ABSTRACT: Severe disruptions in the caregiving system can lead to disorganized caregiving characterized by maternal helplessness and fear. Such caregivers abdicate their caregiving role and fail to provide protection to the child. The measurement of disorganized caregiving has historically been limited to lengthy, labor-intensive interviews, indicating a need for other feasible tools to assess this important construct. Furthermore, few studies have investigated correlates of disorganized caregiving. Participants included 120 diverse, primarily economically disadvantaged women who were part of a longitudinal study examining psychosocial risk factors before and after the birth of a child. Participants completed the Caregiving Helplessness Questionnaire (CHQ; C. George & J. Solomon, 2011) along with measures assessing maternal mental health, trauma exposure, parenting stress, and infant socioemotional adjustment. Results indicated that caregiver helplessness and fear, based on the CHQ, were positively associated with maternal depression, parenting stress, and perceptions of infant socioemotional problems. Importantly, results also revealed significant associations between current maternal trauma experiences and mothers’ reports of helplessness and fear. Findings from the present study indicate that the CHQ may be a valid screening tool for disorganized caregiving among mothers of infants. In addition, a number of maternal experiences may be related to disorganized caregiving following the birth of a child.

Keywords: disorganized caregiving, helplessness, trauma, parenting, infant socioemotional functioning

RESUMEN: Interrupciones severas en el sistema de prestación de cuidado pudiera conducir a un servicio desorganizado de prestar cuidado caracterizado por la impotencia y el temor maternos. Tales cuidadores abdican su papel de prestación de cuidado y no proporcionan protección al niño. El sistema de medidas del cuidado desorganizado ha estado históricamente limitado a entrevistas largas y de trabajo intensivo, lo que indica la necesidad de otras herramientas posibles para evaluar este importante engranaje. Es más, pocos estudios han investigado asuntos correlacionados con el cuidado desorganizado. Las participantes fueron 120 mujeres diversas, primariamente con desventajas económicas, quienes formaron parte de un estudio longitudinal para examinar los factores sicosociales de riesgo antes y después del nacimiento de un niño. Las participantes completaron el Cuestionario de Impotencia de Prestar Cuidado (CHQ; George & Solomon, 2011) junto con medidas para evaluar la salud mental maternal, el haber estado expuesta al trauma, el estrés de crianza y el ajuste socio-emocional del infante. Los resultados indicaron que la impotencia y el temor de quien presta el cuidado, con base en CHQ, estaban positivamente asociados con la depresión materna, el estrés de crianza y las percepciones de problemas socio-emocionales del infante. De importancia es que los resultados también revelaron asociaciones significativas entre las presentes experiencias de trauma materno y los reportes de la madre sobre la impotencia y el temor. Los resultados del presente estudio indican que el CHQ pudiera ser una útil herramienta para examinar el cuidado desorganizado entre madres de infantes. Adicionalmente, un número de experiencias maternas pudieran estar relacionadas con el cuidado desorganizado después del nacimiento de un niño.

Palabras claves: cuidado desorganizado, impotencia, trauma, crianza, funcionamiento socio-emocional del infante

We report no conflict of interests. Approval from the Institutional Review Board at Eastern Michigan University was maintained throughout the duration of the study. We thank the Parenting Project research assistants for their invaluable help with data collection, especially the initial project directors, Erin Puro and Kylene Krause, as well as the families who participated in the study. This work was supported by the American Psychoanalytic Association and Eastern Michigan University, Office of Research Development.

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Disorganized Caregiving

Les perturbations du système de mode de soin peuvent mener à un mode de soin caractérisé par l’impuissance et la peur. Dans ce contexte les personnes donnant des soins abdiquent leur rôle de soignant et n’offrent plus aucune protection pour l’enfant. La mesure du mode de soin désorganisé a traditionnellement été limitée à des entretiens longs et laborieux, indiquant un besoin d’avoir à disposition des outils fiables afin d’évaluer cet élément important. De plus, peu d’études se sont penchées sur les corrélatifs de mode de soin désorganisé. Pour cette étude les participants ont compris 120 femmes d’horizons divers et de milieux défavorisés, participant à une étude longitudinale examinant les facteurs de risque avant et après la naissance de l’enfant. Les participants ont rempli le Questionnaire d’Impuissance du Mode de Soin (en anglais Caregiving Helplessness Questionnaire, abrégé CHQ; George & Solomon, 2011) ainsi que des mesures évaluant la santé mentale maternelle, l’exposition au trauma, le stress de parentage, et l’ajustement socio-émotionnel du bébé. Les résultats indiquent que l’impuissance et la peur de la personne donnant des soins, basé sur le CHQ, étaient fortement liés à la dépression maternelle, au stress de parentage, et aux perceptions des problèmes socio-émotionnels du bébé. Non sans importance, les résultats ont également révélé des liens importants entre les expériences traumatiques actuelles de la mère et les compte rendus d’impuissance et de peur qu’ont fait les mères. Les résultats de cette étude indiquent que le CHQ pourrait être un outil de dépistage valide pour le mode de soin désorganisé chez les mères de bébés. De plus, un nombre d’expériences maternelles peut être lié au mode de soin désorganisé après la naissance d’un enfant.

**Mots clés:** mode de soin désorganisé, impuissance, trauma, parentage, fonctionnement socio-émotionnel du bébé


**Stichwörter:** desorganisierte Fürsorge/Pflege, Hilflosigkeit, Trauma, Erziehung, sozial-emotionale Entwicklung von Säuglingen

抄録: 養育システムの重大な混乱disruptionsは、母親の無力感と恐怖に特徴付けられる混乱した養育organized caregivingにつながりかいない。このような養育者は、育児役割を放棄し、子どもに保護を提供することに失敗する。混乱した養育の測定は、歴史的時には時間がかかり多大な労力が必要な面接に限られていて、この重要な構成概念を評価するためのその他の実行可能なツールの必要性を示していた。さらに、混乱した養育に関連するものを調査する研究はほとんど無かった。研究参加者は、子どもの出産前後の心理社会的危険因子を考慮する綿断研究に参加している、多様な、主として経済的に不利な状態にある120人の女性だった。参加者は、母親の精神保健、外傷への暴露、育児ストレス、および乳児の社会−情緒的な適応を評価する測定と共に、養育の無力感等級紙the Caregiving Helplessness Questionnaire (CHQ; George & Solomon, 2011)に記入した。結果から、CHQに基づく養育者の無力感と恐怖は、母親の抑うつ、育児ストレス、および乳児の社会的問題の認知と、ポジティブに関連していたことが示された。重要なことに、結果から、母親の現在の外傷体験と、母親の無力感と恐怖の報告との間に、有意な相関も明らかになった。この研究の所見から、CHQは乳幼児の母親たちの混乱した養育に関する有効なスクリーニングツールであることが、示される。それに加え、多くの母親の体験が、子どもの誕生後の育児の混乱に関係しているだろう。

