



Development of Physical Aggression from Early Childhood to Adulthood

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Topic

Aggression

Introduction

The traditional point of view

Physical violence exhibited by adolescents and young adults is a major concern in all modern societies. Indeed, the risk of being arrested and found guilty of criminal behaviour is higher during late adolescence and early adulthood than at any other point in life. Over the past 40 years, hundreds of studies have attempted to shed more light on how playful children become violent juvenile delinquents. Poor parental supervision, family break-up, negative peer influences and poverty have all been shown to be associated with violent juvenile delinquency.^{1,2} Males account for the majority of arrests made for violent crimes. The principal explanation for violent behaviour has long been the following: “aggressive and violent behaviours are *learned* responses to frustration, they can also be learned as instruments for achieving goals, and the learning occurs by observing models of such behaviour. Such models may be observed in the family, among peers, elsewhere in the neighbourhood, through the mass media, or in violent pornography.”³

Problems

Problem with the traditional point of view

If physical aggression is learned by observing models in families, around neighbourhoods and among peers, the following questions may be asked:

- a) When does the learning start?
- b) Does the frequency of physical aggression increase with exposure to aggressive models?
- c) When and how can we prevent the development of physical aggression?

Recent Research Results

a) Research during the elementary school years

Until recently, most research on aggression has focused on adolescents and adults. A minority of longitudinal studies using large samples of elementary school-aged children has provided important information on the development of physical aggression.^{4,5} One significant and unexpected finding in these longitudinal studies was that the vast majority of children reduced the frequency of their physical aggression from the time they began school until the end of high school. The same phenomenon applied equally to both girls and boys, although girls systematically showed lower frequencies of physical aggression than did boys. This phenomenon was observed during the 1980s and 1990s in Canada, New Zealand, and the United States, where the homicide rate was rising.^{6,7,8}

This decline in the frequency of physical aggression with age was unexpected from a social learning of aggression perspective, since the children are exposed to more and more models of physical aggression as they grew older. Longitudinal studies have also shown that it is extremely unlikely that an adolescent who has not been highly physically aggressive in the past will suddenly manifest significant problems with physical aggression.^{7,8,9,10,11}

These findings obviously led to another question: if most children are at their peak in frequency of physical aggression when they begin school, when do children learn to become physically aggressive? Few studies to date have focused on physical aggression before school entry, likely for three good reasons: 1) The consequences of physical aggression perpetrated by an 18-year-old adolescent are generally more dramatic than physical aggression perpetrated by a three-year-old toddler; 2) The social learning theory on aggression has led us to believe that children learn to be aggressive during the school years because they are more exposed to models of aggression than preschool children; 3) It is easier for investigators to observe and interview school-aged children.

b) Research during early childhood

In the past decade, a few longitudinal studies that started from birth have reversed our thinking on the development of physical aggression. These studies show that if children do learn to be physically aggressive by observing models, most of the learning likely takes place during the first 18 to 24 months of life. In fact, most mothers report that their children used some form of physical aggression when they were within this age range.^{12,13} However, there are major differences in the frequency of physical aggression among infants as well as among toddlers.^{14,15,16} These studies show that a majority of children make occasional use of physical aggression, a minority use physical aggression much less often than the majority, while another minority make much more frequent use of physical aggression than the majority. Many preschool children are referred to clinics for behaviour problems, primarily for physically aggressive behaviours.¹⁷

Available data on the development of physical aggression during the preschool years have shown that the frequency of physical aggression use increases during the first 30 to 42 months after birth and then decreases steadily.¹⁴⁻¹⁶ Fewer girls than boys reached the highest frequency levels, and girls tended to reduce the frequency of their aggression earlier in life.¹⁸

Further, longitudinal studies up to adolescence show that preschool is a sensitive period for learning to regulate physical aggression. Indeed, the minority of elementary school children (5% to 10%) who continue to show high levels of physical aggression remain at greatest risk of engaging in physically violent behaviour during adolescence.^{7,8}

Interestingly, while the frequency of physical aggression was found to decrease from the third or fourth year after birth, the frequency of indirect aggression (making disparaging remarks about another person behind his or her back) increases substantially from four to seven years of age, and girls tended to use this form of aggression more frequently than did boys.¹⁹

The main risk factors for women to have children with serious physical aggression problems are the following: a low education level, a history of behaviour problems, first delivery at a young age, smoking during pregnancy, and low income.^{14-16,20,21} A study of a large sample of twins also points to genetic effects on individual differences in frequency of physical aggression at 19 months of age.²²

Conclusions

Contrary to traditional belief, children do not need to observe models of physical aggression to initiate the use of physical aggression. In 1972, Donald Hebb, a father of modern psychology, noted that children did not need to learn how to have a temper tantrum.²³ In his 1979 book on social development, Robert Cairns reminded human development students that the most aggressive animals were those that had been isolated from the time they were born.²⁴ Indeed, infants appear to use physical aggression spontaneously to achieve their goals when angry. Following the pioneering work of Charles Darwin, Michael Lewis and his colleagues showed that angry reactions could be observed as early as two months after birth.^{25,26} Children also seem to resort spontaneously to play-fighting.²⁷ Thus, rather than learning to use physical aggression from their environment, human children learn not to use physical aggression through various forms of interaction with their environment.

Research on the development of aggression during the preschool years has not yet adequately elucidated the mechanisms that would explain:

- a) why some infants are more physically aggressive than others;
- b) why some engage in very little physical aggression;
- c) why it is that infant girls tend to engage in physical aggression less often than do infant boys;
- d) why most children learn to regulate physical aggression before they enter school;
- e) why some do not;
- f) why children start engaging in indirect aggression;
- g) why girls engage in indirect aggression more than boys do;
- h) to what extent engaging in indirect aggression reduces physical aggression;
- i) which interventions are most effective to help preschoolers who have problems learning to control their tendency to engage in physical aggression.

Service and Policy Implications

The research summarized above has two important implications for the prevention of physical aggression. First, there is the fact that most children learn alternatives to physical aggression during their preschool years. Therefore, early childhood is probably the best window of opportunity for helping children at risk of becoming chronic physical aggressors. Intensive support to high-risk families starting during pregnancy should have a long-term impact.^{28,29,30} Second, since most humans have used physical aggression during early childhood, most are probably at risk of using it again if they find themselves in a situation where there does not appear to be a satisfactory alternative. This would explain why many violent crimes are committed by individuals who do not have a history of chronic physical aggression, and why so many conflicts among families, ethnic groups, religious groups, socioeconomic classes and nations lead to physical aggression.

Policies that promote quality education during early childhood should reduce cases of chronic violence and the overall level of physical aggression in the population. But policies that strive to maintain peaceful environments throughout society are also needed to prevent the primitive aggressive reactions from breaking through the thin layer of civility we acquire as we grow older.

To learn more on this topic, consult the following sections of the Encyclopedia:

- [How important is it?](#)
- [What do we know?](#)
- [What can be done?](#)
- [According to experts](#)
- [Key messages](#)

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