

AGGRESSION

Development of Indirect Aggression Before School Entry

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Introduction

Attempts to understand and prevent childhood aggression have been predominantly guided by a male-oriented model with a focus on physical aggression. However, children can also hurt their peers in more subtle ways, however, for example through social exclusion or rumor spreading.^{1,2} These forms of aggression are as harmful and elicit the same physiological and neural pain responses as physical aggression.³ They also have a range of negative and potentially long-lasting effects on the victims, including reduced school performance,⁴ somatic complaints,⁵ anxiety, depression,⁶ and even suicide attempts.⁷

Subject

Different labels have been used to describe these more subtle forms of aggression. *Indirect* aggression,⁸ consists of a set of circuitous strategies that implicate peers as a means to sabotage the victim's social relationships and self-esteem, for example, through slanderous rumors or by becoming friends with another as revenge. The indirect nature of the aggressive act often enables

the aggressor to remain unidentified, thereby avoiding a counterattack from the victim and disapproval from other peers or adults. *Social aggression*⁹ and *relational aggression*¹⁰ also encompass directly expressed rejection of the victim and non-verbal behaviours such as facial expressions of disdain. Despite the slight differences, all these terms describe highly related constructs.¹¹

Problems

It has been argued that indirect aggression is more typical of girls.^{8,12} However, a meta-analysis of 148 studies shows that, while boys are consistently more physically aggressive than girls, gender differences with regard to indirect aggression are minimal regardless of children's age and ethnicity.¹³ It thus seems that – while girls may prefer the use of indirect over physical aggression¹⁴ – both girls and boys employ circuitous strategies as a means to attack others. Indeed, many aggressive children use both forms of aggression, and this seems to be especially the case for those who are chronically aggressive.^{13,15} Nevertheless, studies have consistently revealed that physical and indirect aggression constitute two forms of aggression that are clearly distinguishable already in pre-school-aged children.¹⁶⁻²¹

Research Context

The recognition that aggression can be expressed through different means is strengthened further by the fact that physical aggression diminishes for most children from early childhood onwards, whereas indirect aggression increases.^{15,22,23,24} Moreover, many physically aggressive children increase their use of indirect aggression over time, whereas the reverse does not seem to be the case.^{25,26} These diverging developmental trajectories concord with the theoretical model of aggression proposed by Björkqvist and colleagues.⁸ According to this model, very young children aggress against others primarily through physical means due to a lack of other expressive tools. As verbal and social cognitive skills evolve, children begin to use verbal aggression and, at around four years of age, add indirect aggression to their repertoire. Because indirect aggression can be as damaging as physical aggression with much less risk of retribution, indirect aggression eventually becomes the primary strategy.

Key Research Questions

The different developmental trajectories have highlighted the need for a better understanding of the risk factors and potential developmental outcomes associated with indirect aggression and

how they compare to those of physical aggression.

Recent Research Results

Genetically informed studies support the proposition of Björkqvist and colleagues⁸ that, despite their diverging developmental trends, physical and indirect aggression have common roots. Thus, indirect and physical aggression are not only to a large extent influenced by the same underlying genetic factors, but they also share certain familial risk.^{25,27,28} Indeed, both indirect aggression and physical aggression have been linked with harsh and overly controlling parenting and a lack of parental warmth and positive encouragement during the preschool years.²⁹ There is also evidence, however, that overly permissive or neglectful parenting may foster either form of aggressive behaviour in children.²⁹ In addition to family-related factors, indirectly and physically aggressive children share certain cognitive patterns such as the attribution of hostile intent to others and a lack of empathy.^{30,31} Associations with other aspects of social cognitive functioning seem to differ, however. Contrary to predominantly physically aggressive children, indirectly aggressive children often show advanced language abilities, know how to persuade others to do their bidding, and are highly capable of predicting another person's thoughts and actions already prior to entering elementary school.³²⁻³⁶ The most pronounced differences between indirect and physical aggression lie in their social environmental correlates and outcomes, however. In contrast to physical aggression, the frequent use of indirect aggression is generally not related to social difficulties with the peer group. Despite - or perhaps because of - their manipulation of others, many indirectly aggressive children have a rather large network of close friendships.^{37,38} Moreover, although they may not be liked by many of their peers, they often hold a prominent and influential place in the group and indirect aggression is often successfully used to achieve or maintain a high social status.³⁹⁻⁴³ These social benefits seem to be especially pronounced for children who avoid engaging in physical aggression and exclusively employ indirect aggression.^{37,44} However, physically aggressive children also sometimes achieve high social standing in their peer groups and recent studies show that whether the peer group values—or rejects—aggressive behaviour plays a critical role for aggressive and non-aggressive children's further developmental adjustment.⁴⁵ Indeed, already 6-year old children with a disposition for physical or indirect aggression are much more likely to engage in such behaviour if peer group norms are favorable.⁴⁶ Their peers are also more likely to affiliate with and adopt aggressive children's behaviour under these circumstances.⁴⁷⁻⁵⁰ Research also indicates that especially physical aggression can procure protection against teasing or other provocations by peers when social norms are favorable, which

may be a further incentive to maintain or increase such behaviour.⁵¹ Nevertheless, the ostensible advantages of aggressive behaviour may be relatively short-lived, as especially children who engage in high levels of both behaviours seem to fare worse than others in the long run and tend to show elevated delinquency and internalizing problems when they become adults.⁵²