キーワード: 混乱した養育、無力感、外傷、育児、乳児の社会−情緒的功能

抄要: 照顧系統の重質中断可能性による出生児無助な恐怖の無組織型照護。這些照顧者放棄他們的護理角色，不能保護孩子。無組織型照護的測量歴史的有効な冗長、労働力を密集型の採用、詐欺需要実験可能なツールを評価する重要なのは、ここに、少ない研究調査無組織型調査の関連する要素。研究者研究で120名新規の背景、主として経済的に不利な位置の母女、彼女たちは、一覧、子供の出生後の心理社會的因子の偏向によるもの、要因に伴う、養育的無力感クォンサートと母女の社会−情绪的な調査と測定。結果表現、CHQスクリーニング中立的無力感と恐怖、異常を包括する母女虐待、子供の恐怖、子供の社会−情緒的な対応の認識が主なのと、重要的是、調査結果を含む。従来までの調査と母女無力感と恐怖の報告のシンポジウム。従来の研究結果を含む、CHQ可能は、子供の母親の中で無組織型照護を有効なスクリーニングツール。外、一部の母親の機能が、子供の出生後の無組織型照護に影響を及ぼす。
Since Bowlby (1969/1982) first developed and refined attachment theory, the vast majority of attachment research has investigated the attachment system; that is, the individual’s goal-corrected behavioral system that is organized around the primary attachment needs of being cared for and protected to promote survival. Indeed, decades of research have identified a number of important precursors to and consequences of different types of attachment across the lifespan, including the organized forms of attachment (Secure, Avoidant, and Ambivalent; Ainsworth, Blehar, Waters, & Wall, 1978) and the disorganized/disoriented type (Main & Solomon, 1990; see reviews by Lyons-Ruth & Jacobvitz, 2008; Weinfield, Sroufe, Egeland, & Carlson, 2008). Associations between early experiences with attachment figures (i.e., caregivers) and child attachment classifications have been extensively studied in particular.

Bowlby (1969/1982) also suggested that caregiver behavior is organized by a caregiving behavioral system, which is complementary to the infant’s attachment system; however, less research has been devoted to understanding the caregiving system as compared to the tremendous efforts aimed at studying the attachment system. One main exception has been the work of George and Solomon (1996, 2008; Solomon & George, 1996, 2011), who have theoretically and empirically elaborated upon Bowlby’s (1969/1982) initial descriptions of the caregiving system based on their long line of research with mothers of preschool and school-age children. A central premise of their conceptualization is that at some point, most mothers make a critical psychological shift away from the goal of being protected and cared for to the goal of providing protection and care (i.e., the goal of the individual’s attachment system) to the goal of providing protection and care (i.e., the goal of the parent’s caregiving system). The caregiving system is thought to be “activated” when there is a perceived threat to the child or the mother (the latter because a threat to the mother will interfere with the behavioral goal of providing care) and “deactivated” at times of low threat, proximity, and/or psychological health. Similar to attachment behaviors, caregiving behaviors are believed to be influenced by internal working models or representations; in this case, thoughts and feelings about the child, the relationship with the child, and the self as a caregiver. The caregiving system undergoes its most rapid development during pregnancy, as the mother is transitioning to parenthood, and thus, rich and varied representations about the infant and the self as a caregiver typically appear during and immediately after pregnancy (Ammaniti, Baumgartner, Candelori, & Perucchini, 1992; George & Solomon, 2008; Slade, Cohen, Sadler, & Miller, 2009).

There has been growing interest in better understanding the conditions that give rise to severe disruptions in caregiving behavior (also referred to as disabled caregiving, George & Solomon, 2008, p. 846, and disorganized caregiving, Solomon & George, 2011, p. 135) as well as the conditions that give rise to disorganized/disoriented attachment in early childhood (Cyr, Euser, Bakermans-Kranenburg, & van IJzendoorn, 2010). For example, research has indicated that mothers’ own frightening or traumatic experiences may be left unresolved and may be split off from consciousness to avoid the emotional pain associated with the trauma; these defensive processes were termed segregated systems by Bowlby (1980) and are believed to result in a number of disorganized caregiving behaviors (George & Solomon, 2011). More specifically, attachment researchers have noted that maternal unresolved trauma may lead to frightening or fearful caregiving behavior (Hesse & Main, 2006; Main & Hesse, 1990) as well as hostile, helpless, and atypical caregiving behavior such as confusing and contradictory communication, sudden withdrawal or intrusiveness, and other odd maternal behaviors (Lyons-Ruth, Yellin, Melnick, & Atwood, 2005). All of the aforementioned types of disorganized caregiving behavior have consistently been linked to the child’s development of disorganized attachment (George & Solomon, 2011; Lyons-Ruth & Jacobvitz, 2008), and they can be distinguished from other forms of insensitive caregiving behaviors seen in mothers of children who have an organized, but insecure, attachment system (Out, Bakermans-Kranenburg, & van IJzendoorn, 2009).

Importantly, George and Solomon (2008, 2011) took this work a step further by articulating how certain maternal experiences interfere with some mothers’ ability to make the important psychological shift to becoming a provider of care and protection, and, thus, certain experiences can disrupt the organization of the caregiving system. In addition to unresolved childhood trauma, which is the focus in the majority of past research, these authors
speculated that a number of other disorganizing or frightening experiences (which they termed *assaults to the caregiving system*; Solomon & George, 2000, as cited in George & Solomon, 2011, p. 137) may render some mothers *helpless* and *frightened* in the caregiving role. Maternal exposure to intimate partner violence (IPV) is one such example. Although partner violence has not yet been examined in George and Solomon’s work, other researchers have shown that partner violence interferes with the development of coherent, balanced representations of the infant and the relationship with the infant (Huth-Bocks, Levendosky, Theran, & Bogat, 2004; Sokolowski, Hans, Bernstein, & Cox, 2007) and is a predictor of infant attachment disorganization (Zeanah et al., 1999). It seems highly probable, then, that partner violence is a significant “assault” to the caregiving system, particularly when overall maternal distress is high and/or when posttraumatic stress symptoms are present (George & Solomon, 2008; Schechter et al., 2005; Schechter et al., 2008).

