
THE RELATIONSHIP QUESTIONNAIRE-CLINICAL VERSION (RQ-CV): INTRODUCING A PROFOUNDLY- DISTRUSTFUL ATTACHMENT STYLE

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ABSTRACT: Cost-efficient prenatal assessments are needed that have the potential to identify those at risk for parent/infant relational problems. With this goal in mind, an additional attachment style description was added to the Relationship Questionnaire (Bartholomew & Horowitz, 1991), an established self-report attachment measure, to create the Relationship Questionnaire: Clinical Version (RQ-CV). The additional description represents a profoundly-distrustful attachment style: "I think it's a mistake to trust other people. Everyone's looking out for themselves, so the sooner you learn not to expect anything from anybody else the better." The RQ-CV was applied to a sample of 44 low-income mothers who had participated in a previous study of the impact of family risk factors on infant development. After first controlling for demographic risk factors and for other insecure adult attachment styles, mother's profound-distrust was associated with three independent assessments of the quality of maternal interactions with the infant assessed 20 years earlier. In particular, profound-distrust was related to more hostile, intrusive, and negative behaviors toward the infant. The results are discussed within the framework of attachment theory.

RESUMEN: Los instrumentos de investigación prenatal de costo eficiente son necesarios ya que tienen la posibilidad de identificar a quienes están bajo riesgo de problemas en la relación entre los padres y el infante. Con esta idea en mente, se agregó un adjunto adicional de descripción de estilo al Cuestionario de la Relación Afectiva (Bartholomew & Horowitz, 1991), una medida de auto-reporte de la afectividad frecuentemente usada, con el fin de crear el Cuestionario de la Relación Afectiva: Versión Clínica (RQ-CV). La descripción adicional representa un estilo de afectividad profundamente desconfiable: *Yo pienso que es un error confiar en otras personas. Cada uno está atento a sí mismo, de manera que mientras más pronto se aprenda a no esperar nada de nadie mejor.* El RQ-CV se aplicó a una muestra de 44 madres de bajos recursos económicos que habían participado en un estudio previo sobre el impacto de los factores de riesgo familiar en el desarrollo del infante. Después de controlar primero los factores de riesgo demográficos y otros estilos de afectividad del adulto inseguro, se asoció la "profunda desconfianza" de las madres con tres puntajes independientes de las desorganizadas interacciones maternas con el infante. En particular, la "profunda desconfianza" fue relacionada con conductas más

This work was supported by Grant MH 062030 to K. Lyons-Ruth. Direct correspondence to: Bjarne M. Holmes, Applied Psychology, School of Life Sciences, John Muir Building, Heriot-Watt University, Edinburgh EH14 4AS, Scotland; e-mail: B.M.Holmes@hw.ac.uk

hostiles, intrusas y negativas hacia el infante. Los resultados se discuten dentro del marco de la teoría de la afectividad.

RÉSUMÉ: Nous avons besoin d'instruments de dépistage prénatal peu onéreux qui aient le potentiel d'identifier les personnes à risque pour des problèmes relationnels parent-nourrisson. C'est en gardant à l'esprit ce but qu'une description supplémentaire du style d'attachement fut ajoutée au Questionnaire de Relation (Bartholomew & Horowitz, 1991), une mesure auto-évaluative d'attachement souvent utilisée, afin de créer le Questionnaire de Relation: Version Clinique (RQ-CV). La description supplémentaire représente un style d'attachement profondément méfiant: *Je crois que c'est une erreur d'avoir confiance en d'autres gens. Chacun s'occupe de soi, donc, plus vite on apprend à ne rien attendre de qui que ce soit, le mieux c'est.* Le RQ-RV a été donné à un échantillon de 44 mères de bas niveau socio-économique qui avaient participé à une étude précédente sur l'impact des facteurs de risques familiaux sur le développement du nourrisson. Après tout d'abord le contrôle initial des facteurs de risques démographiques et des autres styles d'attachement insécure, la Profonde Méfiance de la mère fut liée à trois indices indépendants d'interactions maternelles perturbées avec le nourrisson. En particulier, la Méfiance Profonde était liée à des comportements plus hostiles, envahissants, et négatifs envers le nourrisson. Les résultats sont discutés dans le cadre de la théorie de l'attachement.

ZUSAMMENFASSUNG: Kostengünstige vorgeburtliche Suchinstrumente sind erforderlich, um jene zu finden, die das Risiko haben ein Eltern-Kind Beziehungsproblem zu entwickeln. Dieses Ziel vor Augen wurde eine zusätzliche Bindungsbeschreibung zum Bindungsfragebogen (Bartholomew & Horowitz 1991) entwickelt, welcher ein häufig benutztes Bindungsmessungsinstrument ist, um einen veränderten Fragebogen zu schaffen: Die klinische Version (RQ-CV). Die zusätzliche Beschreibung bezieht sich auf einen tief greifenden misstrauischen Bindungsstil: *Ich denke es ist ein Fehler anderen Menschen zu trauen. Jeder schaut nur auf sich selbst - je früher du lernst nichts von Anderen zu erwarten, desto besser.* Der RQ-CV wurde bei einer Stichprobe von 44 armen Müttern, die an einer vorangegangenen Studie zu familiären Risikofaktoren und deren Auswirkungen auf die Entwicklung des Kindes teilgenommen hatten, angewandt. Nachdem wir zuerst auf die demographischen Risikofaktoren geachtet hatten und nach anderen Arten unsicherer Bindung ausgeschlossen hatten, fanden wir, dass tiefer greifendes Misstrauen der Mütter mit drei unabhängigen Kategorien von mütterlich – unterbrochenen Interaktionen mit dem Kind zusammen hingen. Insbesondere war tiefer greifendes Misstrauen mit größerer Feindseligkeit, Übergriffen und negativem Verhalten gegenüber dem Kind verbunden. Diese Ergebnisse werden im Rahmen der Bindungstheorie diskutiert.