Research Gaps

While the past decades have seen a sharp increase of research on indirect aggression, most of this work focuses on school-age children and adolescents. Comparatively few studies have examined the risk factors and psychosocial outcomes of different forms of aggression before age 6.⁵³ In particular, further research is needed to understand how childcare providers or peer group characteristics in daycare may facilitate—or prevent—the early development of indirect aggression. Another concern is that the reported links rest predominantly on studies with participants from Western countries, although children from a wide variety of ethno-cultural backgrounds engage in both physical and indirect.⁵⁴ Thus, there is still little knowledge about the developmental course, as well as the predictors and consequences of different forms of aggression in children from diverse cultural backgrounds. Addressing this question is important, as cultural norms may impact children's use of aggressive behaviour, including indirect aggression.⁵³

Conclusions

Despite the current research gaps, it is safe to say that indirect aggression first appears in children's behavioural repertoire at about four years of age and is observed in both genders. Indirect aggression and physical aggression seem to have some common etiological roots and especially younger children often use both behaviours to hurt others. However, whereas physical aggression decreases in most children over the course of development, indirect aggression tends to increase. This increase may in large part be due to the fact that indirect aggression often enables the perpetrator to do considerable damage with a relatively low risk of detection and punishment. Indirect aggression is therefore also employed by children with advanced cognitive and language skills. The use of both indirect and physical aggression is further facilitated when social norms in the peer group favor such behaviour, and indirect in particular aggression may often help achieve influence and power among peers.

Implications for Parents, Services and Policy

While especially indirect aggression may not always entail negative consequences for the perpetrator, any form of aggressive behaviour clearly presents a serious risk for the mental and physical health of the victims. However, evidence suggests that adults feel less negative toward – and are less likely to intervene against – children’s use of indirect aggression compared to physical aggression.⁵⁵⁻⁵⁸ A first step to prevention is thus to dispel the myth that indirect aggression is an exclusively female or relatively benign behaviour. It is also important to acknowledge that not all aggressive behaviours result from deficient socio-cognitive skills, but that it is sometimes highly socially intelligent children who use their abilities to attack others. Efforts to reduce aggression therefore should not be focused exclusively on physical aggression. Indeed, there is evidence that maternal coaching about peer conflicts involving indirect aggression can help reduce such behaviour in preschool children.⁵⁹ Still, multi-component programs that also include the extra-familial environment are likely to be most effective.⁶⁰ Especially in elementary-school aged children, having a warm and supportive teacher may help decrease aggressive behaviour and develop alternative social interactive strategies.⁶¹ Most of the recent prevention programs employ school-based approaches and incorporate several sessions that focus specifically on how to recognize and deal with indirect aggression and they also teach prosocial strategies to build relationships and resolve interpersonal conflicts with.^{62,63} About half of these programs show a statistically significant reduction in physical or indirect aggression or both, but effects are generally small. While the inclusion of parental components could offer additional support, another possible explanation may be that existing prevention and intervention efforts commence too late to have a large impact.⁶⁴ Unfortunately, with one exception,⁶⁵ prevention programs that target multiple indirect aggression have so far focused on children older than 5 years of age. However, given that indirect aggression emerges at around four years of age, prevention efforts may already need to start in the early preschool period. There is indeed some evidence that an early day-care-based program with 3- to 5-year old children can successfully reduce not only physical aggression but also indirect aggression.⁶⁵ Nevertheless, even the most comprehensive programs are likely to fail unless they are sustained over an extended period of time⁶⁰ and more research is needed to evaluate the sustainability of such effects.

Finally, concerted efforts to reduce indirect as well as physical aggression may need to extend beyond the school or family context. Indeed, even films that are considered nonviolent often contain a large extent of indirect aggression, something that is already apparent in animated movies popular among pre-schoolers.⁶⁶ Importantly, viewing indirect aggression in the media has been causally linked to increased hostile intent attributions as well as increased use of indirect

aggression in children.⁶⁷⁻⁶⁹ For almost two decades already, researchers have therefore called for a modification of the current rating system of media content for parental guidance.^{70,71} Such a change would be especially useful because parental mediation of their preschoolers' media consumption (e.g., by monitoring the time spent with media and content restrictions) seems to buffer against the deleterious effects of indirectly aggressive media content on children's behaviour.⁷² Only with a greater awareness of the potential dangers of aggression in all its forms and in a variety of contexts can we hope to prevent the negative repercussions for its victims.

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