Extreme levels of helplessness and fear in the caregiving role subsequently result in the mother abdicating (or giving up) her role as a caregiver and failing to protect her child (George & Solomon, 2011), hence the term *disabled caregiving system* (George & Solomon, 2008). This abdication of care may be fairly overt, as in the case of child neglect for example, or may be more implicit. For instance, the mother may view the child as completely out of control so that any care provided does not seem to matter or may view the child as so independent and capable that the child does not “need” any protection or care (George & Solomon, 2011). As a result, these mothers fail to provide care and show disorganized caregiving behaviors, and their young children are left in their own disorganized state. Some children with these early experiences later show controlling behavior (either punitive-controlling behavior or role-reversed, caregiving behavior) as a way to keep the mother engaged in the relationship (Solomon & George, 2011); such controlling behavior is considered a form of child disorganization in the preschool years and beyond.

Overall, this body of research has primarily relied upon very labor-intensive assessment methods, including lengthy semistructured attachment and caregiving interviews and coded observations of maternal and infant behavior. These methods have been a clear strength in prior research, yielding rich and informative data; however, the field also could benefit from the development and validation of more accessible and less costly ways to measure these complex constructs. In response to this dilemma, George and Solomon (2011) developed the Caregiving Helplessness Questionnaire (CHQ) as a potential screening tool for disorganized caregiving. This measure aims to tap into the dimensions of caregiving helplessness, fear in the parent–child relationship, and parent–child role reversal. A subsample (n = 59) of their larger questionnaire item-development sample (N = 208), composed of primarily middle-class, married, and college-educated mothers of 3- to 11-year-old children, participated in their validity study. The final 26-item CHQ was administered to this subsample, along with self-report measures of parenting stress, maternal depression, and child socioemotional outcomes and the authors’ Caregiving Interview (George & Solomon, 1989), a semistructured interview aimed at assessing patterns of defensive processes that characterize parents’ feelings about being a caregiver.

George and Solomon’s (2011) results revealed three internally consistent subscales, labeled *Mother Helpless*, *Mother–Child Frightened*, and *Child Caregiving*. Convergent validity was established by showing significant positive correlations between the helplessness rating from the Caregiving Interview and mothers’ self-reported Helpless and Frightened experiences on the CHQ. Discriminant validity was supported by a lack of significant associations between the CHQ scales and mothers’ personal stress levels in domains unrelated to caregiving (e.g., stress about health). Results also indicated significant positive correlations between Helpless and Frightened scores from the CHQ and maternal depression, parenting stress, and a number of attachment-related stressful life events. Child Caregiving (role reversal), in contrast, was only positively related to maternal depression. Furthermore, greater Helpless and Frightened experiences were significantly related to greater child externalizing problems (according to maternal report), but not internalizing problems, and Child Caregiving was unrelated to either type of child problems. Additional analyses using four groups of mothers defined by high (upper quartile) or low (below the upper quartile) levels of Frightened experiences and Child Caregiving revealed that the mothers with high Frightened and high Child Caregiving had the highest levels of helplessness, depression, parenting stress, and child socioemotional problems. This was followed by the Frightened only group, the Child Caregiving only group, and then the Neither Frightened nor Child Caregiving group (with the exception that the Child Caregiving only group had the lowest child internalizing and externalizing scores). The authors suggested that the combined high Frightened and high Child Caregiving group may represent the most at-risk group of dyads (George & Solomon, 2011).

Following their initial validation study, several additional unpublished studies were conducted within this research group with mothers of 1- to 3-year-old infants and toddlers using the CHQ (C. George & J. Solomon, personal communication, August 4, 2014). Consistent with their study of preschool and school-age children (George & Solomon, 2011), the later studies with younger children found that greater reported Helpless and Frightened caregiving experiences were significantly related to maternal perceptions of child socioemotional problems and poor child-sleep quality (Guillory, 2013; Keeling, 2013) as well as greater parenting stress (Rutherford, 2012).

Thus, overall, results from George and Solomon’s (2011) initial study as well as those of several unpublished follow-up studies by their research group suggest that the theoretically informed CHQ may be a viable self-report measure that taps into dimensions of disorganized caregiving in mothers of young children and school-age children. Associations between elements of disorganized caregiving and other maternal risks related to caregiving, attachment, and some child adjustment problems were demonstrated, as would be expected based on attachment theory and prior research using more involved assessment instruments of

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disorganized caregiving. Although the CHQ appears to be a promising screening tool, it needs to be further examined in other types of samples, including more high-risk samples that would be expected to show more disrupted forms of caregiving. This work stands to further inform researchers and clinicians about the usefulness of the CHQ as well as expand the field’s understanding of disorganized caregiving.

THE PRESENT STUDY

Therefore, the primary aim of the present investigation was to examine the validity and possible utility of the CHQ as a screening tool for disorganized caregiving (specifically helplessness, fear, and role reversal). In contrast to George and Solomon’s primary work with mostly married, middle-class mothers of preschool and school-age children (2008, 2011; Solomon & George, 2011), the present study examined associations between the CHQ dimensions and a variety of maternal characteristics and infant socioemotional functioning with a mostly unmarried, economically disadvantaged sample of mothers with 1-year-old infants. To our knowledge, this is the first study to examine these associations with this type of sample. A related, secondary aim of the study was to better understand the possible correlates of disorganized caregiving as operationalized by the CHQ. While maternal unresolved trauma or loss from childhood has repeatedly been associated with disorganized forms of caregiving and child disorganized attachment (Madigan, Moran, & Pederson, 2006; Main & Hesse, 1990; see review by Lyons-Ruth & Jacobvitz, 2008), effect sizes appear to be moderate, and other important variables need to be uncovered and examined further (Madigan, Bakermans-Kranenburg et al., 2006; van IJzendoorn, Schuengel, & Bakermans-Kranenburg, 1999). Solomon and George (2011) suggested that a wide variety of experiences may lead to abdicated caregiving and a failure to protect the child; however, few studies have examined other maternal characteristics and experiences in relation to disorganized caregiving. Mothers’ current trauma experiences seem to be one important avenue, as both theory and existing research have suggested that traumatic “assaults to the caregiving system” may be responsible for feelings of helplessness and fear within the caregiving role, which leads to abdication of care and a failure to protect the child. To date, no known studies have empirically examined associations between current maternal trauma experiences and disorganized caregiving using the CHQ.

Similar to the findings reported by George and Solomon (2011), it was hypothesized that greater mother-reported Helpless and Frightened experiences in the caregiving role would be related to higher levels of maternal depression and parenting stress as well as more infant socioemotional difficulties. Second, it was hypothesized that mothers’ experiences of current trauma (both exposure to partner violence and traumatic stress symptoms) would be positively associated with Helpless and Frightened caregiving experiences. No a priori hypotheses were made regarding associations with mothers’ reports of Child Caregiving (i.e., role reversal) given that role-reversed child behavior is believed to emerge during the early preschool years and not during infancy, when the present study took place.