抄録：親／乳児の関係性問題へのリスクの高い人々を同定する潜在力のある、費用効率の高い出産前スクリーニング手段が必要とされている。この目的を念頭に置き、関係性質問紙臨床版Relationship Questionnaire: Clinical Version (RQ-CV)を作るために、しばしば使われる自己報告式の愛着測定法である関係性質問紙Relationship Questionnaire (Bartholomew & Horowitz, 1991)に、付加的な愛着スタイルの記述が付け加えられた。付加的な記述は非常に強い不信感 *profoundly-distrustful* を持った愛着スタイルを代表する。たとえば、*他人を信じるのは誤りだと思う。誰でも自分で用心しているから、あなたはできるだけ早く他の誰からも何も期待しないことを学ぶ方がよい。* 以前に行われた、乳児の発達に与える家族のリスク要因の影響についての研究に参加したことのあつた44人

の低所得の母親という標本群に、RQ-CVが実施された。人口統計学的リスク要因とその他の不安定な成人愛着スタイルについて最初に統制した後、母親の「非常に強い不信感」は、母親の崩壊した子どもとの相互交流の3つの独立した評定と関連があった。特に、「非常に強い不信感」は、乳児に向かうより敵意があり、侵入的で、そして否定的な行動に関係していた。結果は愛着理論の枠組みの中で議論される。

* * *

I think it's a mistake to trust other people. Everyone's looking out for themselves, so the sooner you learn not to expect anything from anybody else the better.

Could an explicitly held relational attitude such as the aforementioned one indicate that a mother might have relational problems with her infant? A growing amount of evidence links early parent-infant interaction problems to later poor socioemotional outcomes (e.g., Lyons-Ruth, Easterbrooks, & Cibelli, 1997; Ogawa, Sroufe, Weinfield, Carlson, & Egeland, 1997; for a review, see Greenberg, 1999, and Lyons-Ruth & Jacobvitz, 1999). One clinical priority is to develop a prenatal assessment suggestive of future relational problems with the infant. A number of studies have established that parental attachment strategies coded before the birth of the infant from the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1996) predict the infant's attachment behaviors toward that parent by 1 year of age (e.g., Fonagy, Steele, & Steele, 1991; Ward & Carlson, 1995; for a review, see Hesse, 1999, and van IJzendoorn, 1995). Though the AAI would be one candidate assessment for predicting future mother/infant relational problems, using it as a prenatal assessment on a broad basis would be limited by its length (approximately 1 hr) and expense (e.g., audiotapes need to be transcribed and professionally coded). Instead, a simple, effective, and cost-efficient assessment is needed that can provide an initial indication of potential future mother/infant relational problems. Such a measure could aid clinicians in determining the need for more complex assessments and/or therapeutic mother/child interventions.

I. BACKGROUND

Attachment theory (Bowlby, 1969, 1973, 1980) and research can provide a conceptual framework from which to understand mother/infant relational problems. Bowlby (1969) postulated that human beings, like all primates, are under pressures of natural selection to evolve behavioral patterns such as proximity seeking, smiling, and clinging, which evoke caretaking behaviors in adults such as touching, holding, and soothing. These reciprocal behaviors are viewed as promoting the development of an enduring affective tie between infant and caregiver, which constitutes attachment. When the safety of the child is threatened, activation of the attachment system naturally occurs, and attachment behaviors such as crying and clinging can be observed in the child (Bowlby, 1973). Though the attachment system can be understood to be continuously active in an infant (Main, 1999), experiences of illness, hurt, fear, and sadness are particularly likely to elicit attachment behaviors. Positive *maternal involvement* such as sensitivity, warmth, and affectionate physical contact (Lyons-Ruth, Connell,

Grunebaum, & Botein, 1990) at these “tender moments” is crucial to determining if the infant will learn to feel safe and secure with the parent.

Moreover, from these reciprocal patterns of interaction between parent and child, Bowlby (1973) viewed the infant as developing internal representations of the self and of others that function as partial templates for later relationships. When a consistent, responsive, and caring relationship evolves between child and caregiver, Bowlby (1973) felt that the child would develop an inner sense of safety, security, and trust—a secure attachment. A secure attachment relationship should hence engender a positive, coherent, and consistent self-image and a sense of being worthy of love combined with a positive expectation that significant others will be generally accepting and responsive.

