

4. Displaced Aggression in Children and Adolescents

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Abstract: Nearly all research on displaced aggression has been conducted with adult participants. Thus, very little is known about displaced aggression in children and adolescents. This article reviews the limited empirical work available on the subject and proposes a theoretical framework for understanding displaced aggression in children. Finally, it concludes with suggestions for future research.

Keywords: Displaced aggression, Aggression, Children, Adolescents, Aggression model.

Introduction

Displaced aggression occurs when a person is provoked, is unwilling or unable to retaliate against the original provocateur and, subsequently, aggresses against an innocent target. The phenomenon is robust in adults [1]. However, very little is known about displaced aggression in children and adolescents. This article reviews the experimental research on displaced aggression in children and adolescents. Although far from being established as a robust phenomenon, there is some evidence that children and adolescents do engage in displaced aggression and also that five-year-old children demonstrate a sophisticated understanding of this phenomenon. The article also introduces a theoretical framework for understanding displaced aggression in this age range. The framework focusses on exposure to displaced aggression, the development of social information processing related to displaced aggression, and variables that may moderate reactions to provocation, as well as the occurrence and intensity of displaced aggression. Finally, some suggestions are given regarding future avenues for research with children and adolescents including bullying, mass school violence, culture, and the development of individual differences in displaced aggression.

Case Scenario of Displaced Aggression in Children

Nine-year-old Nick is chasing his dog around the house with his favourite toy water gun. Despite repeated admonitions from his father to stop running fast, Nick crashes into the coffee table and breaks an expensive flower vase. As punishment, his father takes away his toy and sends him to his room. On his way down the hallway to his room, Nick stops to push his little brother to the floor.

This anecdote illustrates the behavioural phenomena of displaced aggression, which occurs when a person is frustrated or provoked, is unwilling or unable to retaliate against the original

provocateur and, subsequently, aggresses against a seemingly innocent target [2, 3]. In adults, the phenomenon is robust. A meta-analysis of 49 articles reporting on laboratory experiments revealed that the construct has a moderate effect size ($d = + 0.54$) [1]. Although interest in displaced aggression declined toward the end of the 1970s, recent research reflects rejuvenated awareness of the construct [4-8]. This phenomenon also occurs in animals including fish, rats and non-human primates, suggesting an evolutionary contribution [9-12].

Existing Research

Early work examined displaced aggression from the drive-reduction perspective espoused by Dollard et al. and was rooted in Freudian tradition [2]. This 'hydraulic' perspective emphasised the need to aggress following a frustration or provocation. It posits that if the aggressive drive is not directed toward the original source of displeasure, one might aggress against an innocent target as a means to satiate one's aggressive urges.

In an early investigation of 24 children (4 to 6 years old), Jegard and Walters [13] manipulated frustration by having the experimenter arbitrarily take away either a lot of candy (high frustration condition) or a little candy (low frustration condition) from the children. There was no control condition. Following the frustration manipulation, participants were placed in a room with both a stuffed dog and an inflated Bobo doll with a child's face. They were allowed to hit either or both of these objects. Displaced aggression was operationalised as hitting the stuffed dog only. The only significant result was that boys hit the Bobo doll more than girls, but boys and girls did not differ in frequency of hitting the dog. The lack of a no frustration control condition and the assumption that hitting the stuffed dog (but not the inflated doll) indicated displaced aggression precludes firm conclusions about the occurrence of displaced aggression in this experiment.

In a second early experiment, 108 middle-class children (4 to 6 years old) played a card game that served as the context for a frustration manipulation [14]. In the high and low frustration conditions, participants learned to associate losses, i.e. frustration with cards depicting a child and wins with a blank card. In the control condition, losses were associated with a blank card and wins were associated with a child figure. The children were then given the opportunity to shoot cards that depicted similar or dissimilar children to the child figures from the previous card game. When boys lost to the child in the card game, they shot similar targets more than dissimilar targets, suggesting that similarity of the target may be an important moderator of displaced aggression. In contrast, girls tended to shoot at dissimilar targets more than similar targets after losing.