METHOD

Participants

Participants included 120 pregnant women who were recruited for a longitudinal study investigating the role of various psychosocial experiences on women and their young children. Data were collected during pregnancy and at 3 months, 1 year, 2 years, and 3 years after birth; only data from the first and third waves of the larger investigation were used in the present study. Participants were recruited through public postings of fliers and in-person distribution at public locations, programs, and agencies primarily serving low-income families. More specifically, 23% were recruited from several community-based health clinics serving low-income and/or uninsured individuals, 18% from the Women, Infants, and Children social service program, 16% from student areas in one regional-level university and one community college, 11% from a “community baby shower” sponsored by local social service programs, 11% heard about the study through word of mouth (friend, relative, another research study, or church), 7% from Head Start and local daycare programs, 7% from subsidized and/or temporary housing facilities, 5% from second-hand donation centers for pregnant women and young children, and 2% from a parenting class.

At the first data-collection point, which took place during the last trimester of pregnancy, participants ranged in age from 18 to 42 (M = 26, SD = 5.7) years. Thirty percent of participants were pregnant for the first time (for descriptive characteristics of the sample, see Table 1). Despite the relatively wide range of educational attainment, the present sample was economically disadvantaged, which was not surprising given that the majority were single and unemployed (55%). The median monthly income was reported as $1,500 (range = $0–10,416) at study entry, and the vast majority were receiving some form of public financial support. In addition, 74% of the sample was at or near poverty, defined by an income-to-needs ratio below 2 (income level divided by the poverty threshold for a certain family size as determined by the U.S. Census Bureau, Housing and Household Economic Statistics Division, 2010).

Through extensive tracking efforts (detailed later), 114 women participated in the interview 1 year after birth. The remaining 6 women were either unable to be located (n = 3), withdrew from the study (n = 2), or moved out of the country (n = 1). Women who participated in the 1-year interview did not significantly differ on any demographic characteristics or study variables from the 6 women who did not participate.

Procedures

Fliers asked interested pregnant women to call the study office to participate in a study about parenting. To participate, women needed to be pregnant, 18 years or older, and able to speak...
TABLE 1. Demographic Characteristics of Sample

<table>
<thead>
<tr>
<th>Variable</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>47</td>
</tr>
<tr>
<td>European American</td>
<td>36</td>
</tr>
<tr>
<td>Biracial</td>
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<tr>
<td>Other</td>
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</tr>
<tr>
<td>Marital Status</td>
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<td>Single (never married)</td>
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</tr>
<tr>
<td>Married</td>
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<tr>
<td>Separated</td>
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</tr>
<tr>
<td>Divorced</td>
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<td>High-School Diploma/GED or less</td>
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<tr>
<td>Some College or Trade School</td>
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<tr>
<td>College Degree</td>
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<tr>
<td>Employed</td>
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<td>52</td>
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<tr>
<td>Medicaid, Mi-Child, Medicare</td>
<td>76</td>
</tr>
<tr>
<td>Public Supplemental Assistance</td>
<td>17</td>
</tr>
</tbody>
</table>

WIC = Women, Infants, and Children special supplemental nutrition program.

fluently English. Interested participants were scheduled for the first interview when they were in their third trimester of pregnancy; these interviews were conducted in either the participant’s home (81%) or at a research office on campus (19%), based on participant preference. Interviews lasted approximately 2 to 3 hr and were conducted by teams of two; one interviewer led the interview, and the other assisted with childcare if necessary and/or observed and assisted the lead interviewer. After informed consent procedures, interviews included a brief demographic questionnaire, a semistructured, 1-hr audio-recorded interview, and then a number of questionnaires that were administered in the same predetermined order for all participants. The lead research assistant read all questionnaires aloud to the participant and recorded her answers to minimize random responding and protect against possible literacy difficulties. Participants were given a copy of the questionnaires with which to follow along. Participants were compensated with a $25 gift card.

Participants were contacted again, approximately 2 weeks after the baby’s due date, to confirm the baby’s birth and collect basic information about the baby (name and sex). The participant’s contact information also was updated, and permission for future contact was again obtained. Shortly thereafter ($M$ infant age = 3.2 months, $SD$ = 1.0), participants ($n = 119$) completed a 45-min telephone call to gather information regarding the birth and health of the baby, the baby’s schedule (crying, feeding, and sleeping), infant temperament, and the participant’s views of motherhood. Participants were compensated with a $10 gift card.

Participants were then contacted by research assistants every 3 months (i.e., when the babies were about 6 and 9 months of age) to update their contact information in preparation for a third wave of data collection around the child’s first birthday. If participants were unable to be reached by telephone, then a letter was sent to the participants’ homes explaining that the project staff was trying to reach them to update their contact information. They were given the option of either calling the project office or filling out a “contact form” with their updated information, which they could return in a stamped and addressed envelope that was provided to them. If participants were still unable to be reached, telephone calls were made and/or letters were sent to each of the “recontact people” (Names, telephone numbers, and addresses were provided by the participants during their first interview and updated during each subsequent contact) in an attempt to obtain updated contact information for the participant. Finally, if neither the participant nor the recontact people were able to be reached through telephone calls or letters, home visits were made until further contact information was obtained. Overall, this tracking strategy resulted in an excellent retention rate (95%).

The third interview was conducted in either the participant’s home (92%), at a research office (4%), or over the telephone (4%) and lasted approximately 3 hr. For those done in-person, mothers were informed ahead of time that the target infant needed to be at this interview. After consent procedures, all assessments and questionnaires were administered in the same predetermined order for every participant, and as before, the lead interviewer read all questionnaires aloud to the participant and recorded the participant’s verbal answers. Finally, all participants were given a long referral list of community resources and were compensated with $50 and a baby gift. Permission to stay in contact and updated information about recontact people were again obtained for follow-up interviews.

This study obtained and maintained University IRB approval throughout its duration.

Measures

Disorganized caregiving. The CHQ (George & Solomon, 2011) was administered at the 1-year interview to assess for maternal perceptions of helplessness, fear, and role reversal in the caregiving relationship with the target infant. As described earlier, the CHQ is a 26-item self-report questionnaire aimed at assessing core dimensions of disorganized caregiving that are believed to underlie abdicated caregiving and a failure to protect the child. Seven items make up the Mother Helpless subscale (e.g., “When I am with my child, I often feel out of control”), six items make up the Mother–Child Frightened subscale (e.g., “Sometimes my child acts as if he/she is afraid of me” and “I am frightened of my child”), and six items make up the Child Caregiving subscale (e.g., “My child is good at tending to and caring for others”); other items are fillers. All items are rated on a scale ranging from 1 (not characteristic at all) to 7 (very characteristic). Higher scores reflect more of the given construct, and subscale scores can range from 7 to 35, 6 to 30, and 6 to 30, respectively.