However, not all interaction patterns between mothers and infants lead to attachment security. Over time, less than optimal responses by a caregiver to the child’s attachment behaviors may lead the child to develop alternative, less flexible, and coherent strategies for how best to maintain feelings of safety and security when interacting with the caregiver—so-called organized but insecure attachment strategies. Two such insecure but organized strategies have been identified: avoidance and resistance (Ainsworth, Blehar, Waters, & Wall, 1978). A child using an *avoidant* strategy turns attention away from the need for comfort from the caregiver, presumably to preemptively avoid the experience of rejection from the mother’s discomfort with close contact at vulnerable moments. A child using a *resistant* strategy will tend to heighten affective cues to the caregiver, including proximity and contact-seeking and distress, presumably to hold the attention of an inconsistent and preoccupied caregiver (for a review, see Weinfeld, Sroufe, Egeland, & Carlson, 1999).

Some infants, however, fail to develop either a secure attachment to a caregiver or an organized but insecure strategy to deal with lack of security. Such infants display episodes of disorientation and/or disorganized conflict behaviors in the face of attachment-related stress (Main & Solomon, 1990). Behaviors such as failing to seek contact when very distressed, frightened/freezing behaviors, and repeated incomplete approaches to the parent lead to a classification as disorganized/disoriented with respect to attachment (Main & Solomon, 1990). Attachment disorganization is the attachment pattern that has been most clearly linked to psychopathology (Dozier, Stovall, & Albus, 1999; Lyons-Ruth & Jacobvitz, 1999). Disorganized attachment is thought to develop when a caregiver who would normally act as a source of security also becomes a source of fear (Main & Hesse, 1990). In such situations, the distressed infant appears to experience an approach/avoidance dilemma that leads to conflict or disoriented behaviors (Lyons-Ruth & Jacobvitz, 1999). Disorganization also is thought to occur when the caregiver’s behaviors are inadequate to modulate the infant’s fearful arousal caused by someone other than the parent (Lyons-Ruth, Bronfman, & Atwood, 1999). Both *Hostile/intrusive* maternal behaviors toward the infant (e.g., covert hostility, manipulating the infant in an interfering way, and anger) (Lyons-Ruth et al., 1990) and maternal *disrupted affective communication* toward the infant (e.g., disoriented, role-confused, or withdrawal behaviors) (Lyons-Ruth, Bronfman, & Parsons, 1999) have been associated with infant disorganization.

In the absence of specific pressures toward change, attachment patterns are thought to persist over the life span and guide expectations and beliefs regarding past, present, and future interactions in relationships. They also are thought to influence how individuals attend to, interpret, and remember interpersonal events and to trigger both affective and behavioral responses to new interpersonal situations and relationships. For adults, too, feelings of secu-

rity are experienced when individuals receive feedback from attachment figures that they are loved and capable (Pietromonaco & Feldman-Barrett, 2000). The AAI (George et al., 1996), a semistructured interview developed to assess the adult counterparts of the secure, avoidant, and ambivalent strategies observed during infancy and childhood, has been well validated in both normative and high-risk mothers (see Hesse, 1999). The interview poses a series of questions probing how the individual thinks about his or her childhood relationships with parents or central attachment figures; however, this interview takes approximately 1 hr to conduct and requires costly transcribing and time-consuming coding, which renders it less useful as a widely used assessment for mothers at risk.

In a parallel series of developments in the field of social psychology, researchers applied Bowlby's (1969) theory of attachment to the romantic relationships between adults. Hazan and Shaver (1987) asked a sample of college students to pick one of three paragraphs that best represented how they viewed their own relationship experiences. The three paragraphs were conceptually linked to the original childhood attachment patterns: secure, avoidant, anxious/ambivalent (resistant).¹

Bartholomew and colleagues (Bartholomew & Horowitz, 1991; Griffin & Bartholomew, 1994), also using normative college-student samples, proposed a two-dimensional construct of self-reported adult attachment, based on the intersection of a model of the self and a model of others (Bowlby, 1973). Attachment *security* was defined as a positive self-image and a sense of being worthy of love, combined with a positive expectation that others will be generally accepting and responsive in times of need. *Preoccupation* (anxious-ambivalence) was defined as a negative self-image and a sense of unlovability, combined with a positive evaluation of others (in terms of their strength and independence). Two *avoidant* strategies were defined: (a) *dismissing-avoidance*, representing a positive self-image and a sense of lovability, combined with a negative expectation of significant others as demanding, clingy, and dependent; and (b) *fearful-avoidance*, representing a negative self-image combined with skepticism that significant others can be trusted to be loving and available. Researchers measured these patterns primarily by asking individuals to rate four separate paragraphs, each representing one of the four styles, on a scale of 1 to 7 (Relationship Questionnaire, RQ; Bartholomew & Horowitz, 1991). Subsequently, numerous researchers in the social psychology tradition argued for the advantage of using dimensional analysis rather than prototype measures when assessing adult attachment. Hence, contrary to the developmental tradition and the AAI, which attempts to classify an adult as having a predominant attachment pattern, the RQ and the adult attachment self-report tradition takes a dimensional rather than a prototypic approach to attachment, asking "how much" security, dismissing-avoidance, preoccupation, or fearful-avoidance characterizes an individual (e.g., Fraley & Spieker, 2003).