Foss and Fouts [15] set out to examine the catharsis hypothesis in the context of displaced aggression in children. The catharsis hypothesis states that releasing angry feelings following provocation or frustration will improve one's mood [16]. In addition to an affective improvement, the catharsis hypothesis also posits that subsequent aggressive behaviour will be lessened. In this experiment, 44 middle-class children (8 to 11 years old) were either interrupted twice during a counting task (frustration condition) or not (no frustration condition). They were then either given the opportunity to 'take out' their aggressive urges by tearing up cardboard boxes (catharsis condition) or not (no catharsis condition). Finally, the children were asked to play a board game by themselves. The researchers assessed displaced aggression as the extent to which the children knocked over game pieces. Consistent with the catharsis hypothesis, those children who were

frustrated and not allowed to engage in the cathartic box tearing demonstrated the most destructive behaviour during the board game task. No gender effects were reported.

The only experiment to date on displaced aggression with adolescents reported on 160 male and female Indian high school students (14 to 17 years old) who were frustrated (frustration condition) by an experimental confederate during a cognitive task or not (control condition) [17]. Participants were allowed to deliver electric shocks within the context of a teacher-learner task to either the provocateur (direct aggression) or to an innocent confederate (displaced aggression). Those participants who were frustrated delivered significantly more shocks to the provocateur and the innocent confederate than participants in the control condition. Moreover, they shocked the innocent confederate with intensity equal to the provocateur, suggesting a strong displaced aggression response. The study is notable for its large sample, inclusion of a control condition, and use of a physical measure of displaced aggression. No gender effects were reported.

Additional experimental work moved away from the Dollard et al. model [2] and emphasised social-cognitive perspectives on displaced aggression in children. Two experiments within this framework assessed the children's understanding of the causes of displaced aggression, but did not assess actual behavioural displaced aggression [18, 19]. Such work could have important implications for the development of individual differences in displaced aggression. In the first of these experiments, 3 to 5 years old children viewed videotapes of older children engaging in either moderate or extreme acts of displaced aggression [19]. Although the 3-year-olds demonstrated some fundamental understanding of the concept, only the 5-year-olds demonstrated a complex understanding of displaced aggression. More specifically, the 5-year-old children were able to correctly identify anger as the cause of the behaviour of the child in the video and could explain that the initial provocation ultimately led to the act of displaced aggression. Interestingly, the older children also identified that the child in the video may ruminate about the provocation.

The second of these studies showed the same videotaped episodes of displaced aggression [19] to 5-, 7-, and 9-year-old children [18]. The purpose of the study was to determine which broader social cognitive abilities co-vary with children's ability to understand displaced aggression. Understanding of displaced aggression in the 5-year-olds was related to an ability to describe others in psychological terms rather than physical terms. In 7- and 9-year-old children, their understanding was associated with the ability to infer mental states in others. The authors suggested that "...children's growing awareness of psychological characteristics such as, motives, intentions, frustration and aggressive tendencies surely contribute to the concept of displaced aggression". It should also be noted that children's understanding of displaced aggression may be dependent on the use of short, easily digestible videos, as other studies that have investigated this same area using verbal narratives failed to find an understanding of displaced aggression in children until they reached grade school [20].

Suggestions

Based on the present review of the existing literature on displaced aggression in children and adolescents, few firm answers are available. The following two important questions readily surface:

- (i) Do children and adolescents engage in displaced aggression when provoked or frustrated?
Only two experiments in children and one experiment with adolescents support this notion

[14, 15, 17]. Thus, although this evidence suggests that children as young as 4-years-old engage in acts of displaced aggression, the basic phenomenon is not well-established.

- (ii) Do children understand the causes of displaced aggression? It appears that even very young children can demonstrate an understanding of the phenomena when it is presented in easily digestible video format [18, 19]. As children become older, their understanding of the causes of displaced aggression becomes quite complex, even to the extent of inferring mental states and moods in others. Not surprisingly, this more complex understanding is linked to the development of advanced social cognitive abilities in children [18].

