YOUNG CHILDREN'S RESPONSES TO SEPTEMBER 11TH:

THE NEW YORK CITY EXPERIENCE

TOVAH P. KLEIN

Barnard College Center for Toddler Development and Department of Psychology

ELLEN R. DEVOE

Boston University School of Social Work

CLAUDIA MIRANDA-JULIAN

Tufts University

KERI LINAS

University of Denver

ABSTRACT: Although the knowledge base regarding very young children's responses to trauma has been expanding, descriptions of their responses to terrorism remain sparse. Yet, their vulnerability makes this an important group to study. Recent events in the United States (9/11, Hurricane Katrina) make this question highly relevant. This study aims to provide extensive descriptions of how children 5 years or younger on September 11th who were living in close proximity to Ground Zero responded that day and in the following months. Sixty-seven New York City parents (with 104 children) participated in focus groups between November 2001 and May 2002. Focus groups also provided a foundation for an in-depth study examining young children's adaptation following 9/11 and changes in parenting behaviors after the disaster. Findings on children's behavioral and emotional reactions on 9/11 and in the 8 months after as well as their need to return to normalcy are reported. Consistent with current understanding of trauma symptoms in young children, parents reported behaviors including chronic sleep disruptions, fearful reactions, development of new fears, and increased clinginess and separation anxiety following the disaster. On the actual day, children's responses were described as ranging from calm and cooperative to difficult and panicky. Implications for working with parents and young children affected by terrorism or community-level trauma and directions for future research are discussed.

RESUMEN: Aunque se ha expandido el conocimiento básico acerca de las respuestas de los niños muy pequeños al trauma, las descripciones de sus respuestas al terrorismo son escasas. Y a pesar de todo, su vulnerabilidad hace de éste un importante grupo para el estudio. Eventos recientes en los Estados Unidos (el 11 de septiembre, el huracán Katrina) hacen que esta pregunta resulte altamente relevante. Este estudio

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Direct correspondence to: Tovah P. Klein, Barnard College, 3009 Broadway, New York, NY 10027; e-mail: tklein@barnard.edu

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se propone proveer descripciones extensas de cómo los niños de 5 años o menores el 11 de septiembre de 2001, que vivían en las proximidades del área conocida hoy como "Ground Zero," respondieron ese día y en los meses siguientes. Sesenta y siete progenitores de la ciudad de Nueva York (con 104 niños) participaron en grupos de enfoque entre noviembre de 2001 y mayo de 2002. Los grupos de enfoque también proveyeron una base para un estudio profundo que examinara la adaptación de los menores después del 11 de septiembre y los cambios en la conducta de crianza después del desastre. Se reportan los resultados de las reacciones de conducta y emocionales de los niños, tanto el 11 de septiembre como en los 8 meses siguientes, así como también su necesidad de regresar a la normalidad. De una forma consistente con la comprensión actual de los síntomas de trauma en los niños menores, los progenitores reportaron conductas que incluían trastornos crónicos del sueño, reacciones de miedo, desarrollo de nuevos temores, y un incremento en la ansiedad de apego y separación después del desastre. En el preciso día, las descripciones de las respuestas de los niños iban desde la calma y la cooperación hasta las respuestas difíciles y que mostraban temor. Se discuten las implicaciones para trabajar con los progenitores y niños menores afectados por el terrorismo o por el trauma al nivel de la comunidad, así como las directrices para la futura investigación.

Bien que les bases de connaissances pour ce qui concerne les réactions des très jeunes enfants au traumatisme s'étendent, les descriptions de ces réactions au terrorisme demeurent rares. Pourtant leur vulnérabilité en fait un groupe important à étudier. Les récents événements aux Etats-Unis (le 11 septembre et le cyclone Katrina) font de cette question une question d'actualité. Cette étude a pour but de présenter des descriptions détaillées de la manière dont des enfants de 5 ans ou moins, qui vivaient près de Ground Zero, ont réagi le jour du 11 septembre, et les mois qui suivirent. Soixante-sept parents new yorkais (avec 104 enfants) ont participé à cette étude dans de petits groupes d'étude entre novembre 2001 et may 2002. Les groupes d'étude ont également offert la base d'une étude approfondie qui examine l'adaptation des jeunes enfants après le 11 septembre et les changements dans les comportements de parentage après le désastre. Les résultats sur les réactions comportementales et émotionnelles des enfants, le 11 septembre et dans les huit mois qui suivirent, ainsi que leur besoin de revenir à la normalité, sont décrits. En accord avec la compréhension actuelle des symptômes de traumatisme chez les jeunes enfants, les parents ont fait état de comportements qui incluaient des perturbations chroniques du sommeil, des réactions de peur, le développement de nouvelles peurs, le fait de se cramponner beaucoup plus aux parents ainsi qu'une anxiété de séparation après le désastre. Le jour même, les réactions des enfants ont été décrites comme variant du calme et de la coopération à étant difficile et paniquant. Les implications pour le travail avec les parents et les jeunes enfants affectés par le terrorisme ou un traumatisme au niveau communautaire ainsi que des directions pour les recherches à venir sont discutées.

