

Attachment relationships in Early Head Start families

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The remarkable papers in this Special Issue underscore the importance of applied research on families in poverty, the opportunities to developmental science of the Early Head Start National Research and Evaluation Project, and the mutual benefits from collaborations between research scientists and program practitioners. This commentary highlights the insights of these papers concerning the consequences of maternal attachment style and mother-child interaction, the challenges of assessing attachment in intervention research, and the program and policy implications of these findings.

Keywords: attachment; Early Head Start; poverty

Introduction

Early Head Start (EHS) was established in 1995 as a major federal government initiative to support low-income families with infants and toddlers. It does so through a two-generation community-based program that provides high quality, comprehensive child development services through home visitation, child care, parent education, health care and referrals, and family support. Local EHS programs may be home-based, center-based, or use a combination of these approaches, but all are guided by federal performance standards. The quality of EHS services is supported by a state-based training and technical assistance system, with funding for this system increased in the 2007 reauthorization of this program. In addition, many states have built a broader network of early childhood intervention services around their EHS programs. Early Head Start is a significant resource for supporting healthy growth and enhancing the intellectual and socioemotional development of young children who are often at risk for behavioral problems and delays in school readiness in the early years of life.

Early Head Start is also a significant resource for developmental scientists. From the beginning, the rigorous evaluation of developmental outcomes from EHS services has been incorporated into the funding and reauthorization of Early Head Start. The National Early Head Start Research and Evaluation Project was mandated by Congress in 1995 to provide a longitudinal, randomized trial of EHS services involving more than 3000 families in the 17 programs initially enlisted into the program. In addition to the child assessments, adult interviews, and observations incorporated into the national evaluation, local EHS sites could also include additional measures for

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their own purposes. The result is a national treasure for the study of very young children in poverty, as reflected in the articles of this Special Issue.

It is rare that researchers of early childhood development or family functioning have access to such a large sample of low-income families with infants and toddlers for which a wide variety of well-validated assessments have been obtained. The EHS evaluation study is one of a growing number of examples of how large-scale, welldesigned program evaluations have the potential to address core questions of childhood development (Love, Chazan-Cohen, & Raikes, 2007). As a result, an expanding research literature uses data from the National Research and Evaluation Project to address issues of teenage parenting, culture and child development, constituents of school readiness for low-income young children, father involvement, and many other issues (see e.g. Bradley, Chazan-Cohen, & Raikes, 2009; Cabrera, 2004). Equally importantly, with the expansion of Early Head Start because of enhanced funding from the American Recovery and Reinvestment Act of 2009, research addressing the characteristics of families in poverty, their use of EHS services, and the effects of program participation is even more valuable, especially for training and technical assistance efforts. The bridges between developmental research, intervention programs, and child and family policy in this field are strong.

How are findings from the National Research and Evaluation Project relevant to students of attachment theory and research? Children in poverty are more likely to develop insecure attachments than are middle-income children, and the reasons for their insecurity are shaped by the family context (Thompson, 2006). In their metaanalysis of the origins of attachment security, furthermore, de Wolff and van IJzendoorn (1997) noted that the association between maternal sensitivity and security was significantly weaker in lower-income families compared to middleincome homes, and called for greater study of broader contextual influences on the security of attachment. The variety of economic, emotional, and ecological stresses faced by families in poverty may provide additional explanations for child insecurity, especially when they are studied in relation to alternative sources of social support that parents may also experience. Because Early Head Start is a two-generation intervention, moreover, the mother's characteristics (including her own attachment representations) may be important determinants of her response to the assistance provided by a home visitor or other services offered in the EHS program. Better understanding of these mediators of program impact on children, parents, and families have the potential of improving service delivery and intervention efficacy, as well as for advancing understanding of attachment processes in the family.

Three issues that cut across the thought-provoking articles of this special section are the focus of this commentary. The first concerns the consequences of mothers' attachment style and mother-child interaction. The second concerns the challenges of assessing attachment in intervention research. Finally, there are the broader program and policy implications of these findings.