Note that self-reported attachment styles represent conscious and explicit relational attitudes and, in this way, differ from attachment patterns as assessed by the AAI. The more complex AAI relies on the coder's judgment of the coherence of the discourse during the interview to establish an attachment classification rather than requiring or assuming that attachment attitudes are conscious and can be accurately reported. In addition to assessing explicit relational attitudes, self-report attachment measures such as the RQ have been developed primarily on low-risk, nonclinical student samples. None of the four paragraph descrip-

¹There is no direct evidence to date that links any of these three self-reported adult relational patterns to childhood attachment classifications.

tions in the RQ seem to conceptually capture the relationship attitudes that might be associated with the types of mother/infant behaviors indicative of serious mother/infant relational problems. Hence, in the current work, an additional attachment-style description was added to the RQ to create the RQ-Clinical Version (RQ-CV). Based on phrases used by some high-risk parents on the AAI, an additional paragraph was added describing what was labeled a *profoundly-distrustful* attachment orientation.

In the current study, relational attitudes were assessed among a cohort of low-income mothers who had been followed from the first year of the infant's life to child age 20 years. First, we hypothesized that mothers' self-reported attachment security would be associated with positive *maternal involvement* with the infant (Lyons-Ruth, Connel, Grunebaum, & Botein, 1990) assessed in the home 20 years earlier (Hypothesis 1). Second, we hypothesized that mothers' self-reported profoundly-distrustful attachment style would be positively associated with mothers' *hostile/intrusive behaviors* toward the infant (Lyons-Ruth et al., 1990) assessed in the home 20 years earlier (Hypothesis 2). Third, we hypothesized that mothers' profoundly-distrustful attachment style would predict mothers' classification as *disrupted in affective communication* with the infant (Lyons-Ruth, Bronfman, & Parsons, 1999) during the Strange Situation procedure (Ainsworth, Blehar, Waters, & Wall, 1978) procedure assessed 20 years earlier using the Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE) coding system (Lyons-Ruth, Bronfman, & Parsons, 1999) (Hypothesis 3). Fourth, we hypothesized that mothers' profoundly-distrustful attachment style would be positively associated with clinically assessed risk for infant maltreatment 20 years earlier (Hypothesis 4).

II. METHODS

A. Participants

The participants were 44 low-income mothers who had participated in a previous study of the impact of family risk factors on infant development (Lyons-Ruth et al., 1990). Of 70 mothers assessed when the infant was 18 months, 63% were given the RQ-CV 20 years later. Fourteen percent of the original sample could not be located, 9% refused participation, and 3% could not participate because they were living overseas. The participating follow-up sample did not differ from the group lost to follow-up on any of the study variables. Risk factors characterizing the study sample in infancy included the following: Eighteen percent of mothers had experienced psychiatric problems, 16% were receiving services for documented child maltreatment, 83% were in female-headed households, 45% were supported by government assistance, and 46% of mothers had not completed high school. The average age of mothers at the 20-year follow-up assessment was 48 years ($SD=5.2$, range = 38–64). Eighty-one percent of mothers were Caucasian, 4% were African American, 11% were of Hispanic origin, and 4% were of mixed or other origin.

B. Measures

1. Demographic risk. A cumulative demographic risk score was computed by summing the presence of the following five variables collected at the time of the infant study: no high-

school diploma, Aid for Dependent Children (AFDC) recipient, no male partner in home, mother under 20 at birth of first child, and more than two children under the age of 6 years. Demographic risk score could have a range from 0 to 5 (0 = *Low Demographic Risk*; 5 = *High Demographic Risk*).

2. *Maternal involvement and Hostile/Intrusive behaviors.* Naturalistic mother–infant interaction was videotaped at home for 40 min when the child was 18 months old. Mothers were told that the observer was interested in recording a “typical segment” of the infant’s day. Maternal behavior was coded in ten 4-min intervals. Coders were blind to all other data on the families. Interobserver reliabilities, computed on 20% of home videotapes, yielded percentages of agreement, calculated within 1 point, above 90% for all scales ($M=92.7\%$). Cohen’s κ coefficients ranged from .45 for one scale to .81, $ps < .001$. Using principal components analyses, negative loadings ($< .50$) for Maternal Disengagement and positive loadings for Maternal Sensitivity, Warmth, Verbal Communication, and Quantity and Quality of Comforting Touch (i.e., physical contact in the service of communicating affection, “touching base,” or reducing stress) formed a *Maternal Involvement* factor that accounted for 38% of the variance. In addition, negative loadings for Quality of Comforting Touch and Quality of Caretaking Touch and positive loadings for Covert Hostility, Interfering Manipulation, and Anger formed a second *Hostile/Intrusiveness* factor that accounted for 26% of the variance (for further details, see Lyons-Ruth et al., 1990).

3. *Disrupted maternal affective communication.* Disrupted maternal communication with the infant at 18 months of age was coded using the AMBIANCE coding system (Lyons-Ruth, Bronfman, & Parsons, 1999) over all episodes of the Strange Situation procedure (Ainsworth et al., 1978). In the Strange Situation procedure, the infant is observed in a playroom during a series of eight 3-min episodes in which the mother leaves and rejoins the infant twice. The AMBIANCE coding protocol yields a classification as Disrupted or Not Disrupted, with five subtotals for affective communication errors, role confusion, negative-intrusive behavior, disorientation, and withdrawal (for a more extended description, see Lyons-Ruth, Bronfman, & Parsons, 1999).

