

## Measure twice, cut once: attachment theory and the NICHD Study of Early Child Care and Youth Development

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The NICHD Early Child Care Research Network has produced research findings that provide reassuring confirmation of some central tenets of attachment theory, challenges to other aspects of the theory, and above all highlight the need for attachment researchers to clarify the claims for which the theory can be held accountable. This commentary on Friedman and Boyle's excellent review evaluates the strengths and weaknesses of the NICHD Study of Early Child Care and Youth Development as a study of attachment, and highlights the relevance of these findings for understanding the origins and consequences of attachment security, the problem of heterotypic continuity of the attachment construct, the importance of examining mediators and moderators of the developmental influence of security, and the interpretation of modest effect sizes from the study.

**Keywords:** NICHD SECCYD; attachment theory; heterotypic continuity; effect sizes

### Introduction

The NICHD Study of Early Child Care and Youth Development (SECCYD), inaugurated in the late 1980s to address public concern about the impact of early child care experience, has become a national resource for developmental science. Originally conceived to study a large sample of children through to age 3 years, the project has grown to study these children through adolescence and has incorporated a much larger range of measures than initially envisioned. As a consequence, it has enabled researchers to explore a broader variety of topics than early child care, including the origins of school readiness, predictors of childhood internalizing and externalizing disorders, genetic correlates of differences in socioemotional and cognitive functioning, the development of physiological stress reactivity, predictors of early social cognition, and other important issues.

Friedman and Boyle (this issue) provide a valuable summary of research from the NICHD SECCYD concerning the predictors and sequelae of infant-mother attachment. Besides highlighting what has been learned and what remains to be studied, their purpose was to provoke discussion of how these findings should be aligned with attachment theory. This commentary is devoted to extending this discussion, and to suggest that the alignment with theory is more complicated than Friedman and Boyle have suggested because of the casualness with which claims from attachment theory are sometimes formulated. Indeed, their summary of research findings highlights a challenge that has long been apparent in

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attachment theory: clarifying the expectations for which the theory can be held accountable in the context of proliferating mini-theories about how security is associated with antecedent influences and later functioning.

This paper begins by considering the special strengths of the NICHD SECCYD dataset for addressing questions arising from attachment theory, and some of its weaknesses for doing so. These are important for understanding how this study challenges, confirms, and clarifies claims from attachment theory and research, which is the focus of the section that follows. This essay closes with some thoughts about how attachment theory and research should proceed in light of these results and other findings from the attachment literature. Just as wise carpenters measure twice before cutting, it is wise for us to be clear about what attachment theory claims before identifying its research implications or interpreting the findings of large-scale studies like this one.

### **The NICHD SECCYD and attachment theory**

Friedman and Boyle's review is important because the NICHD SECCYD has many strengths as a tool for longitudinally studying childhood development. It boasts an enviably large sample size that, while not nationally representative, is diverse in important ways and provides statistical power to test mediating and moderating influences as well as main effects among predictors. The Early Child Care Research Network (ECCRN) is a consortium of developmental scientists whose negotiations over the design of this project led to an investigation that is carefully constructed using well-designed measures and painstaking coordination among 10 research sites. The attention to using convergent measures and multiple informants is admirable. The care in the design of this study is also reflected in the attachment measures. As described by Friedman and Boyle, the ECCRN selected developmentally appropriate assessments of attachment security for use at 15, 24, and 36 months with special attention to the training and consistency of coders of children's Strange Situation behavior. Taken together, the NICHD SECCYD is a model for large-scale longitudinal developmental research into early child care influences.

As a study of attachment security, these design strengths are also advantageous but some of the weaknesses of the NICHD study also become apparent. Some of these weaknesses arise from the economies required in a large-scale research effort. A more systematic assessment of maternal sensitivity, for example, would last longer than 15 minutes and include observations of mothers and infants in contexts besides play. When McElwain and Booth-LaForce (2006) tried to assess maternal sensitivity to infant distress (a particularly important context from an attachment perspective), more than two-thirds of the SECCYD sample had to be excluded because infants did not become distressed during the brief observational episode. Emotion regulation is an important outcome of a secure or insecure attachment, but in the NICHD study measurement was based on child behavior during a mother-child interaction task, making it difficult to evaluate whether associations with attachment security derived from the mother's participation in each assessment or are more generalizable (NICHD Early Child Care Research Network, 2004). Similar interpretive problems emerge with other outcome measures that relied on maternal report. In these and other instances, measurement of key constructs was not optimal either because measures were derived from assessments meant to serve other purposes, or owing to the need to compress the length of the overall assessment battery. This is, of course, a common problem in large-scale research projects.