In their original study, George and Solomon (2011) reported a good factor structure and adequate internal reliability, with
alpha coefficients of .85, .66, and .64, respectively, among their ethnically diverse, middle-class mothers (n = 59) of 3- to 11-year-old children. Convergent validity was established by demonstrating significant positive associations between the CHQ Helplessness and Frightened subscales and the Helplessness rating on the authors’ Caregiving Interview, \( r = .45 \) and .30, respectively). Similarly, a more recent study of 51 low-income mothers of late adolescents (Vulliez-Coady, Obsuth, Torreiro-Casal, Ellertsdottir, & Lyons-Ruth, 2013) found a significant positive association between Helplessness on the CHQ and role confusion coded from concurrent Caregiving Interview responses, \( r = .31 \). These authors also reported that the CHQ was associated with maternal withdrawal behavior observed many years earlier when the children were 18 months old, \( r = .35 \), providing additional evidence of validity.

In the current study, alpha coefficients were adequate for Mother Helpless, \( \alpha = .80 \), and Child Caregiving, \( \alpha = .64 \), but low for Mother–Child Frightened, \( \alpha = .33 \). However, importantly, mothers’ reports of Frightened caregiving on the CHQ were significantly associated with mothers’ overall level of disrupted (disorganized) caregiving representations, \( r = .21, p < .05 \), as coded by researchers using mothers’ Working Model of the Child Interviews (Disrupted coding scheme; Crawford & Benoit, 2009).

**Maternal depression.** Maternal depression was measured during pregnancy using the Edinburgh Postnatal Depression Scale (EPDS; Cox, Holden, & Sagovsky, 1987; Wisner, Parry, & Piontek, 2002). The EPDS is a 10-item questionnaire designed to assess the frequency of prenatal and postnatal depressive symptoms, with an attempt to differentiate depressive symptoms, per se, from typical perinatal symptoms not associated with depression (e.g., appetite changes). Each item is rated on a 0 (no symptom) — 3 (high levels of symptom) scale. Possible scores range from 0 to 30, with higher scores indicating more depressive symptoms. The psychometric properties of the EPDS have been well-established (C.T. Beck & Gable, 2001; Cox et al., 1987). The EPDS demonstrated good internal consistency in the present sample (\( \alpha = .76 \)). Maternal depression at the 1-year interview was assessed using the Beck Depression Inventory-II (BDI-II; A.T. Beck, Steer, & Brown, 1996). The BDI-II is a 21-item self-report questionnaire that measures the severity of depression in adults. Each item is rated on a 0 (no symptom) — 3 (high levels of symptom) rating scale. Possible scores range from 0 to 63, with higher scores indicating greater frequency and severity of depressive symptoms. The psychometric properties of the BDI-II have been well-established (A.T. Beck et al., 1996). The BDI-II demonstrated very good internal consistency in the present sample, \( \alpha = .90 \).

**Parenting stress.** The Parenting Stress Index-Short Form (PSI-SF; Abidin, 1995) is a 36-item self-report measure of parenting stress that was administered at the 1-year interview. Each item is rated on a 1 (Strongly Agree) to 5 (Strongly Disagree) rating scale. Total scores can range from 36 to 180, with higher scores indicating greater parenting stress. Evidence for the reliability and validity of the PSI-SF has been established (Abidin, 1995). The coefficient alpha for the total score in the present study was excellent, \( \alpha = .88 \).

**Infant socioemotional functioning.** The Brief Infant-Toddler Social and Emotional Assessment (BITSEA; Briggs-Gowan & Carter, 2006) was administered at the 1-year interview to assess mothers’ perceptions of infant socioemotional problems. The BITSEA is a 42-item parent-report questionnaire (item responses range from 0 = Not true/Rarely to 2 = Very true/Often), with a problem total score that can range from 0 to 62; higher scores indicate more socioemotional problems. Strong psychometric properties have been reported for the BITSEA for both parents and childcare providers completing the measure (Briggs-Gowan & Carter, 2007). Evidence for content, convergent, discriminant, concurrent, and predictive validity also has been repeatedly established (Briggs-Gowan & Carter, 2007). In the present study, good internal consistency for the total problem score was obtained, \( \alpha = .77 \).

**IPV.** The Conflict Tactics Scale-2 (CTS-2; Straus, Hamby, & Warren, 2003) was used to assess for women’s experiences of IPV in the first year after birth. The 33 items of the CTS-2 that assess for victimization from psychological, physical, and sexual partner violence were administered. The CTS-2 was scored by using a weighting system suggested by the authors, in which frequency values were recoded (1 = 1, 2 = 2, 3 = 4, 4 = 8, 5 = 15, and 6 = 25). Higher scores indicate greater experience (severity) of partner violence, with total scores ranging from 0 to 825. Straus et al. (2003) reported good internal consistency among different groups including two samples of high-risk postpartum mothers. Evidence of convergent and discriminant validity of the measure also has been established (Straus et al., 2003). In the present study, coefficient alpha for the total score was .84.

**Posttraumatic stress symptoms.** The Posttraumatic Stress Disorder Checklist Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993) was used during the pregnancy and 1-year interviews to assess maternal posttraumatic stress disorder (PTSD) symptoms from “stressful” life events. The PCL-C is a 17-item self-report questionnaire comprised of three subscales that correspond to the three Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (American Psychiatric Association, 1994) PTSD symptom clusters: (a) avoidance, (b) reexperiencing, and (c) hyperarousal. A total PTSD symptom score is calculated by summing the individual items, which are each rated on a scale from a (Not at all) to 5 (Extremely). Total scores range from 17 to 85; higher total scores indicate greater severity of PTSD symptoms. The PCL-C is a highly valid and reliable instrument and is commonly used in trauma research (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996; Wilkins, Lang, & Norman, 2011). Coefficient alphas in the present sample were excellent, \( \alpha = .87 \) at pregnancy and .91 at 1 year.
Data Analytic Plan

As noted earlier, 6 mothers were lost to attrition at the 1-year interview (including 1 woman who never had a confirmed live birth). An additional 3 women did not complete the child-related measures at the 1-year interview (CHQ, PSI-SF, and BITSEA) because they had not had contact with the infant since birth. Two women lost custody of their infants, and 1 woman placed her infant for adoption; however, these 3 women completed measures related to themselves (BDI-II, CTS-2, and PCL-C). Aside from the child-specific measures for the 4 women who either did not have a confirmed birth or who did not have custody of the infant since birth, all missing data were estimated using the expectation maximization (EM) algorithm in SPSS Version 20.0 prior to analyses. The EM method uses a maximum likelihood (ML) approach to iteratively impute missing values. An ML approach such as EM is considered an effective approach for handling missing data that are Missing at Random (MAR; Enders, 2013), which is the case in the present study. Enders (2013) and others noted that the EM method results in estimates that are comparable with those of full-information maximum likelihood (FIML), another common and recommended ML approach. The rates of missingness in the present study were well within guidelines for the use of EM (McCarty, Burchinal, & Bub, 2006); therefore, analyses were based on 116 participants after imputation.

