context-dependent process, not a predetermined developmental outcome.

8. Key Concepts for Theoretical Interpretation

Table 1. Key concepts used in the theoretical discussion.

Concept	Meaning in this paper	Relevance to aggression
Developmental transition	The emotional, social, cognitive, and interpersonal changes that occur during adolescence.	Creates new challenges and expectations that adolescents need to adapt to.
Emotional and regulatory resources	The developing ability to recognize and understand emotions, manage emotional arousal, and choose appropriate behavioural responses.	Can influence how adolescents respond to frustration, disagreements, and situations involving provocation.
Contextual environment	The influence of family relationships, peers, school experiences, and broader social surroundings on adolescent development.	These settings can either increase stress and conflict or provide support that helps adolescents cope effectively.
Developmental strain	The pressure that may arise when adolescents face increasing demands, responsibilities, and difficult experiences.	Greater strain may make it harder to respond adaptively and may increase the likelihood of aggressive reactions.
Turbulence	A period in which developmental demands become difficult to manage with the resources currently available to the adolescent.	Provides a framework for understanding periods of temporary or continuing behavioural difficulties, including aggression.
Aggressive expression	Behaviour involving physical, verbal, relational, reactive, or proactive forms of aggression.	Represents one possible way of responding to challenging situations rather than an unavoidable consequence of adolescent development.
Adjustment and recovery	The process of successfully managing developmental demands and gradually returning to effective emotional and behavioural functioning.	Helps explain why aggressive behaviour may be temporary and may decrease as adolescents develop better coping and regulatory abilities.

The concepts presented above can be understood as a dynamic sequence rather than as isolated variables:

Developmental Transition → Changing Developmental Demands → Developmental Strain → Interaction with Emotional and Regulatory Resources and Contextual Environment → Possible Turbulence → Aggressive or Adaptive Expression → Adjustment and Recovery

This sequence is conceptual rather than strictly linear. The processes may influence one another continuously. For example, aggressive behaviour may itself affect family relationships, peer interactions, school experiences, and subsequent emotional regulation. Similarly, supportive relationships may strengthen emotional resources and reduce developmental strain. The contribution of the present paper is therefore integrative rather than causal. It does not propose that emotional maturity, parenting, or any single contextual factor independently produces or prevents aggression. Instead, the framework emphasizes the dynamic relationship between developmental demands and the resources available to adolescents for managing those demands.

9. Discussion

Adolescence is a period of substantial developmental change involving emotional, cognitive, social, relational, and behavioural adjustments. The present theoretical framework suggests that adolescent aggression should not be

considered an inevitable characteristic of this stage or explained through a single psychological or environmental factor. Instead, aggressive behaviour may emerge from the interaction between changing developmental demands and the emotional, cognitive, behavioural, and social resources available to adolescents.

The transition–turbulence perspective emphasizes that adolescents experience different developmental challenges and possess different abilities to manage them. Academic pressure, family disagreements, peer difficulties, identity concerns, and increasing expectations for independence may create additional demands. When these demands become difficult to manage, adolescents may experience a period of turbulence. However, turbulence does not necessarily result in aggression. Individual differences in emotion regulation, social interpretation, coping skills, previous experiences, and social support may contribute to different behavioural outcomes.

9.1 Relationship to Existing Research on Emotional Maturity and Parenting

Emotional competence is an important resource for successful adjustment during adolescence. Saarni (1999) described emotional competence in terms of the ability to understand, express, and regulate emotions effectively. These abilities may influence how adolescents respond to frustration, rejection, conflict, and other emotionally challenging situations. Difficulties in managing strong emotions may increase vulnerability to aggressive responses, particularly when combined with stressful interpersonal circumstances.

Parenting and parent–adolescent relationships also represent important contextual influences. Masud et al. (2019) identified associations between parenting styles and adolescent aggression, while Smetana and Rote (2019) emphasized the continuing importance of parent–adolescent relationships as young people seek greater autonomy. Supportive communication, appropriate boundaries, emotional availability, and opportunities for age-appropriate independence may provide valuable developmental resources. In contrast, persistent conflict or problematic family interactions may increase stress.

However, neither emotional maturity nor parenting should be considered a direct or independent cause of aggression. Their influence may vary according to individual characteristics and wider social conditions. The present framework therefore integrates emotional and contextual resources within a broader developmental perspective.

9.2 Theoretical and Practical Implications

The transition–turbulence framework has both theoretical and practical implications. Theoretically, it shifts attention away from viewing adolescence itself as the cause of aggression and toward examining the conditions under which aggressive behaviour emerges. Aggression may be more likely when developmental demands interact with emotional activation, difficult social interpretations, interpersonal conflict, or insufficient coping resources.

Practically, prevention should not focus only on controlling aggressive behaviour after it occurs. Interventions may also strengthen skills that help adolescents manage difficult situations, including emotional awareness, emotion regulation, empathy, perspective taking, communication, problem solving, and constructive conflict resolution. Families can contribute through supportive relationships, consistent expectations, and appropriate autonomy. Schools may support adolescents through social-emotional learning, positive teacher–student relationships, counselling, peer support, and safe opportunities for conflict resolution.

9.3 Limitations and Future Directions

The present framework is theoretical and has not been empirically tested or statistically validated. Therefore, it should be regarded as a conceptual synthesis rather than an established causal or predictive model. The concept of turbulence is also theoretical and should not be interpreted as a diagnostic or clinical condition.

Future longitudinal studies can examine how developmental demands, emotion regulation, parenting, peer relationships, school experiences, and aggression change over time. Researchers should also distinguish between reactive and proactive aggression because these forms may involve different psychological processes. Cultural factors can receive greater attention, as expectations regarding autonomy, parenting, emotional expression, discipline, and social relationships vary across societies. Mixed-method research may also provide a more comprehensive understanding by combining quantitative evidence with adolescents' personal experiences.

10. Conclusion

Adolescent aggression is a complex and context-dependent behaviour rather than an inevitable part of adolescence. The transition–turbulence framework suggests that developmental changes and increasing demands may contribute to aggression when adolescents lack sufficient emotional, cognitive, behavioural, or environmental resources to manage challenges. However, adolescents respond differently to these experiences depending on factors such as emotional regulation, coping skills, social relationships, and environmental support.

Family, peers, schools, communities, and cultural contexts can either increase vulnerability to aggression or provide protection and support. Therefore, aggression should be understood as a dynamic response that may increase, decrease, or persist over time, rather than as a fixed adolescent characteristic. Future longitudinal research involving culturally diverse populations can further clarify these developmental pathways and support context-sensitive approaches that promote emotional regulation, adaptive coping, and healthy adjustment during adolescence.

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