Fifteen randomly selected tapes were coded by two coders to assess reliability. Reliabilities were: Disrupted Classification = 87% agreement, $\kappa=.73$; Affective Communication Errors Subscore: $r_i=.75$, Role Confusion Subscore: $r_i=.76$, Negative-Intrusive Behavior Subscore: $r_i=.84$, Disorientation Subscore: $r_i=.73$, Withdrawal Subscore: $r_i=.73$.

In studies to date, the AMBIANCE system has been coded both from the Strange Situation and from separate laboratory procedures, and has been validated in relation to infant attachment disorganization and to maternal Unresolved classification on the AAI (Goldberg, Benoit, Blokland, & Madigan, 2003; Grienberger & Kelly, 2001; Kelly, Ueng-McHale, Grienberger, & Slade, 2003; Lyons-Ruth, Bronfman, & Parsons, 1999; Madigan & Hawkins, 2003; Madigan, Pederson, & Moran, 2003).

4. *Risk for maltreatment of infant.* Risk for maltreatment of infant was assessed at intake into the study when infants were aged 0 to 9 months (3 = *state documented child maltreatment*; 2 = *referral for infant services*; 1 = *no documented maltreatment or referral*) (Lyons-Ruth et al., 1990). Seven of the mothers assessed at follow-up ($N=44$) had a history of state-documented child maltreatment at the time of the infant study, and an additional 17 had

received a referral for infant services. The remaining 20 mothers had no documented maltreatment or referral at the time of the infant study.

5. Mother's self-reported adult attachment style. Adult attachment style was assessed using a modified version of the Relationship Questionnaire (RQ) (Bartholomew & Horowitz, 1991), titled the Relationship Questionnaire—Clinical Version (RQ-CV). The original RQ consists of four paragraphs, each describing an attitude toward relationships in general. Security is characterized by the following description: "It is easy for me to become emotionally close to others. I am comfortable depending on others and having others depend on me. I don't worry about being alone or having others not accept me." Preoccupation is characterized by the following description: "I want to be completely emotionally intimate with others, but I often find that others are reluctant to get as close as I would like. I am uncomfortable being without close relationships, but I sometimes worry that others don't value me as much as I value them." Dismissing-avoidance is characterized by the following description: "I am comfortable without close personal relationships. It is very important to me to feel independent and self-sufficient, and I prefer not to depend on others or have others depend on me." Fearful-avoidance is characterized by the following description: "I am uncomfortable getting close to others. I want emotionally close relationships, but I find it difficult to trust others completely, or to depend on them. I worry that I will be hurt if I allow myself to become too close to others." The RQ-CV adds one additional item (profound-distrust) to the traditional RQ. This item states, "I think it's a mistake to trust other people. Everyone's looking out for themselves, so the sooner you learn not to expect anything from anybody else the better." The participant rates each paragraph on a scale of 1 (*does not describe me at all*) to 7 (*describes me exactly*).

III. RESULTS

A. Descriptive Data

The average demographic risk score in the sample was 2.09 ($SD=.98$). The average maternal risk for maltreatment of child, assessed at 0 to 9 months infant age, was 1.73 ($SD=.72$). Table 1 displays zero order correlations among key study variables. Maternal risk for maltreatment of child was correlated with demographic risk and with maternal Hostile-Intrusive behavior observed in the home at 18 months. Demographic risk was negatively related to mothers' security and positively related to mothers' preoccupation and fearful-avoidance.

Mothers' means and SD s for the five adult attachment paragraphs measured with the RQ-CV were: security $M=5.02$, $SD=1.98$; preoccupation $M=3.02$, $SD=2.04$; dismissing-avoidance $M=3.39$, $SD=2.03$; fearful-avoidance $M=3.25$, $SD=2.13$; and profound-distrust $M=2.61$, $SD=1.94$. As can be seen in Table 1, several of the attachment styles were correlated with one another; mothers' profound-distrust was correlated with both dismissing-avoidance and fearful-avoidance.

TABLE 1. Zero-Order Correlations Between Key Study Variables (N=44)

	1	2	3	4	5	6	7	8	9	10
1. Demographic Risk	–	–.34 ^a	.29 ^a	–.08	.30 ^a	–.07	–.14	–.08	–.27 ^a	.29 ^a
2. Mother's Security		–	–.09	–.18	–.29 ^a	.06	.33 ^a	.15	.07	–.10
3. Mother's Preoccupation			–	.03	.60 ^c	.14	–.01	.03	–.07	.35 ^b
4. Mother's Dismissing-Avoidance				–	.33 ^a	.45 ^c	–.06	.08	.29 ^a	.25 ^a
5. Mother's Fearful-Avoidance					–	.29 ^a	–.10	–.11	–.13	.36 ^b
6. Mother's Profound-Distrust						–	.08	.45 ^b	.33 ^a	.51 ^c
7. Maternal Involvement Behavior							–	.14	–.24	.07
8. Maternal Hostile-Intrusive Behavior								–	.18	.56 ^c
9. Maternal Disrupted Communication									–	.20
10. Risk for Infant Maltreatment										–

^a*p* < .05.^b*p* < .01.^c*p* < .001.