A remarkable achievement of the ECCRN research team was minimizing the attrition of research participants over the extended course of this study. Even so, some attrition

occurred and, according to Friedman and Boyle's Table 1, it seems to have reduced the proportion of families in poverty. The inclusion of at-risk families was also reduced by the sample selection criteria, by which families were excluded if the mother did not speak English or was under 18 years old, the family lived in a dangerous neighborhood (such as a public housing project), the infant had been hospitalized shortly after birth, or the family planned to move from the area within 3 years (NICHD Early Child Care Research Network, 2001a). The sample is still more diverse and representative than most other studies in the field. However, the exclusion of the most at-risk families is an important consideration in interpreting findings related to attachment security. In their meta-analytic review, de Wolff and van IJzendoorn (1997) noted that family socioeconomic status is a significant moderator of the influence of maternal sensitivity on attachment security: there is a weaker association between sensitivity and security in lower-income homes. Raikes and Thompson (2005) studied a sample of low-income Early Head Start families (many of whom would have been excluded from the NICHD study) and found that family stressors had direct as well as indirect effects (i.e., mediated by maternal responsiveness) on attachment security. The sociodemographic diversity of the sample can influence findings concerning the sequelae of attachment as well. A secure attachment is likely to be developmentally more significant in contexts where children experience greater environmental challenges than when they are in more supportive contexts, and studies of children in at-risk families have yielded some of the most significant longitudinal sequelae of early security (e.g., Sroufe, Egeland, Carlson, & Collins, 2005). To the extent that the NICHD SECCYD had a limited and diminishing proportion of at-risk families, we might expect the associations between attachment and some of its predictors (e.g., maternal sensitivity) to be enhanced and the association between attachment and some of its consequences to be somewhat reduced.

Finally, but most importantly, the NICHD study was designed to examine the correlates and consequences of the child care choices that parents made for their young children. It was not designed as a study of the predictors and consequences of the security of attachment. Many outcomes of attachment security are nicely captured in the follow-up research protocols (e.g., parent-child relationship quality; social skills with peers; social cognition; behavior problems), but others (e.g., personality development, self-concept, emotion understanding) were little studied or unmeasured in this project. More importantly, a number of the studies summarized by Friedman and Boyle examine the associations between attachment and behaviors for which theoretical predictions from attachment theory are unclear or nonexistent. What should we expect, for example, of the association between attachment and diurnal patterns of sleep and wakefulness? Proposing that "it is possible to argue that ..." does not substitute for a strong theoretical hypothesis. What does attachment theory have to say about the relation between security and attention, language, and school readiness? It is a long way from the influence of security on infant exploration to cognitive skills, and Bowlby and Ainsworth had relatively little to say about attachment and cognitive-linguistic growth. The NICHD SECCYD also includes measures of health, ethnic identity, pubertal maturation, narrative fluency, physiological reactivity, and many other behaviors that are potentially relevant to early child care outcomes. It will be tempting in the future to see how each is associated with the security of attachment. A clear understanding of the expectations of attachment theory is necessary, however, to determining whether empirical findings from this project confirm, disconfirm, or have no theoretical relevance at all.

What are, therefore, the claims of attachment theory concerning the correlates and consequences of the security of attachment? This is, in many respects, a surprisingly

difficult question to answer (Thompson, in press). One reason is that in the decades since it was originally formulated, Bowlby's heirs have expanded his theory to take into account new ideas in developmental science, advances in attachment research, and their own ideas about the influence of early attachment security. The result has been increasingly expansive constructions of attachment and its developmental implications during the past 25 years. Originally formulated as a theory of the influence of the mother–infant relationship on personality development, there has grown from the foundation of Bowlby's theory a variety of attachment mini-theories with much broader views of the developmental influences arising from secure or insecure early relationships. In one view, for example, attachment affects later development because of its influences on neurodevelopment, behavioral and affective regulation, and mental representations of experience, a formulation that can encompass a wide variety of potential sequelae of security (Weinfield, Sroufe, Egeland, & Carlson, 1999). To another, a secure attachment is the avenue by which important social outcomes related to identification, imitation, social learning, cooperation and compliance, and prosocial motivation derive from a harmonious parent–child relationship (Waters, Kondo-Ikemura, Posada, & Richters, 1991). Other attachment researchers have explored, as did scientists from the NICHD ECCRN, the association between attachment and later cognitive-linguistic functioning because of the expected influences of attachment security on exploration, self-confidence, and achievement motivation. As Belsky and Cassidy (1994) asked, one might wonder if there is anything to which attachment security is *not* related. Friedman and Boyle's review reflects the expansiveness of many of these contemporary formulations.

