Anger Regulation and Aggression in Middle Childhood

Authors & Affiliations

Helena Rohlf & Barbara Krahé

University of Potsdam
Germany

Key Terms Defined

Anger regulation – the process that modulates anger arousal. Anger regulation is not limited to successful, adaptive regulation strategies but also includes maladaptive strategies.
Aggression – Behavior that is carried out with the intention of harming another person (for example by causing physical harm or by damaging the person's social relationships).
Proactive and reactive aggression – Aggressive behavior can serve two different functions. Proactive aggression refers to purposeful, instrumental, "cool-blooded" behavior that is displayed to reach a certain goal (e.g. fun, material goals), whereas reactive aggression is shown in responses to perceived threats or frustrations. Reactive aggression is described as emotional or "hot-blooded" aggression.

Background

The development of adaptive emotion regulation strategies is one of the core developmental tasks in childhood. Children with deficits in emotion regulation are at risk for various problematic outcomes, including aggressive behavior.

In addition, previous studies have indicated that the frequent use of maladaptive anger regulation strategies, such as venting anger openly, is negatively evaluated by peers, leading to social rejection. Social rejection, in turn, is a robust predictor of aggression. Considering these findings, it can be assumed that the link between anger regulation and aggression is partly due to social rejection. This assumption has rarely been addressed in middle childhood to date and was therefore examined in this longitudinal study.

Another important aspect when studying the link between anger regulation and aggression is the distinction between reactive and proactive aggression. According to the theoretical conceptualization of the two functions of aggression, anger is a major component of reactive but not proactive aggression (Price & Dodge, 1989). Thus, it can be assumed that deficits in anger regulation are linked primarily to reactive, but not to proactive aggression. This assumption was also tested in the present study.

Study

The sample for this study consisted of 599 children from 33 public elementary schools in Germany who took part in two data waves 12 months apart. The children were aged between 6 and 9 years at Time 1 (T1) and 7 to 11 years at Time 2 (T2).

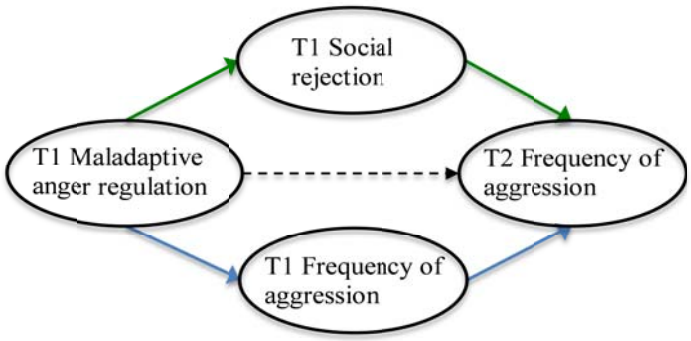
The children´s anger regulation skills were assessed through observing and videotaping their behavior in an anger-eliciting situation. They were instructed to build a tower out of ten toy blocks in two minutes and forty seconds. They were told that they would be allowed to choose a present if they managed to build the tower in this time. The presents as well as an hourglass that indicated the running-out of time were put in front of the children. It was almost impossible to solve this task, as two of the toy blocks were rounded on one side, making the tower collapse again and again. All children received a present regardless of their performance on the task and were carefully debriefed.

The videos were analyzed using a coding system that allowed the identification of four maladaptive strategies: venting the anger (e.g. swearing, smashing the toy blocks on the table), resignation, verbal focus on the frustrating stimuli (talking about the negative aspects of the task), and visual focus on the frustrating stimuli (e.g. looking at the hourglass or the

presents) and one adaptive strategy: solution-orientation (behavior that directly aims to solve the problem in a constructive way, e.g. by testing new strategies to build the tower). Aggressive behavior was assessed through teacher and self-reports. Social rejection was assessed through teacher-, parent-, and self-reports.