B. Self-Rated Attachment Style and Mother–Infant Naturalistic Interaction in the Home

Hierarchical multiple regressions were employed to assess associations between mothers' adult attachment style and mother–infant interaction at home at 18 months. Hypothesis 1 predicted that positive maternal-involvement behaviors observed in the home would be positively associated with mothers' self-reported attachment security. To test this hypothesis, *Maternal Involvement* with the infant at home at 18 months was regressed on mothers' self-rated attachment style. Demographic risk was entered at Step 1 ($\beta = -.19$, $t = -1.23$, $p = ns$), and self-rated attachment security was entered at Step 2.² Security ($\beta = .31$, $t = 2.00$, $p = .05$) explained 12% of the variance in maternal involvement with the infant.

Hypothesis 2 predicted that mothers' profoundly-distrustful attachment style would be positively associated with mothers' hostile/intrusive behaviors toward the infant observed in

²Risk for collinearity did not allow security and the insecure styles to be entered together as predictors in the same equation. This also applies to all analyses that follow.

TABLE 2. Mothers' Maternal Hostile/Intrusive Behavior During Home Interactions at 18 Months and Risk for Infant Maltreatment (at 0–9 Months) Regressed on Mothers' Adult Attachment Style Measured 20 Years Later (N=44)

Mother/Infant and Predictors	Step 1				Step 2				Step 3			
	β	<i>t</i>	<i>p</i>	r^2_{sp}	β	<i>t</i>	<i>p</i>	r^2_{sp}	β	<i>t</i>	<i>p</i>	r^2_{sp}
<i>Maternal Hostile/Intrusive Behaviors</i>												
Demographic Risk	-.08	-.49	<i>ns</i>	.01	-.04	-.23	<i>ns</i>	.00	.02	.12	<i>ns</i>	.00
RQ Preoccupation	–	–	–		.20	.99	<i>ns</i>	.02	.16	.88	<i>ns</i>	.01
RQ Dismissing-Avoidance	–	–	–		.16	.96	<i>ns</i>	.02	-.05	-.33	<i>ns</i>	.00
RQ Fearful-Avoidance	–	–	–		-.28	-1.27	<i>ns</i>	.04	-.35	-1.84	<i>ns</i>	.06
RQ-CV Profound-Distrust	–	–	–		–	–	–		.55	3.51	.001	.23
Model 3 $R^2=.29$, $F=3.02$, $p<.05$												
<i>Risk for Infant Maltreatment</i>												
Demographic Risk	.29	2.02	.05	.09	.22	1.49	<i>ns</i>	.04	.27	1.97	<i>ns</i>	.06
RQ Preoccupation	–	–	–		.23	1.31	<i>ns</i>	.03	.20	1.21	<i>ns</i>	.02
RQ Dismissing-Avoidance	–	–	–		.23	1.53	<i>ns</i>	.04	.06	.38	<i>ns</i>	.00
RQ Fearful-Avoidance	–	–	–		.08	.42	<i>ns</i>	.00	.02	.09	<i>ns</i>	.00
RQ-CV Profound-Distrust	–	–	–		–	–	–		.45	3.08	.004	.15
Model 3 $R^2=.38$, $F=4.86$, $p<.01$												

Note. Maternal Hostile/Intrusive Behaviors, $R^2=.01$ at Step 1; $\Delta R^2=.04$ for Step 2; $\Delta R^2=.24$ for Step 3 ($p<.001$).
Risk for Infant Maltreatment, $R^2=.09$ at Step 1; $\Delta R^2=.14$ for Step 2; $\Delta R^2=.15$ for Step 3 ($p<.005$).

the home at age 18 months, after first controlling for demographic risk and for the other insecure attachment styles. Demographic risk was entered at Step 1. Preoccupation, fearful-avoidance, and dismissing-avoidance were entered at Step 2, and profound-distrust was entered at Step 3. As shown in Table 2, demographic factors accounted for almost no variance in mothers' Hostile/Intrusive behavior ($R^2=.01$) within this low-income context. Ratings of other insecure attachment styles added little to the prediction of maternal Hostile-Intrusive behavior, $R^2=.05$, $F_{\text{change}}(3, 39)=.65$, $p=ns$; however, profound-distrust, entered at Step 3, increased R^2 to .29, $\beta=.55$, $F_{\text{change}}(1, 38)=12.31$, $p<.001$. The profoundly-distrustful attachment style by itself accounted for 23% of the variance in mothers' Hostile/Intrusive behaviors. Using Cohen and Cohen's (1983) standards for effect sizes (small=1%, medium=9%, large=24%), the previous finding can be interpreted as a large effect size. Table 2 displays t and β ; and semipartial correlation (r^2_{sp} ; Cohen & Cohen, 1983) values for the analysis.