Some of Bowlby's most insightful concepts have been similarly expanded by his followers. His concept of the "internal working model" that bridges relational experience and expectations, for example, is a brilliant proposal for understanding the nature of integrated, affectively-colored relational representations. But "internal working model" is a conceptual metaphor, not a systematically defined theoretical construct, and thus has been subject to increasingly broader interpretations as it has been applied to research findings relating attachment security to theory of mind, ideological values, and other behaviors and mental representations (Thompson, in press; Thompson & Raikes, 2003). Guided by a general view that a secure attachment should be associated with more positive developmental outcomes, therefore, attachment researchers have used Bowlby's theory as a conceptual umbrella for broadening constructions of the developmental impact of attachment relationships. They have not yet achieved consensus, however, about how broadly these developmental consequences should be construed.

Expanding the claims of attachment theory has seemed necessary, furthermore, to accommodate a greater variety of empirical correlates of attachment security. When researchers have found relations between attachment security and later cognitive or linguistic achievement, for example, a theoretical justification for this direct association has seemed necessary. However, the simple pre-post research design characteristic of much of the attachment literature seldom enables the detection of more theoretically predictable mediating relationships. Does a significant association between early attachment and school-age reading and mathematical ability mean that security yields better reasoning skills? When Sroufe and his colleagues were faced with this question in the Minnesota Study of Risk and Adaptation, they did not conclude that a secure attachment in infancy fosters a better "math brain." Rather, they found that the association derived from intervening processes (such as parent involvement with schoolwork and positive child–teacher relationships) that accord better with the original formulations of attachment theory (Sroufe et al., 2005).

The need for greater theoretical clarity concerning the correlates and consequences of attachment security is thus one of the most significant current challenges for attachment theory. “All good things go together,” the view that a secure attachment leads to better generalized developmental outcomes, is not a sophisticated developmental theory. At present, the most well-established empirical sequelae of attachment are those most directly derived from Bowlby’s theory: a secure attachment confers benefits for later parent–child relationships and other close relationships, personality functioning, self-concept, emotion regulation, and social-cognitive capabilities such as emotion understanding and conscience (Thompson, 2006, in press). These sequelae are foundational to attachment theory and are the central predictions against which the theory should be held accountable.

Taken together, the NICHD SECCYD provides opportunities to examine, in a large, national sample of children studied longitudinally, the predictors of attachment security and its sequelae. It is most useful for exploring the central tenets of attachment theory concerning the origins of security in maternal responsiveness and the implications of security for later social relationships, social understanding, and risk for behavior problems. Beyond these, findings from the study must be considered cautiously in assessing their implications for attachment theory, especially when direct associations between attachment and later behavior are examined without consideration of potential mediating influences (a caution that extends, of course, to all attachment research). In the end, attachment theory is best challenged, confirmed, and clarified when research is theoretically guided to address the core claims on which the theory is based rather than tallying the broadening range of correlates of early security.

### **What have we learned?**

When research bearing on the central theoretical claims of attachment theory from the NICHD SECCYD is considered, a variety of findings offer challenges, confirmations, and opportunities to clarify attachment theory.

### ***What we always knew to be so***

Many of the findings from the NICHD project help to validate some of the core hypotheses of attachment theory. In its central mission of clarifying inconsistent prior findings concerning the effects of early and extensive nonparental care on attachment security, the NICHD SECCYD showed that maternal sensitivity, not child care experience, best predicts whether infants become secure or insecure. As noted by Friedman and Boyle, this has been one of the project’s most robust conclusions.