Because of the expense, practical difficulty and ethical concerns of conducting aggression research in children, perhaps, it is not surprising that little research exists in this area. Nonetheless, the following are three specific issues that need to be addressed in future research:

- (i) Complete designs are necessary to infer displaced aggression. Thus, a no provocation control condition should be included in studies of displaced aggression.
- (ii) Attempts should be made to operationalise displaced aggression as consistent with the commonly adopted definition of aggression as “intent to cause harm” [21]. For instance, in some of the studies, children aggressed against inanimate objects. Although surely destructive and a valid dependent measure in its own right, it is doubtful if this would qualify as displaced aggression according to modern definitions, i.e. inanimate objects cannot feel and as such cannot be ‘harmed’. Perhaps displaced aggression directed against animate objects may be more informative about real-world displaced aggression than destructive acts against inanimate objects.
- (iii) Future work on displaced aggression should incorporate modern models of aggressive behaviour such as, Huesmann’s developmental model [22], or the more recent General Aggression Model [21].

Much progress has been made in understanding aggression in the past few years. Extending these advances in aggression research to the domain of displaced aggression in youth may greatly increase our understanding of this important phenomenon.

A Theoretical Framework

Figure 1 presents a theoretical framework for understanding the development and occurrence of displaced aggression in children and adolescents. This framework relies heavily on prior models of aggression and represents an extension of principles found in these models into the specific domain of displaced aggression in young people [21-25]. It is intended as a starting point for future empirical work.

Here, the basic aspects of the framework are described. A central assumption of the model is that engaging in acts of displaced aggression begins with exposure to such behaviour while young. Such exposure biases social information processing, which, in turn, affects how the child reacts to provocations. This reaction is moderated by both person (e.g., genes, personality) and situational (e.g., social roles, norms) variables. Negative reactions to the provocation then increase the likelihood that displaced aggression will occur. Certain situational variables moderate this effect such that they influence the degree of displaced aggression and likelihood of its occurrence.

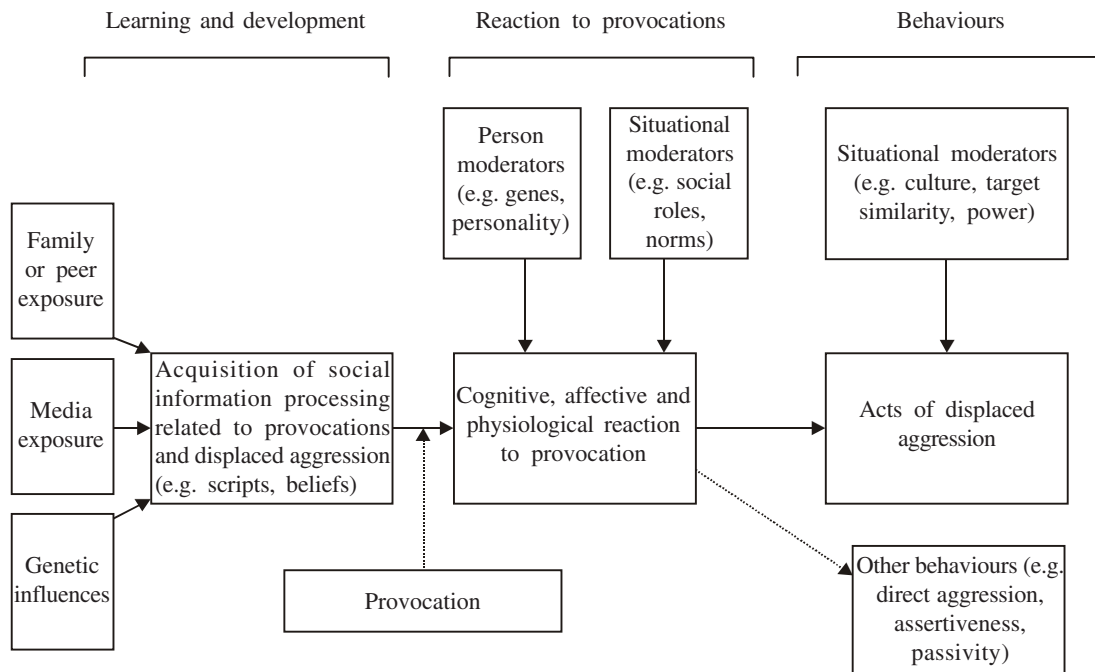


Fig. 4.1. A theoretical framework for understanding displaced aggression in children and adolescents.