Mothers' attachment style and mother-child interaction

The interesting and important findings of Berlin, Whiteside-Mansell, Roggman, Green, Robinson, and Spieker (2010, 69–90) and of Green, Furrer, and McAllister (2010, 27–47) each begin with the observation that involvement with Early Head Start personnel, such as a home visitor, is likely to activate the attachment system of mothers of young children. Thus, the mother's attachment security may moderate

the benefits of program participation for child outcomes. The study by Howard, Martin, Berlin, and Brooks-Gunn (2010, 5–26), in turn, focuses on the long-term impacts of mother-child separation during the child's first two years on later functioning, and also raises important issues about maternal influences associated with the development of children's attachment security. In each case, the findings pose new questions for understanding the associations between family stress and support in the growth of security.

Berlin and colleagues (2010, 49–67) were interested in the extent to which the potential benefits of EHS program participation on the quality of maternal care would be moderated by differences in attachment style (avoidance and anxiety) as well as maternal depression. Cumulative stress models that portray attachment as a moderator of the impact of life stresses are an important way of understanding the protective influences of security for individuals at risk (Kobak, Cassidy, Lyons-Ruth, & Ziv, 2006), and this approach was enlisted in this study as a means of understanding mothers' reactions to the services of a home visitor. In general, the findings were consistent with this view: Berlin and her colleagues found that mothers with lower baseline attachment avoidance were rated as more supportive of their children at the three-year follow-up, while mothers with lower baseline attachment anxiety showed reduced spanking at the follow-up. In each case, the authors argue, mothers with less avoidance and anxiety were able to better engage EHS personnel and thus to benefit more from program participation. Interestingly, there were no effects associated with maternal depression. One reason may be that studies assessing depressive symptomatology among mothers in community samples tend to yield weaker associations with other variables than do studies assessing the effects of maternal depression in clinical samples (Atkinson, Paglia, Coolbear, Niccols, Parker, & Guger, 2000).

The findings of Berlin and her colleagues contribute to a broader research literature on the effects of recipient reactions to aid that mediate the benefits of social support interventions (see Thompson, 1995, for a review). Home visitors and other EHS program personnel are motivated by a sense of professional responsibility and compassion for recipients, and they may be surprised to find that recipients of their assistance often respond negatively to their efforts. This is because receiving assistance evokes feelings of appreciation but also of indebtedness, inferiority, dependency, and vulnerability. Receiving aid can be stigmatizing, especially if it is based on judgments of incompetence or failure. Equity norms in our society also contribute to feelings of humiliation at receiving benevolence that cannot be repaid, and such feelings are exacerbated if aid comes in the context of intrusions into private issues, such as the care of children. In these circumstances, recipients are likely to terminate a helping relationship if they can do so (such as by not being home when the visitor is due to arrive), and may reinterpret the circumstances to maintain self-esteem, such as by derogating the benefactor's motives or intentions.

The study by Berlin and colleagues contributes to this understanding an appreciation of the recipient's attachment representations, which may create further obstacles to a constructive relationship between a helper and the recipient of aid. Mothers who are high in anxiety or avoidance may resist developing a collaborative relationship with a home visitor or child care provider. Much more research is needed, of course, to elucidate the specific aspects of the helping relationship that are affected by a recipient's attachment style, as well as to understand how attachment representations interact with other features of the help-giving context (such as

implied or explicit judgments of the recipient) to influence recipient reactions (see Thompson, 1995, for further details).

Green and her colleagues reach similar conclusions in their study of perceived social support by mothers who differ in attachment style. These researchers found that high avoidance was associated with lower subsequent perceptions of social support. Social support had no reciprocal effects on avoidance in these cross-lagged longitudinal analysis: mothers higher in avoidant attachment perceived their social environment as becoming less supportive over time. By contrast, social support was associated with lower attachment anxiety in this sample. This was especially true for mothers experiencing lower stress, for whom enhanced perceptions of social support predicted a subsequently less anxious attachment style. When life stress was high, on the other hand, social support did not have a positive influence on attachment anxiety. Green and her colleagues concluded that avoidant attachment can be an obstacle to improving perceptions of social support, and this may contribute further to negative recipient reactions to aid.