Friedman and Boyle and others (e.g., Newcombe, 2007) regard the failure of early and extensive nonparental care to foreshadow attachment insecurity as inconsistent with attachment theory. In one sense, this is certainly true. The assumption by Bowlby (and others of his time) that maternal care is exclusively important to healthy early psychological growth and that frequent separations between mother and baby were inevitably harmful is clearly incorrect. Concerns were also raised that nonparental care faced young infants with frequent separations that could undermine confidence in the caregiver and that mothers might have difficulty maintaining sensitivity to their infants in these circumstances. The findings of the NICHD SECCYD indicate that (1) poorer child care quality and longer child care hours were associated with lower maternal sensitivity (NICHD Early Child Care Research Network, 1999), (2) maternal sensitivity, not the

amount or quality of child care experience, predicted attachment security during the early years (NICHD Early Child Care Research Network 1997, 2001b), and (3) poorer child care experience was predictive of the security of attachment primarily in the context of maternal insensitivity. When mothers are sensitively responsive to their infants, neither the quality, amount, nor age of onset of nonparental care has a consistent, significant influence on the security of attachment. Other studies summarized by Friedman and Boyle indicate that the Strange Situation is a valid attachment assessment for infants with extensive child care experience, despite these infants' greater experience with maternal separations. Taken together, these conclusions are consistent with attachment theory, especially with its core emphasis on the importance of maternal responsiveness to early security. Indeed, these conclusions have led to follow-up research, including studies from the NICHD project, into the predictors of variability in maternal sensitivity (see Mills-Koonce, Garipey, Sutton, & Cox, this issue).

The NICHD SECCYD also extensively studied the sequelae of attachment security. With respect to expectations most central to attachment theory, ECCRN researchers have consistently found early security to predict children's later social competence with peers and interactions with friends, internalizing and externalizing behaviors, and emotion regulation. For each outcome domain, the differences between securely-attached and insecurely-attached children have been consistent with theoretical expectations, and there is even some modest evidence for security as a protective influence in the context of environmental challenge. It is important to note, however, that the studies summarized by Friedman and Boyle barely sample the range of outcome measures relevant to attachment theory that are included in the NICHD SECCYD, so there is reason to look forward to further discoveries in the future.

### *Heterotypic continuity and the stability of attachment*

The NICHD project is the only large-scale longitudinal study to use each of the best-validated attachment assessments: the Ainsworth-Wittig Strange Situation at 15 months, and Attachment Q-sort (AQS) at 24 months, and the Cassidy-Marvin Strange Situation at 36 months. Because of the centrality of attachment to the study's aims, the ECCRN enlisted careful procedures to ensure that these assessments were conducted validly and reliably in order to study maternal and child care associations with attachment security throughout the 3 years of the original project design. In doing so, the research team confronted the challenges of heterotypic continuity in using different developmentally-appropriate measures of the same underlying construct.

Attachment researchers have long realized that different measures are necessary for assessing attachment security at different ages. Children's tolerances for brief separations for their caregivers, the behavioral manifestations of security and insecurity, and the growth of representational capacities each transform the nature of developmentally appropriate assessment. The result, however, is a trio of well-validated measures with very different measurement strategies and operationalizations of attachment security. By contrast with the Strange Situation, for example, the AQS seeks to describe secure base behavior at home rather than activating attachment behavior in the lab. Consequently, the criteria for secure attachment are more subtle and broader than for the Strange Situation, and incorporate hypothesized correlates of attachment security (such as the child's obedience, social referencing, empathy, and exploratory interest) as well as secure base behavior. The AQS also yields a continuous rather than a categorical measure of security, and does not distinguish variations in insecurity. The Strange Situation procedures for

infants and preschoolers are also significantly different from one another not only in the duration of separation episodes but also in the behavioral criteria for secure and insecure classifications, with the preschool assessment incorporating speech and more subtle behavioral indicators into classification criteria. The central question for attachment researchers is whether these diverse assessment strategies converge on a common, shared attachment construct.

As noted by Friedman and Boyle, data from the NICHD SECCYD were used by Fraley and Spieker (2003) in analyses that showed the advantages of representing diversity in the security of attachment according to two continuous variables rather than several discrete categories. The problem of heterotypic continuity might be addressed, therefore, with the use of consistent continua for representing attachment security across age, and there are also data-analytic advantages to continuous over categorical measures. The major problem with Fraley and Spieker's proposal, however, is that they eliminated the D classification from their analyses, rendering their findings of limited applicability in light of growing interest in infant disorganization. If researchers seek variability in the forms of insecurity manifested by children, neither the AQS nor alternative continuous approaches seem to be useful. It is impossible to study the importance of disorganization in the attachment relationship with either approach.