Learning and Development

It is well-known that aggressive children come from aggressive homes [26]. Thus, children’s first exposure to displaced aggression is likely to occur within the home. For instance, a child may observe that when a parent returns home complaining about a frustrating day at work, the parent may behave aggressively toward others in the household – including the child. This notion has recently been empirically validated. The degree of abuse that workers received from their supervisors was associated with increased displaced aggression in the workers’ homes, as reported by family members [6]. Over time, the child may learn to pair the angered parent with the acts of displaced aggression. The ultimate effect of this pairing is that, eventually, the child ‘learns’ that harming undeserving others may be an appropriate and effective method of behaving when one is confronted with a provocation. Such a social learning perspective [23] may help explain why adults who were abused as children are at increased risk of abusing their own children relative to those who were not abused as children [27, 28].

Another source of exposure to acts of displaced aggression may be violent media, which has been meta-analytically linked with the development of aggressive behaviour in children [29, 30]. While acts of displaced aggression are presumably less common than acts of direct aggression in the media, violent media may still contain a significant amount of displaced aggression. Finally, genetic influences may predispose children to acquire aggressive social information processing. Indeed, in studies that have been able to statistically separate the two types of influences, both genes and socialisation experiences are powerful determinants of aggressive behaviour in children [31].

Acquisition of Social Information Processing Related to Displaced Aggression

Building on earlier social learning perspectives, cognitive models of individual differences in aggressive development postulate that repeated exposure to aggression results in changes in social information processing [22, 32]. These changes in social information processing lead a child to interpret situations in a hostile manner, which then increases the likelihood of his/her becoming angry and behaving aggressively. Children exposed to aggression adopt aggression-related cognitive knowledge structures. Huesmann [22] mentioned two types of knowledge structures – *scripts* and *normative beliefs*. Scripts determine how one should react to social interactions, what cues one should pay attention to and how one should behave. Normative beliefs about aggression describe how appropriate this type of behaviour is perceived by the child [22].

What is the outcome of repeated exposure to displaced aggression, specifically, over and above that of direct aggression? It is highly likely that children who are exposed to a substantial amount of displaced aggression develop scripts specifically related to it. While a script of direct aggression would entail harming the provocateur when insulted or frustrated, a script of displaced aggression would likely entail harming innocent others following a provocation. Over time these scripts become automatically activated in memory when the child is confronted with a provocation. Moreover, the child may also endorse normative beliefs about displaced aggression as an appropriate means of dealing with life's provocations, especially when admired role models, e.g. a parent engage in displaced aggression themselves. Given that children as young as 5-year-old demonstrate a sophisticated understanding of displaced aggression, even exposure at this early age may lead to the development of altered social information processing [18, 19].

Reaction to Provocations

The General Aggression Model [21] posits three mediating internal states that are involved in exacerbating responses to provocations – *cognition*, e.g. the accessibility of aggressive constructs, scripts, etc.; *affect*, e.g. anger; and *physiological arousal*, e.g. cardiovascular reactivity. Although not specific to displaced aggression *per se*, it is likely that children and adolescents, who have developed hostile social information processing, will perceive provocations as highly aversive and, therefore, react with increased cognitive, affective and physiological reactivity relative to those with less hostile cognitive biases. For instance, aggressive boys display better recognition memory for aggressive stimuli than non-aggressive stimuli [33], and respond with more anger and retaliation to ambiguous provocations [34].

