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[Archived] Commentary on Papers Regarding “Aggression as an Outcome of Early Childhood Development”

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Introduction

The three papers on the topic of aggression as an outcome of early childhood development by Tremblay, Keenan, Ishiwawa and Raine provide important perspectives on the development of aggression in early childhood. Tremblay establishes a convincing justification for focusing on the first five years, noting that rates of physical aggression decrease from the toddler period through adolescence. It is critical to note that if children do not show high rates of aggressive behaviour within the first 3 years, very few of them will proceed to show elevated rates from age 5 onward. This point was corroborated in a longitudinal study following the course of aggression from ages 2 to 5 in a sample of 300 low-income boys.[1] Of the children who scored $\geq$ the ninetieth percentile on the Child Behavior Checklist (CBCL) items tapping aggressive behaviour at age two, 88% remained above this threshold at age 5, with relatively few newcomers to this extreme group at age 5 (22%). Thus, the vast majority of children who exhibit high levels of aggression at school

entry are likely to begin demonstrating this pattern by early childhood.

Keenan addresses issues that are paramount in advancing the *developmental* study of aggression. How “aggression” should be defined is still a matter that continues to spark debate. Indeed, “aggressive” behaviour may be studied very early in childhood, but developmentalists such as Maccoby[2] contend that a child should have some cognitive appreciation for the consequences of aggressive acts before he or she is considered to be truly aggressive. Alternatively, apparently aggressive behaviour, its correlates, and its stability can still be assessed to examine this issue empirically. Keenan also noted how trajectories of aggressive behaviour are moderated by child and parenting factors. Child factors include maturation in cognitive abilities that permit the use of more sophisticated conflict–resolution strategies after the second year (eg, use of reasoning). Parental caregiving quality is also critical, in the form of contingent responsiveness during infancy [3,4] and consistent and non-rejecting responses to expressions of negative emotionality during the toddler period.[5,6]

Ishiwawa and Raine review the biologically oriented risk factors associated with child maladjustment that are present prior to birth. Three issues merit attention in this regard. First, the review emphasizes that studies of biological risk are underrepresented relative to studies of environmental risk.[7] In particular, relatively few studies of biological risk have focused on aggression per se in early childhood.[8,9,10] Second, it is clear from the review that factors such as parental substance abuse, nutritional deficiencies, MPAs, and delivery complications place some children at risk for subsequent antisocial behaviour. Third, and as noted above, biological risk factors are often moderated by the presence of environmental risk. In fact, several studies have found that biological insults, in isolation, are unrelated to later antisocial behaviour. [11,12]

Research and Conclusions

The tenets and conclusions of each paper are firmly supported by theory and/or empirical grounding. However, I do have a few caveats regarding specific issues. Regarding Tremblay’s “surprise,” for example: it should not be terribly surprising that physically aggressive acts decrease throughout the childhood years. As noted earlier, cognitive maturation provides children with more flexible repertories for handling interpersonal conflict, allowing them to be more selective in the use of physical aggression. This factor is also consistent with the more rapid decline of physical aggression among girls based on their higher verbal fluency in the toddler to preschool periods. Indeed, the forces of socialization at home and school make physical

aggression a less attractive coping strategy for both sexes as time goes by, with increasingly dramatic consequences for 8 year olds when compared to 3 year olds who commit comparable aggressive acts. Developmental studies initiated by Goodenough (in 1931)[13] and Fawls (in 1963)[14] (although neither followed the progression of aggression per se), documented the decrease in frequency of anger/conflict bouts as a function of increasing age in childhood. Thus, while perhaps surprising from the perspective of learning theory, the declining trajectory of physical aggression is not a recent surprise. Regarding children who persist in showing high rates of physical aggression at school-age, it is important to note that even these persistently aggressive children show slight declines from ages 2 to 10,[15] but are likely to learn to engage in progressively more covert forms of antisocial behaviour over time, as demonstrated in a recent study by Patterson and Yoerger.[16]

Keenan's paper also raises a few points that bear discussion. First, while aggression may be observable in infants as young as 5 months, aggressive behaviour per se does not generally become bothersome to parents until the second year, with children's newfound ability to ambulate more quickly and reliably. This fact has implications for the timing of early intervention studies where observing frequent rates of the target behaviour is deemed to be an important factor. Second, studies have documented that aggression among 1.5-2 year olds is predictive of later conduct problems;[17] however, the level of stability is often modest, once again reflecting the changing nature of the developing child and individual differences in the caregiving environment. Third, although there is consensus that parenting behaviours involving physical or emotional maltreatment tend to promote aggression in children, it is vital that we evaluate the consequences of parenting styles prescribed by different cultures before making assumptions about appropriateness, such as the use of the authoritarian parenting styles espoused by African American families.[18]

The Ishiwawa and Raine paper raises the issue of the need for interdisciplinary research. We sorely need studies that prospectively measure the quality of the prenatal environment *and* observe the development of the early parent–child relationship. Without such data, it is likely that the mechanisms by which prenatal insults affect the development *and* maintenance of early aggressive behaviour will remain unknown. As Tremblay notes, much of the "learning" of aggression occurs by the third year; intense efforts to capture its emergence are indicated.

Implications for Policy and Service Perspective

All three papers suggest that early identification be a primary concern for social policy. As an example, Tremblay[19] has demonstrated that parents who begin childbearing before age 20 and do not complete high school are at increased risk for showing trajectories of aggressive behaviour. The identification of risk factors before birth is also recommended by Keenan and implied by Ishiwawa and Raine's paper on prenatal insults. These efforts clearly merit support; however, it is likely that multiple intervention points and approaches will be needed to adequately identify young children with emerging patterns of aggression.[20,21] Particularly during the first year (before high rates of aggressive behaviour are evident), and the second year (when aggression becomes statistically normative), efforts will need to focus on how the course of early child behaviour is moderated by the caregiving environment, and ultimately leads to more stable patterns of aggression at preschool and school ages.

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