Attachment researchers have sought to validate these measures by establishing their association with antecedent or concurrent infant Strange Situation classifications or with theoretically-predicted external correlates, such as maternal sensitivity. In general, these studies indicate that the three attachment assessments used in the NICHD SECCYD are valid according to these criteria and suggest that they share variance that indexes a consistent attachment construct (Thompson, 2006). The remaining variance in each measure is substantial, however, and together with differences in their external correlates (such as temperament), this indicates that each measure indexes influences independent of the security of attachment. We would expect this to be true, but the amount of unshared variance between well-validated assessments of attachment security raises questions about developmental differences not only in the *assessment* of attachment but also the attachment *construct* as children mature psychologically.

In this light, the findings from the NICHD SECCYD add important information bearing on heterotypic continuity in the attachment construct. First, in evaluating a "maternal attachment model" of behavior problems in early childhood, McCartney, Owen, Booth, Clarke-Stewart, and Vandell (2004) found variable associations between maternal-reported internalizing and externalizing problems at age 3 and attachment assessments at each age. While AQS scores were the most reliable predictor of children's behavior problems, Strange Situation ratings at 15 and 36 months were much more variable and inconsistent predictors. Similar findings have been reported by Raikes and Thompson (this issue) in a study described below using each of the attachment measures to predict differences in children's social information-processing abilities at kindergarten. Neither study could address *why* attachment assessments at different ages yielded different predictive correlates; variability in measurement, duration from assessment to outcome, and children's changing developmental capabilities are candidate reasons. Second, McCartney and colleagues (2004) reported no stability in attachment status from 15 months to 24 months, no stability from 15 to 36 months, and very modest consistency between attachment assessments at 24 and 36 months. These findings are consistent with the evidence of the attachment literature that security of attachment (assessed consistently in the infant Strange Situation) often changes over time (Thompson, 2006), but adds the realization that assessing consistency in attachment security is further challenged when

different assessments are used over periods of considerable growth in psychological functioning.

Taken together, these findings highlight an important challenge to attachment theory and research. While the problem of heterotypic continuity focuses on efforts to assess a consistent psychological construct in developmentally appropriate ways, these findings raise the question of whether the security of attachment is itself a psychologically changing construct as children mature. Growth in representational skills, psychological sophistication, and relational depth may transform not only the assessment of attachment but also its meaning over time. Studies like the NICHD SECCYD have the potential of elucidating this challenging possibility.

### *Mediators, moderators, and interactions*

One of the strengths of the NICHD SECCYD is its large sample size with sufficient power to reliably detect mediating and moderating associations among variables. Investigators of the ECCRN have taken advantage of this to explore moderators of the predictive correlates of attachment security in ways that smaller-scale studies of the attachment literature have been incapable of doing. In an important investigation, for example, Belsky and Fearon (2002) found that children who obtained the highest scores on a broad range of social and cognitive measures at 36 months were securely attached at 15 months and who subsequently experienced sensitive maternal care in assessments at 24 months. Those performing most poorly at 36 months were insecurely attached in infancy and experienced later insensitive care. Of the two intermediate groups, children who were initially insecurely attached but subsequently experienced sensitive care scored higher on all outcome measures than children who were initially secure but later experienced insensitive care. Although these findings suggest, as Friedman and Boyle do, that children would benefit if their mothers are trained to be sensitively responsive, the more important conclusion is that prediction of child outcomes is enhanced if *both* early security *and* subsequent maternal support are considered together, and that the continuing quality of parenting is important.

Other studies summarized by Friedman and Boyle also contribute to the conclusion that the main effects orientation of traditional attachment research should be supplemented by efforts to understand how attachment is influential in concert with other influences on psychological development. Because attachment security indexes the harmony of the parent-child relationship early in life, assessing its prediction to later behavior when subsequent measures of parenting quality are also considered can yield stronger conclusions concerning the early and enduring importance of a secure attachment (NICHD Early Child Care Research Network, 2006). In another recent study based on these data, for example, Raikes and Thompson (this issue) used all three assessments of early attachment together with measures of maternal sensitivity and depressive symptomatology throughout infancy and early childhood to predict children's social information-processing skills at 54 months and in first grade. With parenting measures controlled, children who were secure at 24 months provided more competent social problem-solving solutions and reported less loneliness, while insecurely-attached children at 36 months made more negative attributions to peers, reported more loneliness, and offered poorer solutions to social problems (attachment assessed at 15 months was nonpredictive). Maternal sensitivity and depressive symptomatology were also predictive of these later social cognitive measures, especially when they were assessed before 36 months. The conclusion that attachment security and maternal care *each* predicted later



social information-processing is important to establishing the significance of an early secure attachment to mother, and to understanding how changes in maternal care are likely to herald meaningful changes in internal working models of attachment.