Additional person moderators may explain how children and adolescents react to provocations. In adults, individual differences in displaced aggression have been linked to tendencies to ruminate about provocations, as well as behavioural inhibition [35]. Rumination is important because it maintains angry affect and the cognitive accessibility of aggressive constructs [36]. Moreover, in adults, angry rumination delays cardiovascular recovery to provocations [37]. Behavioural inhibition is important because it implies that individuals high in this trait do not respond immediately and directly to life's provocations. Rather, they may feel a complex emotional response consisting of a conflict between approach motivation, i.e. anger and avoidance motivation, i.e. anxiety. For example, one item on the Behavioral Inhibition Scale [38] – “I feel pretty worried or upset when I think or know somebody is angry at me” – illustrates this point. In addition to personality

variables, gender, genes and other biological differences between individuals may increase the negativity of the reaction to the provocation. Examples include genetic deficiencies in monoamine oxidase A (MAOA) gene, which has been linked to aggression [39, 40], and hormone levels such as testosterone [41].

Situational variables are also capable of influencing reactions to provocations. These may include social roles and context-dependent norms, among others. If the source of a provocation or frustration is seen as legitimate due to the social role they occupy, it is likely that the child will not respond as intensely to the provocation as to an illegitimate source of provocation. For example, if a child is told by his/her parent or teacher to cease a certain behaviour, then he/she is likely to exhibit less reactivity than if issued the same ultimatum by a bossy peer. In one experiment, adults directed less displaced aggression toward high status targets than low status targets, presumably due to lower levels of anger [42]. Group norms may also play a role in moderating responses to provocations, to an extent that some families or groups of children and adolescents condone displays of anger and aggression in response to provocations. Extreme reactions may be more likely in these group members.

Acts of Displaced Aggression

Once a sufficient degree of aggressive cognition, angry affect and/or physiological arousal is elicited by a provocation, various behaviours may follow suit. Displaced aggression is just one such behaviour. Others include, but are not limited to, direct aggression toward the provocateur, dealing assertively, yet non-aggressively with the provocateur, or behaving passively. Several situational factors make displaced aggression more or less likely:

- (i) If the original source of provocation or frustration is no longer available, direct aggression is obviously not an option for the child.
- (ii) If a second minor annoyance or ‘trigger’ to aggress follows the initial provocation, children may respond with an excessive amount of aggression that exceeds “tit-for-tat” matching rules [43, 44]. This hypothesis is based on experimental evidence in adults within the triggered displaced aggression paradigm [8].
- (iii) If the degree of similarity between the original provocateur and the target of aggression is high, this may also increase displaced aggression. Moore [14] reported that, at least for boys, target similarity increased displaced aggression toward an inanimate object. This is consistent with meta-analytic findings, which suggest that the degree of similarity between the provocateur and target increases displaced aggression in adults [1]. Further work with children and adolescents could explore this issue.
- (iv) Another situational variable that may moderate the degree of displaced aggression is the power of the target. If the only available target of displaced aggression is high in status or power, e.g. a teacher or parent, displaced aggression is likely to be inhibited under these circumstances. As stated earlier, adults directed less displaced aggression toward high status targets than low status targets [42], but this variable has yet to be investigated in children and adolescents.

New Directions

Now, let us examine a broader conceptualisation of displaced aggression among children and adolescents. Specifically, recent theoretical advances in displaced aggression may lead to a

greater understanding of some forms of violent and aggressive behaviour that affect young people. For instance, person and situational determinants of displaced aggression may explain important social problems such as bullying and school shootings. These issues are discussed along with the role of culture and the development of individual differences in displaced aggression.

Bullying

Although displaced aggression may not explain all instances of bullying, it is possible that this type of aggression is frequently an instantiation of displaced aggression. As mentioned earlier, children who are exposed to displaced aggression in the home are likely to develop scripts and normative beliefs related to this behaviour [22]. Thus, when angered, bullies may likely aggress against innocent schoolmates. Interpreting some instances of bullying as displaced aggression may be advantageous from a research perspective. As an instantiation of displaced aggression, bullying is susceptible to the same person and situation moderators that affect other types of displaced aggression. Eventually, examining bullying from a displaced aggression perspective may lead to the development of interventions that reduce bullying. Nonetheless, this may prove difficult as habitual bullies are likely to be locked into a cycle of displaced aggression whereby they receive punishment from authority figures because they are aggressive, which further increases the likelihood of engaging in subsequent displaced aggression toward safer targets such as fellow school children.