Distributions of all study variables were examined using SPSS Version 20.0, and scales with severe nonnormality (CHQ Mother Helpless, CHQ Mother–Child Frightened, IPV total) were log-transformed before analyses. Pearson correlations were used to evaluate associations between all variables as well as to test the first and second hypotheses. Statistical significance was set at $p < .05$. Next, examination of mothers’ PTSD symptoms as a possible mediator between exposure to IPV and disorganized caregiving was conducted using the PROCESS macro for SPSS (Hayes, 2013); both direct and indirect effects were examined. PROCESS estimates coefficients using ML regression with bootstrap confidence intervals for inference. Bootstrapping is helpful for smaller samples because it involves repeated sampling from the data set to estimate effects, and it better handles irregular distributions. Finally, multivariate analyses of variance (MANOVAs) were conducted in SPSS Version 20.0 to examine possible group differences between women who reported low and/or high levels of CHQ dimensions on other study variables.

RESULTS

Disorganized Caregiving on the CHQ and Maternal Depression, Parenting Stress, and Perceived Infant Socioemotional Functioning

Data on maternal depression were available both during pregnancy and 1 year after birth (concurrent with the CHQ). As Table 2 shows, Pearson correlations revealed that prenatal depression was significantly positively associated with later Frightened caregiving, $p = .03$, and also was showing a trend toward significance with later Helplessness, $p = .06$. Depression at 1 year after birth was significantly positively associated with both dimensions of disorganized caregiving on the CHQ, $ps = .04$ and .00, respectively. In addition, parenting stress was highly related to both Helplessness, $p = .00$, and Frightened, $p = .00$, experiences in the caregiving context, as expected. Furthermore, as can be seen in Table 2, both Helplessness and Frightened caregiving were positively related to maternal perceptions of infant socioemotional problems, $ps = .00$, with an especially strong association between Frightened caregiving and infant problems. Overall, these findings support the first hypothesis that Helplessness and Frightened caregiving, as measured by the CHQ, would be related to maternal depression, parenting stress, and perceived infant socioemotional problems among this high-risk group of mothers of infants.

As noted earlier, associations between Child Caregiving (i.e., role reversal in the parent–child relationship) from the CHQ and other study variables were examined in an exploratory manner, given that the former construct is believed to emerge in children well after infancy. Nevertheless, in the present study, Child Caregiving was unrelated to maternal depression and parenting stress, but was significantly positively related to maternal perceptions of infant socioemotional problems, $p = .04$, such that greater maternal perceptions of the infant as a caregiver to others were related to more problematic perceived infant adjustment.

Disorganized Caregiving on the CHQ and Maternal Trauma

Next, it was hypothesized that current maternal trauma experiences would be related to more Helplessness and Frightened caregiving, as measured by the CHQ, as theory would strongly suggest. Pearson correlations confirmed that mothers’ experiences of partner violence during the first year of the infant’s life were significantly positively related to her own sense of helplessness, $p = .01$, and fear, $p = .00$, in the caregiving context (see Table 2). Furthermore, while the association between prenatal posttraumatic stress symptoms and later Helplessness was only at trend-level significance, $p = .07$, prenatal posttraumatic stress symptoms were significantly positively related to later Frightened caregiving experiences, $p = .00$. Further, posttraumatic stress symptoms at 1 year after birth were significantly positively correlated with concurrent Helplessness and Frightened caregiving, $ps = .00$. Thus, both exposure to traumatic experiences in the mother’s current romantic relationship during the first year after giving birth and her traumatic stress symptoms were associated with both subscales of the CHQ. Child Caregiving (role reversal) was unrelated to maternal trauma variables.

Due to the pattern of correlations found between concurrent partner violence (IPV), PTSD symptoms, and both Helplessness and Frightened caregiving 1 year after birth, analyses were conducted to examine whether mothers’ posttraumatic stress symptoms mediated the relation between exposure to IPV and disorganized caregiving. Based on 5,000 bootstrap sampling, results revealed a significant indirect effect of IPV on maternal helplessness through PTSD symptoms (95% bias-corrected CI = .01–.07)
In contrast, results revealed a significant direct effect of IPV on Frightened caregiving (95% bias-corrected CI = .01–.06), with no significant indirect effect through PTSD symptoms.

Exploratory Analyses

In George and Solomon’s (2011) original study, unexpected associations (or lack thereof) with the Child Caregiving subscale led to exploratory analyses whereby mothers were grouped according to high (upper quartile) or low (below the upper quartile) levels of Frightened experiences and Child Caregiving based on their CHQ responses; results from their study have suggested that mothers high on both Frightened and Child Caregiving may be most at risk. Therefore, similar exploratory analyses were conducted in the present study to examine the utility of these two scales in combination within our high-risk group of mothers with infants. Mothers were divided into groups in the same manner as outlined by George and Solomon (2011; using the upper quartile to define “high” levels of the construct), yielding the following groups: mothers with high Frightened and high Child Caregiving scores (n = 12), mothers with high Frightened scores only (n = 23), mothers high on Child Caregiving only (n = 16), and mothers with neither high Frightened nor high Child Caregiving scores (n = 65). As shown in Table 3, results from MANOVA analyses indicated significant between-group differences for parenting stress and perceptions of infant socioemotional problems. Specifically, mothers in the combined group (high on both scales) reported significantly more parenting stress than did mothers high on Child Caregiving only, p = .00, and they reported more infant socioemotional problems than did those in the Child Caregiving only, p = .01, and “neither/nor,” p = .00, groups. Further, mothers high on Frightened caregiving only reported more parenting stress and more infant socioemotional problems than did the Child Caregiving only and “neither/nor” groups, p = .00 for all comparisons. Finally, mothers with high scores on the Child Caregiving subscale only reported less parenting stress than did those in the “neither/nor” group, p = .02. There were no significant between-group differences on maternal depression, IPV severity, or posttraumatic stress symptoms.