C. Self-Rated Attachment Style and Disrupted Maternal Affective Communication

Hypothesis 3 predicted that mothers' profoundly-distrustful attachment style would be positively associated with maternal classification as disrupted in affective communication with the infant, assessed from the Strange Situation at 18 months. Hierarchical logistic regression was used to test this hypothesis. Demographic risk was entered at Step 1, $\chi^2(1)=2.75$, $p=ns$, the other insecure attachment styles were entered at Step 2, $\chi^2(1)=4.28$, $p=ns$, and profound-distrust was entered at Step 3, $\chi^2(1)=5.13$, $p<.05$. Given this significant finding, the subtypes

TABLE 3. Correlations Between Mothers' Disrupted Communication Behaviors (AMBIANCE Coded) During the Strange Situation at 18 Months and Mothers' Self-Reported Attachment Style 20 Years Later (N=37)

Mother's Self-Reported Attachment Style	Dimensions of Maternal Disrupted Affective Communication				
	Affective Communication Error	Role Boundary Confusion	Disorientation	Intrusiveness/Negativity	Withdrawal
RQ Security	-.03	-.12	-.05	-.19	.24
RQ Preoccupation	-.05	-.01	-.30 ^a	.01	.02
RQ Dismissing-Avoidance	-.03	.26	.43 ^c	.27	-.06
RQ Fearful-Avoidance	.07	-.09	-.16	.01	.06
RQ-CV Profound-Distrust	.12	.16	.12	.38 ^b	-.02

RQ=Relationship Questionnaire.

^a $p < .10$.^b $p < .05$.^c $p < .01$.

of maternal behaviors used to classify mothers as disrupted in affective communication were correlated with mothers' self-reported attachment styles (see Table 3). Maternal Negative/Intrusive behaviors were associated with mothers' self-reported profound-distrust while maternal Disoriented behaviors were associated with mothers' self-reported dismissing-avoidance.

Based on these significant correlations, hierarchical multiple regressions were used to explore multivariate associations between the subtypes of maternal behaviors and attachment styles.³ Negative/Intrusive behaviors were regressed on mothers' self-reported attachment style. Demographic risk factors, entered at Step 1, and the other insecure attachment styles, entered at Step 2, accounted for only 8% of the total variance, $F(4, 32) = .72$, $p = ns$. Profound-distrust, entered at Step 3, increased R^2 to .17, $\beta = .33$, $F_{\text{change}}(1, 31) = 3.43$, $p = .07$. Though the increase was only marginally significant, profound-distrust alone explained 9% of the total variance. In a second analysis, the Disorientation dimension was regressed on mothers' self-reported attachment style. Demographic risk, entered at Step 1, and preoccupation, fearful-avoidance, and profound-distrust, entered at Step 2, accounted for 12% of the total variance $F(4, 32) = 1.08$, $p = ns$. Dismissing-avoidance, entered at Step 3, increased R^2 to .31, $\beta = .47$, $F_{\text{change}}(1, 31) = 8.25$, $p < .01$. Dismissing-avoidance alone explained 19% of the total variance. Table 4 displays t , β , and r_{sp}^2 values for these two sets of analyses.

D. Self-Rated Attachment Style and Risk for Infant Maltreatment

Hypothesis 4 predicted that mothers' profoundly-distrustful attachment style would be positively associated with maternal risk for infant maltreatment, assessed between birth and 9

³There were no significant associations between the attachment styles and the three remaining AMBIANCE subscores (i.e., role confusion, withdrawal, affective communication error).

TABLE 4. Mothers' Negative/Intrusiveness and Disorientation Behaviors (AMBIANCE Coded From Strange Situation at 18 Months) Regressed on Mothers' Self-Reported Attachment Style Measured 20 Years Later (N=37)

Mother/Infant and Predictors	Step 1				Step 2				Step 3			
	β	<i>t</i>	<i>p</i>	r^2_{sp}	β	<i>t</i>	<i>p</i>	r^2_{sp}	β	<i>t</i>	<i>p</i>	r^2_{sp}
<i>Negative/Intrusiveness Score</i>												
Demographic Risk	-.10	-.57	<i>ns</i>	.01	-.07	-.37	<i>ns</i>	.00	-.05	-.25	<i>ns</i>	.00
RQ Preoccupation	-	-	-		.07	.31	<i>ns</i>	.00	.01	.02	<i>ns</i>	.00
RQ Dismissing-Avoidance	-	-	-		.28	1.57	<i>ns</i>	.07	.18	.98	<i>ns</i>	.00
RQ Fearful-Avoidance	-	-	-		-.06	-.28	<i>ns</i>	.00	-.07	-.33	<i>ns</i>	.00
RQ-CV Profound-Distrust	-	-	-		-	-	-		.33	1.85	.074	.09
Model 3 $R^2=.17$, $F=1.31$, $p=.29$												
<i>Disorientation Score</i>												
Demographic Risk	-.11	-.65	<i>ns</i>	.01	.03	.17	<i>ns</i>	.00	.10	.58	<i>ns</i>	.01
RQ Preoccupation	-	-	-		-.33	-1.58	<i>ns</i>	.07	-.26	-1.34	<i>ns</i>	.04
RQ Fearful-Avoidance	-	-	-		-.02	-.10	<i>ns</i>	.00	-.17	-.83	<i>ns</i>	.02
RQ-CV Profound-Distrust	-	-	-		.17	.98	<i>ns</i>	.03	.03	.15	<i>ns</i>	.00
RQ Dismissing-Avoidance	-	-	-		-	-	-		.47	2.87	.007	.19
Model 3 $R^2=.31$, $F=2.71$, $p<.05$												