Mass School Violence

Although mass violence in schools is rare, it has nonetheless received much media and scientific attention in recent years. School violence is an interesting case because it is often a mix of direct aggression (attacking those perceived to be the source of torment), displaced aggression (attacking innocents), and sometimes suicide (attacking the self). Many of these instances involve some type of social rejection. Although in real world settings, it is difficult to determine whether social rejection is a consequence of aggression or a cause, we know from laboratory experiments that social rejection is a powerful elicitor of displaced aggression [45]. In a review of 15 school shootings that occurred from 1995 to 2001, researchers concluded that social rejection was present in all but two of the cases [46]. Although some of these cases represented direct aggression, mass killings may often represent specific instances of displaced aggression because innocents are often harmed. Gaertner and Iuzzini [47] have suggested that the perceived entitativity of groups of students may moderate the degree of violence, suggesting that groups that are perceived as cohesive units may elicit more displaced aggression. Among adults, perceived entitativity is associated with the extent to which all group members are perceived as being responsible for the negative actions of a single member [35].

Culture

With the exception of one experiment [17], all of the work on displaced aggression in children and adolescents has been conducted with, primarily, middle-class American children. Based on one experiment conducted with adults from the United Kingdom and Hong Kong, there is good reason to expect that culture may be an important moderator of displaced aggression. Redford [48] found that participants from Hong Kong were more likely to report displaced aggression

action tendencies – operationalised as wanting to harm inanimate objects – than participants from the UK. Conversely, participants from the UK were more likely to report more direct aggression action tendencies than participants from Hong Kong. The author speculated that collectivistic cultures might emphasise more displaced aggression in the purpose of maintaining group harmony, whereas individualistic cultures emphasise direct confrontation. Although it remains to be seen whether these findings generalise to displaced aggression against humans, culture may prove a powerful moderating force in determining the relative degree of displaced versus displaced aggression that is displayed.

Development of Individual Differences

We know that adults vary in the extent to which they tend to harm innocent others when in a bad mood [35]. Denson et al. have named this trait displaced aggression and it is related to, yet distinct from, general AHA. Among adults, individual differences in displaced aggression explained a substantial proportion of the variance in domestic abuse over and above general AHA [35]. Thus, identifying childhood influences that may affect the development of this personality dimension is of societal importance.

Those high in trait displaced aggression tend to ruminate following provocations and harm those closest to them [35]. Thus, the combination of rumination and exposure to displaced aggression in the home may increase the likelihood that children will grow up to be displaced aggressors. Early identification of children who ruminate and have abusive parents may circumvent this developmental trajectory. In addition, because individual differences in general AHA stabilise around 8-years old [49], the preschool and early grade school years may be an especially sensitive period for the development of individual differences in displaced aggression.

Conclusions

Although far from being established as a robust phenomenon, there is some evidence that children and adolescents do engage in displaced aggression and that by about 5 years of age, children demonstrate a sophisticated understanding of this phenomenon. In the present work, an initial theoretical framework for understanding displaced aggression has been introduced. The framework focusses on exposure to displaced aggression in early childhood, the development of social information processing related to displaced aggression, and variables that may moderate reactions to provocations, as well as the occurrence and intensity of displaced aggression. In addition, by exploring displaced aggression within the context of bullying, mass school violence, and culture, we may increase our understanding of these important social problems. Furthermore, understanding how some individuals develop into adults who tend to engage in frequent acts of displaced aggression may eventually benefit society.

Key Points

- ❑ Although far from being established as a robust phenomenon, there is some evidence that children and adolescents engage in displaced aggression.
- ❑ By age five, children demonstrate a sophisticated understanding of displaced aggression.
- ❑ A theoretical framework for understanding displaced aggression in children and adolescents is proposed.

- Suggestions for future research, including bullying and mass school violence as forms of displaced aggression, cultural influences and the development of individual differences in displaced aggression are discussed.

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