Stress was a moderator of the benefits of social support for anxiously attached mothers. Like most researchers, Green and her colleagues used a cumulative measure of life stress, but the multiple, compounding stresses experienced by families in poverty may warrant multidimensional risk assessments. In our own research on EHS families, Raikes and Thompson (2005) distinguished two kinds of stresses experienced by these families. *Economic* stresses included being unemployed, single parenthood, having two or more children under the age of six in the home, teen parenting, and related indicators associated with poverty. *Emotional* stresses included domestic violence, anger management problems by a family member, parental incarceration or criminal activity, alcohol or drug abuse, and other indicators of a difficult family emotional climate. Both kinds of stresses are unfortunately common among EHS families, according to the mothers' reports, and were moderately correlated with each other. But they reflect different kinds of demands on mothers and on the mother–child relationship.

Economic and emotional stresses had different associations with the security of attachment in three-year-olds (Raikes & Thompson, 2005). The effects of economic stresses were mediated by differences in maternal sensitivity. Consistent with the predictions of attachment theory, mothers with high levels of economic stress were less responsive to their children which, in turn, predicted less secure attachments. By contrast, the effects of emotional stresses moderated the influence of maternal sensitivity on children's attachment security at age 2 1/2. Consistent with the conclusions of de Wolff and van IJzendoorn (1997), maternal sensitivity was not predictive of a secure attachment for families who were high in emotional stress. However, for families low in emotional stress, there was a positive association between maternal sensitivity and the security of attachment. Emotional stresses in the family also had a direct association with attachment security. Controlling for differences in maternal sensitivity, a family climate characterized by high levels of emotional stress was associated with the child's insecurity.

These findings (and others in the literature) underscore the potential value of distinguishing between different kinds of stressful events in the lives of families in poverty, and highlight their different impact on the mother—child relationship. In light of the findings of Green and colleagues, the possibility that emotional stresses moderated the association between perceived social support and attachment anxiety over time is a worthwhile hypothesis for further study. The view that emotional

stresses may also help to account for attachment insecurity beyond the influence of maternal sensitivity for poverty families is consistent with the conclusions of others who study at-risk families (e.g., Repetti, Taylor, & Seeman, 2002) and families in emotional turmoil (e.g., Davies & Woitach, 2008), and warrant further inquiry into the unique direct and indirect influences on the security of attachment for children growing up in poverty, and their mothers.

This leads to the study by Howard and colleagues concerning the long-term association between early mother—child separation and indicators of later child well being. These researchers found that a mother—child separation of a week or longer within the child's first two years was associated with higher levels of child negativity and aggression at age three, but not differences in child vocabulary or in multiple measures of maternal care. There was also evidence of a cascading effect, such that the effects of early separation on aggression at age five was mediated by aggression at age three.

One of the more interesting features of this study was the authors' analysis of the reasons for mother-child separation of such a duration before the child reached age two. In general, early separation was not a reflection of family dysfunction or instability, but rather derived from the mother's vacation or visiting a family member, and during this period the child was usually in the care of another likely attachment figure. In light of the fact that there were no indications that mothers who elected to be away were less sensitive or warm than others, it does not appear that these voluntary early separations were related to inadequate maternal care. In addition to the possibility that the association between early separation and later child aggression derived from the disruptive effects of separation experiences to developing child-mother attachment, it is also possible that child aggression at age three derived, in part, from emergent family problems that were indirectly related to the reasons the mother was away early in the child's life. Other studies have found that broader family stresses (such as those associated with the emotional stresses described above, such as marital disruption, adult substance abuse, or criminality problems) influence the security of attachment independently of maternal sensitivity (e.g., Owen & Cox, 1997), and this is likely for families at risk. Without knowing more about the reasons for the mother's absence, it awaits further research with families in poverty to better understand the impact of stressful family influences on developing attachment relationships.

Assessing attachment security

In none of these studies, unfortunately, was the security of child attachment measured. The study by Spieker, Nelson, and Condon (2010, 69–90) helps us to understand why. An unfortunate reality of evaluation studies is that the research tools created by developmental scientists for the laboratory do not transfer well to field studies. Despite the heroic efforts of the NICHD Study of Early Child Care and Youth Development (NICHD Early Child Care Research Network, 1997), the best-validated assessments of child attachment security are difficult to implement in large-scale research.

The Toddler Attachment Sort-45 (TAS-45) profiled by Spieker and her colleagues is a promising assessment of child attachment security that can be used in research of this kind. Although it is still in early stages of development, the findings reported in their study are encouraging. Security scores were significantly

associated with mother-reported competence and (negatively) associated with problem behavior, as well as with receptive language and a parent-child communicative mutuality score. The TAS-45 also incorporates several attractive methodological innovations, including the use of a "trilemma" procedure for observer reports of child behavior, an effort to develop behavioral profiles reflecting different attachment strategies, and the creation of "hotspot" scores for D and other classifications.