DISCUSSION

The primary aim of the current study was to examine the recently developed CHQ as a potential screening tool for disorganized caregiving among a high-risk sample of mothers with 1-year-old infants. The study sought to replicate George and Solomon’s (2011) original validation study, with an additional focus on possible associations between current maternal trauma experiences and disorganized caregiving. More specifically, the aim was to examine mothers’ reports on the CHQ Helpless and Frightened caregiving scales in relation to (a) maternal depression, parenting stress, and perceptions of infant social emotional problems; and (b) maternal experiences of current IPV and posttraumatic stress symptoms. A secondary, related aim was to better understand maternal experiences that may be related to disorganized caregiving, as conceptualized and elaborated upon by George and Solomon (2008, 2011; Solomon & George, 2000, 2011) as possible “assaults to the caregiving system.”

To begin, descriptive statistics revealed that the mean level of maternal Helplessness and Frightened caregiving as well as Child Caregiving (i.e., role reversal) were nearly identical to the means reported in George and Solomon’s (2011) CHQ validity study, despite the fact that the present study was with mothers of infants (vs. mothers of preschool- and school-age children), who could be considered at much higher risk based on demographic characteristics (e.g., primarily single and economically disadvantaged). Furthermore, as expected, results revealed that maternal...
depression and parenting stress were positively related to both the Helplessness and Frightened caregiving scales of the CHQ. These findings are consistent with those of George and Solomon (2011) and Rutherford (2012), who also found this pattern of associations. The findings also are consistent with previous studies that have established associations between maternal depression and problematic maternal representations of the infant (Korja et al., 2009; Wood, Hargreaves, & Marks, 2004) as well as a study that has reported an association between parenting stress and maternal atypical caregiving behavior (Schechter et al., 2010). Although it is impossible to determine the direction of effects with concurrent associations, the fact that prenatal depressive symptoms in the present study also predicted later Helplessness and Frightened caregiving experiences provides some evidence that maternal mental health disturbance may contribute to a disabled caregiving system and a subsequent tendency for some mothers to abdicate care of their infants. As such, these associations provide further evidence for the construct validity of the CHQ.

The present study also found significant positive associations between Helplessness and Frightened caregiving from the CHQ and maternal reports of broad infant socioemotional problems. Although George and Solomon (2011) only found associations with perceived child externalizing problems, Keeling (2013) and Guillory (2013) found associations with broad infant and toddler socioemotional problems using the BITSEA, like the present study. Together, these findings provide evidence for the predictive validity of the CHQ. Helpless and Frightened subscales. From a theoretical standpoint, the associations between helplessness and fear in the caregiving role and infant problems are not surprising. Young children whose caregivers routinely abdicate care due to their own emotional dysregulation and whose caregivers behave in incoherent ways are left in a state of emotional and physiological dysregulation without any assistance (Solomon & George, 2011); this child dilemma also has been called “fright without solution” (Main & Hesse, 1990, p. 163). For the same reason that this scenario gives rise to child attachment disorganization (George & Solomon, 2008; Lyons-Ruth & Jacobvitz 2008), it likely also leads to a broad range of infant psychopathology.

Alternatively, it is possible that results reflect associations between maternal helplessness and fear and perceptions of infant difficulties, rather than “actual” difficulties, since the infant outcome measure used in the present study was based solely on maternal report. It seems probable that mothers who are more disorganized in the caregiving role are more likely to distort their infants’ behaviors and experiences. This possibility is supported by some existing research that has shown that trauma-exposed mothers tend to have severely distorted representations of their children (Huth-Bocks et al., 2004), and in turn, distorted representations pose a risk for caregiving problems and insecure mother–infant attachment (Levendosky, Bogat, & Huth-Bocks, 2011; Porcerelli, Huth-Bocks, Huprich, & Richardson, 2016).

Along these lines, results from the present study also revealed a relationship between maternal reports on the CHQ Child Caregiving subscale and broad infant socioemotional difficulties, in contrast to those of George and Solomon (2011), who did not find such expected bivariate associations. Although child behavior that is indicative of a role-reversed relationship is not possible during infancy, the present results indicate that maternal perceptions of the child as a caregiver may be present earlier than when this type of actual child behavior emerges. Indeed, this is consistent with theory noted throughout this article regarding some mothers’ tendency to view their children as more independent and capable in some domains than they really are as a way to abdicate their caregiving responsibilities. One can imagine that these types of perceptions also incur developmental costs for the child, perhaps as early as infancy. Also note that more infant problems were

### TABLE 3. Frightened and Child Caregiving Group Differences

<table>
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<tr>
<th></th>
<th>F &amp; C (n = 12)</th>
<th>F Only (n = 23)</th>
<th>C Only (n = 16)</th>
<th>Neither (n = 65)</th>
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<td></td>
<td>M</td>
<td>SD</td>
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<tr>
<td>Prenatal Depression (EPDS)</td>
<td>7.83</td>
<td>4.51</td>
<td>8.57</td>
<td>4.69</td>
<td>6.88</td>
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<tr>
<td>Depression at 1 Year (BDI-II)</td>
<td>14.58</td>
<td>12.04</td>
<td>12.04</td>
<td>6.52</td>
<td>9.31</td>
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<tr>
<td>Parenting Stress at 1 Year (PSI-SF)</td>
<td>72.83</td>
<td>15.31</td>
<td>78.43</td>
<td>13.12</td>
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<tr>
<td>Infant Problems (BITSEA)</td>
<td>15.17</td>
<td>4.06</td>
<td>16.13</td>
<td>6.94</td>
<td>8.88</td>
</tr>
<tr>
<td>Partner Violence at 1 Year (CTS-2)</td>
<td>31.42</td>
<td>40.30</td>
<td>17.43</td>
<td>19.34</td>
<td>11.69</td>
</tr>
<tr>
<td>Posttraumatic Stress at 1 Year (PCL)</td>
<td>31.75</td>
<td>11.65</td>
<td>30.87</td>
<td>10.75</td>
<td>27.25</td>
</tr>
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</table>

Note. F = High Mother–Child Frightened on CHQ subscale; C = High Child Caregiving on CHQ subscale; EPDS = Edinburgh Postnatal Depression Scale; BDI-II = Beck Depression Inventory-2nd ed.; PSI-SF = Parenting Stress Index-Short Form; BITSEA = Brief Infant Toddler Social Emotional Assessment; CTS-2 = Conflict Tactics Scale-2nd ed.; PCL = Posttraumatic Stress Disorder Checklist.

*p < .05. **p < .01. ***p < .001.
observed when high levels of Child Caregiving were combined with high levels of Frightened experiences in the exploratory analyses, suggesting that perceptions of the child as capable of taking care of others, in the context of other elements of disorganized caregiving, is particularly concerning.

