ENCYCLOPEDIA
on Early Childhood
Development

Temperament, Parenting and Implications for Development

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April 2012

Introduction

Children's temperament is often defined as biologically-based differences in reactivity and self-regulation.[1] Research has focused most on temperament dimensions of self-regulation or effortful control, general positive emotional reactivity, general negative emotional reactivity, and more specific aspects of negative emotionality reflecting fearfulness and inhibition on the one hand, and anger and irritability on the other hand. Much research has also considered whether temperament dimensions predict subsequent child adjustment outcomes. Some research has considered how temperament and parenting combine to predict child outcomes. Parental warmth (support, affection) and firm control (discipline) have been identified as particularly important.[2]

Subject

According to current systems theories of child social development,[3] temperament-related behaviour and parenting behaviour influence one another, and are independently associated with child socio-emotional development. In addition, some temperament characteristics lead to better or worse outcomes depending on parenting, and vice versa – some parenting behaviours lead to better or worse outcomes depending on temperament.[1]

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Problems

One challenge in examining the influences of parenting and temperament on one another is that cross-sectional studies, which measure temperament and parenting at only one point in time, do not clarify the direction of influence between temperament and parenting. To clarify directionality, longitudinal studies or experimental methods are needed. However, factors like participant attrition and the problem of replicating real life experience in a lab context present considerable challenges for longitudinal studies and experiments, respectively. Thus, many studies have relied on cross-sectional, correlational methods which prevent inferences regarding the direction of influence.

Research Context

Certain dimensions of temperament have been found to predict subsequent child outcomes. Specifically, negative emotional reactivity has been found to predict both internalizing problems (e.g., anxiety, depression) and externalizing problems (e.g., aggression, rule-breaking).[1] Fearfulness predicts internalizing problems, and self-regulation difficulties predict externalizing problems.[1] The large literature on parenting[2] generally shows that high levels of warm and firm parenting are associated with positive child development.[4]

Key Research Questions

1. Which temperament dimensions influence which parenting dimensions?
2. Which parenting dimensions influence which temperament characteristics?
3. How do temperament and parenting interact to influence developmental outcomes?

Although temperament and parenting each independently predict outcomes, the associations are only moderate in strength,[5] allowing the possibility that parenting may increase the risk of problem outcomes in children whose temperament predisposes them to adjustment problems.

Recent Research Results

Temperament -- Parenting: There is some, but not much, evidence that child positive emotional reactivity may elicit higher levels of parental warmth.[6,7] There is also a little evidence of the opposite direction of effects, suggesting that parental warmth gives rise to more child positive emotionality.[8,9] We do not yet have enough evidence to know whether child positivity and

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parental control influence one another.

More studies have examined associations between child negative emotional reactivity and parenting. With contradictions possibly related to child age, some studies suggest that child negative emotionality elicits more parental warmth,[10] whereas other studies suggest it has mixed associations with parental warmth.[11] However, there is more consistent evidence that high levels of parental sensitivity/responsivity lead to less child negative reactivity.[8,12] There is also some evidence that child negative emotionality predicts more negative parental control,[7] and a little evidence that negative parental control predicts more negative emotionality.[13] In terms of more specific aspects of negative emotionality, child fearfulness predicts more parental warmth and more positive control.[14] Similarly, low levels of parental warmth predict increases in fearfulness.[12]

Studies have also examined associations between child self-regulation and parenting. Higher levels of child self-regulation consistently predict more parental warmth[14,15] and less parental control.[16] Similarly, parental warmth predicts better child self-regulation,[17] and more negative parental control predicts poorer child self-regulation.[13]

Temperament X Parenting Interactions: In the study of interaction effects of temperament and parenting on developmental outcomes, one replicated pattern of associations involves child self-regulation and parental control. Children's self-regulatory difficulties are more likely to lead to externalizing problems when parents use inconsistent discipline strategies or are low in firm discipline.[18,19] Another replicated finding involves temperament-related fearfulness. Children who have high levels of fearfulness are less likely to have internalizing and externalizing problems if their parents are high in warmth and in gentle discipline strategies.[20,21]

Research Gaps

To clarify the developmental relationship between children's temperament and parenting, more longitudinal studies are needed, especially ones that include statistical controls for parenting and temperament at earlier time points, allowing tests of temperament as predictors of change in parenting and tests of parenting as predictors of change in temperament. Such studies are particularly needed in the developmental era of adolescence. Further, much more investigation of basic mechanisms underlying these associations is needed. Neuropsychological processing is one example. Although children who have been maltreated show different brain activity in response to facial emotion than nonmaltreated children,[22] we know little about children's neural

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processing of a wide variety of parenting behaviours, and we know even less about temperament-related differences in such neural processing.

Conclusions

Based on studies conducted so far, findings suggest that child positive emotional reactivity, fearfulness, and self-regulation elicit warmth from parents, whereas child negative emotional reactivity results in more negative parental control. Conversely, parental warmth and positive control appear to contribute to children's development of less negative emotional reactivity and more positive emotional reactivity and self-regulation.

Firm, consistent parental discipline appears to be particularly important for children who have difficulties with self-regulation. Parents' use of firm control may lead, over time, to the development of better self-regulation for children who are initially low in self-regulation. In addition, parental warmth and gentle control appears to be particularly important for children who are highly fearful. One possible explanation is that harsh parenting is too emotionally arousing for highly fearful children to absorb socialization lessons. Findings, thus, are beginning to suggest ways to increase the "goodness-of-fit" between the parenting strategies and the child's temperament.

Implications for Parents, Services and Policy

Some children especially need firm, consistent parenting, and other children especially need gentle parenting, according to recent studies. Studies showing the influence of child temperament upon parenting suggest that children who have high levels of negative emotionality or self-regulatory difficulties are more difficult to parent than other children. In addition, behavior genetic studies suggest genetic factors contribute to temperamental differences among children and influence the association between temperament and child outcomes.[23] Children with tendencies toward negative emotionality and poor self-regulation may be especially difficult to provide optimal care for, and their parents appear particularly likely to use less firm control over time,[24] but they are also the very children who especially need calmly-persistent caregiver efforts. Recognizing interplay between temperament and parenting offers potentially useful ways of specifying the challenges involved in parenting, caring for, and educating an individual child and devising care that is a good fit to the child and the family.

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