The more challenging question is what further work must be accomplished for this measure to be satisfactorily validated as an early attachment index. Confirming theoretically predicted associations with other measures is clearly a start, although more is needed: other variables are likely to show similar associations to those of the TAS-45 in this study. Further attention to discriminant as well as convergent validity is crucial, and this should proceed in light of clear theoretical judgments about what a secure attachment should, and should not, predict. The tendency of attachment researchers to seek significant associations between a new attachment assessment and earlier Strange Situation behavior may not be instructive, however, because attachment security can change over time and because this does not distinguish an attachment assessment from an attachment correlate.

Waters and Cummings (2000) argue that naturalistic observations of secure base behavior at home should be the gold standard against which attachment measures are validated. This would seem to be easy in this case, because the TAS-45 is, like the Attachment Q-Sort (AQS), an index of security through the observation of secure base behavior at home. But this is actually a thorny conceptual and empirical challenge. Because it can be difficult to observe secure base behavior in unstructured home observations, attachment researchers have had to broaden their criteria for attachment security to incorporate some of the presumed correlates of security. The security criterion sort for the AQS, for example, weights heavily items reflecting the child's social referencing, obedience, and empathy. Likewise, the TAS-45 includes items describing the child's stranger reactions, separation distress, and general fussiness. These may well prove to be valid indicators of the security of attachment, but only when they have been validated against clear age-appropriate indices of secure base behavior. As the authors acknowledge, doing so may require longer observations at home and in other settings where this behavior can be more reliably observed.

Finally, the generativity of attachment theory is reflected in the many uses of the term "attachment" to describe a child's emotional bond to the parent, the parent's emotional tie to dependent offspring, an adult's representations of early experiences of parental care, and one adult's romantic relationship with another adult. These alternative meanings of "attachment" require conceptual clarity as different attachment measures are used and interpreted. The studies by Berlin and Green and their colleagues enlisted an adaptation of a widely used measure of adult romantic attachment to index mothers' relational representations as a moderator of the effects of EHS program participation. These representations would be influential, they argued, because of the program's interest in fostering close relationships between mothers and home visitors. This is consistent with the view of attachment theory that attachment-related mental representations color encounters with new partners and the development of new relationships. But how and why would concerns about being loved, abandonment, and emotional closeness (indexed in the measure used in these studies) generalize from prior experiences of relational intimacy to new relationships with service providers? And does the influence of prior relational representations change over time as the relationship with home visitors grows? These seem to be important questions meriting further study as the ideas of attachment research are applied to policies and programs like EHS.

Implications for program and policy

The authors of several of the papers in this Special Issue suggest that measures of attachment should be incorporated into EHS programs as a means of screening for mothers with challenging relational representations that may be an obstacle to service delivery, or assessing children whose attachment security reflects experiences in the family as well as the outcomes of services. These are worthwhile suggestions, and present an important challenge to researchers and practitioners to ensure that attachment measures are appropriately used and interpreted in field settings.

Even if attachment assessments are not yet ready for valid field use, however, these ideas can be heuristically valuable to the EHS personnel who are providing services to families in poverty. It can be helpful, for example, for a home visitor to understand the importance of a mother's attachment representations in the context of the other influences on recipient reactions to aid. It can be valuable for a provider of child care services to understand how a young child's reactions to a caregiver may have roots in the child's experience of attachment relationships at home. The ideas underlying these measures can also be a source of discussion between program personnel and participant families about the characteristics of past relationships that can cause people to respond in distinct ways to others, including those whom they barely know.

More broadly, as the ideas of attachment theory have become incorporated into everyday understandings of parent-child relationships, the interaction between developmental scientists and practitioners over EHS can stimulate theory development as well as service delivery. It is important for attachment researchers to better understand, for example, the family and ecological influences on children's attachment security outside of maternal sensitivity, and how the economic and emotional stresses of family life can influence adults and children and their relationship. Viewed in this light, researchers as well as practitioners have much to gain from continuing the collaboration reflected in these remarkable papers.

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