Understanding how attachment interacts with parenting practices and other developmental influences is important for validating the attachment construct. If “all good things go together,” then the processes that initially contributed to a secure attachment may also shape later sociopersonality capabilities for which attachment security is often given credit. Research that simultaneously investigates the prediction of later outcomes by attachment security and parenting practices helps to confirm that something more is contributed by a secure attachment.

The influence of attachment security may be moderated by subsequent parenting quality, of course, but it may also moderate the effects of parenting practices, as has been shown in research from the NICHD project (NICHD Early Child Care Research Network, 2006) as well as by other researchers (Kochanska, Aksan, Knaack, & Rhines, 2004). As earlier noted, several studies by the ECCRN have also elucidated how a secure attachment may be a protective factor, and insecurity a risk factor, for psychological adaptation in the context of environmental adversity. Taken together, findings from the NICHD SECCYD provide a model for future research that examines not only the direct, main effects of attachment security on later psychological functioning but also the indirect effects that are studied when attachment is viewed in concert with other important developmental influences in the early years.

### *Modest effect sizes*

In their review, Friedman and Boyle draw attention to the modest effect sizes of findings associating attachment security with later outcomes. In light of the foregoing discussion, however, it is easy to understand why this occurs. In predicting later behavior (sometimes years in the future), a secure attachment is only one of many influences on sociopersonality development whose effect may not only be direct (the kind commonly measured) but also indirect. Friendship, behavior problems, social information-processing, self-concept, and other predictive correlates of the security of attachment are also affected by many other developmental influences. The NICHD SECCYD is not the only large-scale longitudinal study to yield this conclusion. Sroufe and his colleagues, in analyzing the results of the Minnesota Study of Risk and Adaptation, emphasized that broadband measures of caregiving quality and other influences were far more predictive of later outcomes than were single measures, such as attachment security (Sroufe et al., 2005). Why would we expect otherwise?

### **Where do we go from here?**

A recent review of the attachment literature offered some tentative conclusions about the developmental influence of attachment security (Thompson, in press). Early secure or insecure attachment is especially predictive of later psychological outcomes when viewed in the context of the continuing quality of parental care. The social-cognitive advantages of children with a secure attachment history are likely to be an important mediator of their social competence, especially with peers and other close relational partners. How secure and insecure children perceive themselves and their characteristics may be an especially important contributor to their psychological functioning. The content and quality of mother-child conversation is probably an important avenue by which sensitivity is

conveyed and security maintained after infancy. Attachment security may be important not only for how young children think, but also how they attend to, process, and remember events related to their relational experiences. Understanding how attachment changes with the developing representational and psychological sophistication of the child will enable researchers to understand better its predictive correlates.

These and other formulations to guide future research are valuable if they are well-founded on attachment theory and move beyond simple, direct associations between the security of attachment and its antecedents and consequents. They are helpful to theory if they embed the developmental influence of attachment security in a network of other influences on psychological growth. They will stretch attachment theory if they offer good tests of core theoretical ideas, and provide avenues for exploring mediated and moderated associations between attachment and unexpected developmental outcomes. They will build the architecture of attachment theory if they focus on discriminant as well as convergent validity of the attachment construct.

It is not easy to be theoretically guided in this atheoretical, data-driven era. Aply summarized by Friedman and Boyle, the NICHD ECCRN has provided a network of research findings that provide reassuring confirmation of some central tenets of attachment theory, challenges to other aspects of the theory, and above all highlight the need for attachment researchers to clarify the claims for which the theory can be held accountable. With many longitudinal waves yet to be analyzed and a striking array of relevant measures yet to be studied, their review is also a promissory note of future discoveries contingent on the ability of attachment researchers to attend to theory development. Without a clear blueprint, it is difficult to measure once or twice.

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