Note. Intrusiveness/Negativity, $R^2=.01$ at Step 1; $\Delta R^2=.07$ for Step 2; $\Delta R^2=.09$ for Step 3 ($p=.07$).
Disorientation, $R^2=.01$ at Step 1; $\Delta R^2=.11$ for Step 2; $\Delta R^2=.19$ for step 3 ($p<.01$).

months of age, after first controlling for demographic risk and for other insecure self-reported attachment styles. Demographic factors, entered at Step 1, accounted for 9% of the variance ($p=.05$). Ratings of other insecure attachment styles, entered at Step 2, increased R^2 to .23, $F_{\text{change}}(3,40)=2.57$, $p=ns$. Profound-distrust, entered at Step 3, further increased R^2 to .38, $\beta=.44$, $F_{\text{change}}(1,39)=9.46$, $p<.005$. Profound-distrust by itself accounted for 15% of the variance in clinically judged risk for maltreatment of the infant. Table 2 displays *t*, β , and r^2_{sp} values for the analysis.

IV. DISCUSSION

As predicted, mothers' adult attachment security explained 12% of the variance in positive Maternal Involvement with the infant at home. Using Cohen and Cohen's (1983) standards for effect sizes (small=1%, medium=9%, large=24%), this finding can be interpreted as a medium-sized effect. Further, profound-distrust was associated with mothers' Hostile/Intrusive behaviors toward their infants at home and with maternal risk for maltreatment of the infant, after first controlling for demographic risk and other self-reported insecure attachment styles. Twenty-three percent of the variance in maternal Hostile-Intrusive behaviors (large effect size) and 15% of the variance in risk for maltreatment (medium effect size) could be explained by this assessment. Further, logistic regression models showed that profound-distrust successfully predicted maternal classification as disrupted in affective communication with the infant. In addition, further analysis using the subtypes of maternal behavior in the

AMBIANCE coding system showed that profound-distrust was most closely related to maternal Intrusiveness/Negativity. In contrast, dismissing-avoidance was related to maternal Disoriented behaviors.

These findings indicate that the profoundly-distrustful relational description captures an explicitly held attachment style not represented by the three standard insecure descriptions. Although it shares variance with both dismissing-avoidance ($r=.45$) and fearful-avoidance ($r=.29$), profound-distrust appears to represent a more extreme relational disposition that predicts clinically significant difficulties in parent-child interaction. In addition, the relational attitude captured in the content of the item also is more extreme than the attitudes of the other insecure styles. Fearful-avoidance signifies relationship anxiety with avoidance behavior while still including a desire for a close relationship. Dismissing-avoidance signifies desire for independence, but here also, an expectation of at least some form of emotionally shallow relationship. Neither stance represents a globally negative judgment of potential attachment partners. In contrast, in a profoundly-distrustful stance, significant others are derogated in a global way as entirely untrustworthy, and the need to completely give up expectation of care or support is stressed.

The current data suggest that profound-distrust captures an important attachment-related attitude that is particularly prevalent among more Hostile-Intrusive parents; however, the finding that more disoriented parents might differentially endorse an avoidant style suggests that in clinical samples with more disorientation or schizoid tendencies, the dismissing-avoidant style may be more highly endorsed than a hostile-distrust style. Further, given the literature relating borderline personality disorder traits to endorsement of preoccupied attachment on self-report measures (see Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004), note that at-risk mothers in the current sample did not highly endorse that style. Whether this is due to the addition of the profoundly-distrustful option on the present instrument (i.e., RQ-CV) cannot be determined from the present study and needs further exploration.

A limitation with this work is that it cannot be assumed that mothers' relationship attitudes, assessed with the RQ-CV 20 years after the original mother/infant interactions, are representative of attitudes held at the time of the infant assessments. This assumption will need to be tested in future work by assessing the relations reported here in a sample of high-risk mothers who currently have infants. The profoundly-distrustful assessment should be understood as work under development, and the results presented earlier, while potentially exciting, should be interpreted with caution. The RQ-CV needs further development in terms of reliability and validity. In addition, the diversity in the current sample is limited, and further development in other samples is needed before it can be generalized to many groups that might be of interest to clinicians. However, the results are promising enough to warrant further construct development.

Another limitation of the current work is that a more psychometrically sophisticated adult attachment measure (compared to the RQ) is now widely being used in the field. This measure, the Experiences in Close Relationships Scale (Brennan, Clark, & Shaver, 1998) or a revised version, the Experiences in Close Relationships Scale-Revised (Fraley, Waller, & Brennan, 2001) consists of 36 items that make up the two dimensions of attachment anxiety and avoidance. Security is defined as a low score on both of these dimensions. Like the RQ, however, this measure was developed using predominantly normal samples. Whether profound-distrust will come to be understood as an extreme (clinical) variation of the con-

tinuous anxiety and avoidance dimensions or whether it is part of a separate and unique dimension is beyond the scope of this preliminary work and remains to be answered.

Even with the aforementioned limitations in mind, the results are promising in that an easily administered self-reported attachment measure shows associations with three independently rated measures of clinically significant difficulties in parenting, even with a 20-year interval between assessment points. While the original RQ does a satisfactory job in capturing adult attachment styles held in normal samples, the RQ-CV with the profound-distrust item offers an opportunity to capture a more severe relational attitude more common in high-risk and clinical samples.

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