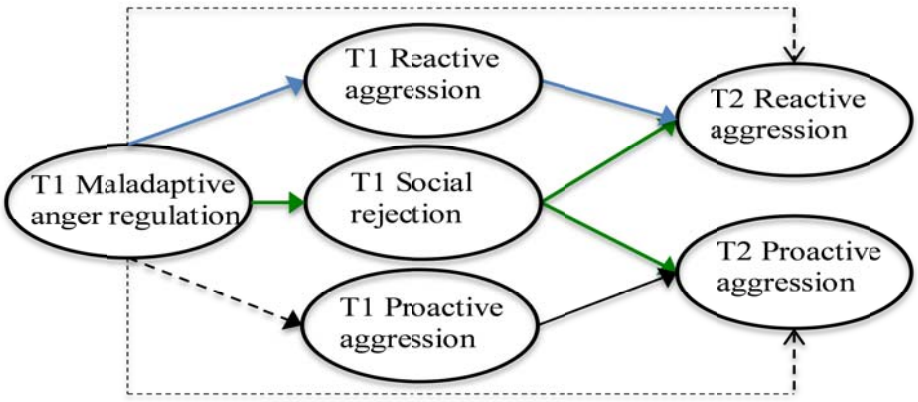
The statistically significant paths are shown as solid lines in Figure 1. Maladaptive anger regulation at T1 was significantly linked to the frequency of aggression and social rejection at T1. No significant direct longitudinal link was found between T1 anger regulation and T2 aggression (as depicted by the dotted line). However, as expected, there were two significant indirect links: T1 maladaptive anger regulation was linked to higher aggression at T2 in that more maladaptive anger regulation was linked (a) to more social rejection and (b) to more aggressive behavior (as shown by green and blue lines, respectively), both of which predicted aggression at T2.

Figure 1. Pathways from anger regulation to the frequency of aggression



Regarding the functions of aggression, Figure 2 shows that as expected, maladaptive anger regulation was linked cross-sectionally to reactive but not proactive aggression. Over time, reactive aggression was indirectly predicted by maladaptive anger regulation through reactive aggression at T1. Furthermore, T1 social rejection predicted both reactive and proactive aggression at T2, so maladaptive anger regulation influenced both forms of aggression through a greater likelihood of experiencing social rejection from the peer group.

Figure 2. Pathways from anger regulation to the functions of aggression



Anger Regulation and Aggression in Middle Childhood

Implications for Violence Prevention

The findings of this study indicate that maladaptive anger regulation may contribute to the development of both reactive and proactive aggression in middle childhood by eliciting social rejection from peers. Maladaptive anger regulation is an important risk factor for aggression through its influence on social rejection. Thus, programs that aim to promote peer relationships should seek to enable children to control maladaptive strategies and promote more adaptive strategies for coping with anger, such as focusing on the solution of the task. Helping children who are prone to have angry outbursts to engage in regulation strategies that are more socially accepted among peers may decrease social rejection and may therefore indirectly reduce reactive as well as proactive aggression.

This knowledge may be particularly important for teachers, as rejection by peers occurs to a large extent in the school context. Learning to be alert and sensitive to potentially anger-arousing situations, for instance, may help teachers to intervene directly by supporting children with deficits in anger regulation to generate solution-orientated regulation strategies.

References

Price, J. M., & Dodge, K. A. (1989). Reactive and proactive aggression in childhood: relations to peer status and social context dimensions. *Journal of Abnormal Child Psychology, 17,* 455–71.

This brief is a summary of research presented at the 21st World Meeting of the International Society for Research on Aggression. Support for the development of this research brief was provided by the Centers for Disease Control and Prevention (CDC). The findings and conclusions in this brief are those of the authors and do not necessarily represent the official position of the CDC. This project was supported by Grant #2012-JF-FX-0062 awarded by the Office of Juvenile Justice and Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice. The opinions, findings, and conclusions or recommendations expressed in this publication are those of the author and do not necessarily reflect those of the Department of Justice.