Although considerable research has demonstrated that unresolved trauma from childhood leads to disorganized, atypical caregiving and child disorganized attachment (for reviews, see van IJzendoorn et al., 1999 and Lyons-Ruth & Jacobvitz, 2008), very few studies have examined other types of maternal trauma experiences in relation to disorganized caregiving. However, George and Solomon (2008, 2011; Solomon & George, 2011) repeatedly suggested that a range of experiences can disorganize the caregiving system and render mothers unable to care for and protect their children. Thus, to provide further evidence of the validity of the CHQ, associations between CHQ subscales (helplessness and fear) and maternal experiences of current trauma were examined. As expected, mothers’ experiences of IPV during the first year after birth were significantly related to CHQ scales measuring helplessness and fear in the caregiving role. In addition, severity of posttraumatic stress symptoms both during pregnancy and at 1 year after birth were related to greater helplessness and fear. Moreover, posttraumatic stress symptoms accounted for the association between partner violence and maternal helplessness. Thus, current maternal experiences of relational trauma were significantly related (both directly and indirectly) to CHQ scales, as predicted, providing additional support for the potential usefulness of the measure.

Although partner violence and posttraumatic stress symptoms have not been examined in relation to disorganized caregiving, as measured by the CHQ, until the present study, a growing body of literature has demonstrated that partner violence (and associated trauma symptoms) may be considered an “assault” to the caregiving system. For many mothers, this experience severely undermines their capacity to care for and protect their infants. For instance, as noted earlier, several studies have found that partner violence and posttraumatic stress symptoms are related to more incoherent, problematic representations of the infant (Huth-Bocks et al., 2004; Sokolowski et al., 2007) and to the types of maternal atypical behaviors that have been associated with disorganized infant attachment (Schechter et al., 2008; Schechter et al., 2005). Furthermore, through an in-depth case analysis building off of a series of studies, Levendosky et al. (2011) provided evidence that IPV impairs the caregiving system by triggering both helplessness and fear in the mother (often unconsciously). For some, the infant’s distress may even serve as a posttraumatic trigger (e.g., by reminding the mother of her own distress, calling attention to her own failure to comfort or protect the child, altering her physiology, triggering a past traumatic event, etc.).

Taken together, past research has indicated that current relational trauma experiences may, for many mothers, lead to overwhelming, painful feelings that are split off (or “segregated”) from consciousness and remain unresolved and incompletely processed. Their own activated attachment system, coupled with overwhelming distress, makes it difficult to attend to the attachment needs of their infants and leads to atypical caregiving behavior. This process is precisely what has been proposed by others who have examined associations between unresolved trauma from childhood and disorganized caregiver–infant relationships (Crawford & Benoit, 2009; Lyons-Ruth & Block, 1996; Lyons-Ruth & Jacobvitz, 2008; Main & Hesse, 1990) as well as by George and Solomon (2008, 2011) in their conceptualization of the disorganized caregiving system. However, this is the first study to demonstrate these associations using the CHQ.

Note that several limitations to the present study should be kept in mind when drawing conclusions. First, all measures were obtained through maternal self-report, and it therefore is possible that associations were inflated based on a single reporter. Among this high-risk sample, it also is possible that some women minimized their own feelings of helplessness and fear; average scores on the CHQ scales were nearly identical to those of George and Solomon’s (2011) mostly married, middle-class mothers, which was unexpected. Indeed, the CHQ aims to measure constructs that are believed to be partly unconscious; therefore, the self-report nature of this measure may be limited to tapping conscious perceptions only, and conscious perceptions may be distorted for some women as noted earlier. Furthermore, most associations were based on measures assessed concurrently (1 year after birth), which makes it impossible to interpret direction of effects. For instance, even though theory and past research have posited that maternal mental health and stress experiences impair the caregiving system, which in turn influence infant and child outcomes, such temporal effects cannot be established here. However, evidence stemming from the associations with the two mental health variables assessed prenatally, before the CHQ was administered, provide some support for the expected direction of effects. Finally, the internal consistency of items making up the Mother–Child Frightened subscale of the CHQ was low in the present sample (and lower than that in George and Solomon’s 2011 sample). Although low reliability is more likely with measures assessing rarely occurring, but clinically significant, behaviors (Mongillo, Briggs-Gowan, Ford & Carter, 2009), this subscale needs to be further examined in other higher risk samples. At this point, findings with the Mother–Child Frightened subscale should be interpreted with caution despite the fact that results with this subscale were significant and in the expected directions for most findings.

Despite these limitations, this study has a number of strengths. The study was conducted with a relatively large sample of high-risk mothers who are often difficult to engage in research across the transition to parenthood and who may be at most risk for disorganized relationships. Indeed, a notable strength of the present study was its inclusion of current maternal trauma experiences in relation to caregiving constructs. Although plenty of past research has demonstrated that unresolved traumatic experiences from childhood interfere with the caregiving system, very little research has examined other forms of trauma and stressful experiences that may “assault” the caregiving system and lead to parental helplessness,
fear, and abdication of care. The findings from the present study, which was guided by an attachment framework and a long line of important research on the caregiving system (Crawford & Benoit, 2009; George & Solomon, 2008, 2011; Solomon & George, 1996, 2011), extend the limited existing knowledge on maternal characteristics and risk status for disorganized caregiving. It is important for future research to continue to include current relational trauma, such as IPV, in studies on disorganized parent–child relationships as well as in other possible contexts that render parents unable to provide care or protect their children.

In addition, this is the first known study to examine the use of the CHQ among mothers of infants exclusively rather than mothers of toddlers, preschoolers, and older children, and findings suggest that the measure, especially the Helplessness and Frightened subscales, may be useful at earlier ages than those originally intended by the authors. As a possible screening tool for disorganized caregiving, this has important implications. Earlier detection using good screening tools are more likely to lead to earlier, effective interventions; however, note that most associations, while statistically significant, were relatively modest in strength.

At this point, it is still unclear how the Child Caregiving subscale on the measure may be used. Based on their findings with mothers of older children, George and Solomon (2011) suggested that mothers who score high on the Child Caregiving subscale, but report no other difficulties, may be viewing the child unrealistically good (i.e., in a role-reversed manner). They also found that mothers who scored high on this scale and who endorsed Frightened experiences were most at risk. The exploratory results in the present study may be interpreted in a similar way, given that mothers who were high only on Child Caregiving reported the fewest problems, but mothers high on this subscale and the Frightened subscale reported elevated difficulties across most measures. Given that the present study was with mothers of infants, it appears that perceptions of role reversal may emerge earlier than when this type of behavior actually is observable during the early preschool years and beyond. More research is needed to better understand the emergence of role reversal that underlies the controlling form of preschooler disorganization. Finally, note that the CHQ is not meant to replace lengthier semistructured interviews that yield important information about a mother’s representations of her child and herself as a caregiver; however, it seems to be an important tool to consider either before lengthier methods are considered or in combination with them. The development of such tools, alongside continued use of rich interview methods, is an important avenue for future attachment research.

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