ZUSAMMENFASSUNG: Das Grundlagenwissen der Reaktion sehr kleiner Kinder auf Traumen hat sich erweitert, trotzdem bleiben die Beschreibungen kindlicher Reaktionen auf Terrorismus spärlich. Dennoch, die Verletzlichkeit dieser Gruppe macht sie zu einer wichtigen Untersuchungsgruppe. Jüngste Ereignisse in den USA (9/11 Hurrikan Katrina) bewirken eine hohe Aktualisierung dieser Frage. Zielsetzung der vorliegenden Studie ist die Bereitstellung ausführlicher Beschreibungen, wie Kinder, 5 Jahre und jünger, die in der näheren Umgebung des Ground Zero leben, auf den angesprochenen Tag und die folgenden Monate reagierten. Siebenundsechzig New Yorker Stadt Eltern (mit 104 Kindern) nahmen in Testgruppen zwischen November 2001 und Mai 2002 teil. Die ausführlichen Untersuchen der Testgruppen wurden mithilfe einer Stiftung ermöglicht, um die Anpassung kleiner Kinder nach dem 11. September und die Veränderungen im Elternverhalten nach dieser Katastrophe zu untersuchen. Die Ergebnisse bezüglich der kindlichen Verhaltensweisen und emotionalen Reaktionen am 11. September und in den folgenden 8 Monaten, sowie ihr Bedürfnis nach der Rückkehr zur Normalität, werden beschrieben. In Übereinstimmung mit dem derzeitigen Verständnis von traumatischen Symptomen bei jungen Kindern, berichteten die Eltern nach

den Ereignissen Verhaltensweisen wie chronische Schlafstörungen, angstvolle Reaktionen, Entwicklung bisher unbekannten Ängsten, erhöhte Anhänglichkeit und Trennungsangst. Am Tag der Katastrophe, wurden kindlichen Reaktionen von tobend bis gefasst sowie von kooperativ bis schwierig und panisch beobachtet. Die Konsequenz für die Arbeit mit Eltern und jungen Kindern die von Terrorismus direkt oder auf gesellschaftlicher Ebene betroffen wurden sowie die Richtung weiterer Forschungen werden diskutiert.

抄録:とても幼い子どものトラウマへの反応に関する知識基盤は拡張してきてはいるが、幼い子どものテロへの反応についての記述はわずかである。しかし、幼い子どもは脆弱なので、このグループはとても重要な研究対象となる。この質問は、アメリカにおける最近の出来事(9月11日同時多発テロ、ハリケーン・カトリーナ)によって、非常に意味のあるものになった。この研究は、グラウンド・ゼロのすぐ近くに住む、9月11日に5歳以下だった子どもたちが、どのようにその日とそれに続く数カ月に反応したかについての、詳しい記述を提供することを目的としている。ニューヨーク市に住む67人の親(と104人の子ども)が、2001年11月から2002年5月までの間にフォーカス・グループに参加した。フォーカス・グループはまた、幼い子供たちの9月11日同時多発テロ後の適応と、惨劇後の養育行動の変化を詳細に研究するための基礎を提供した。9月11日の、そしてその8カ月後の子供の行動上および情緒的反応が、子どもたちの日常に戻りたいというニードとともに報告された。幼い子どもにおけるトラウマ症状についての最近の理解と一致して、災害後の慢性的な睡眠の中断、恐怖反応、新しい恐怖の発展、そしてしがみつき易さと分離不安を含む行動を、親は報告した。まさにその当日の子どもたちの反応は、おとなしく協力的から扱いにくくパニック状態までの範囲で記述された。テロあるいは地域レベルのトラウマに影響を受けた親と幼い子どもを扱う仕事に対して持つ意味と、今後の研究の方向性が、考察される。

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INTRODUCTION

While most of the world witnessed the attacks on the World Trade Center (WTC) on television, families in New York City watched it unfold in person. Children living near the WTC witnessed the disaster firsthand: from watching and hearing airplanes hit the towers to running for their lives amidst crowds of panicked people. Families were displaced from homes, schools, and communities for weeks or months. The events of 9/11 present a unique opportunity to examine responses of very young children to a catastrophic community disaster. Several features of 9/11 make it unique in comparison with the ongoing and episodic nature of terrorism and wars in other countries. This was a single occurrence of catastrophic proportion, with a level of brutality and intent unknown on our soil, and generally unknown, even in ongoing conflict. The magnitude of brutality of this large-scale terrorism presents an opportunity to shed further light on young children's responses and adaptation, adding to the growing knowledge regarding trauma and young children. This information can deepen understanding of normative early childhood reactions to catastrophic community trauma. The need for such information is particularly relevant in light of recent community disasters such as Hurricane Katrina.

Research has documented the responses of children to community trauma, primarily focusing on school-age children and adolescents (Aber, 2004; Pfefferbaum, 1997; Pfefferbaum et al., 2004; Sugar, 1993). What is known about trauma in children under 5 years of age comes from several areas including studies on exposure to domestic and interpersonal violence (Groves, 2002; Kitzmann, Gaylord, Holt, & Kenny, 2003; Levendosky, Huth-Bocks, Shapiro, & Semel, 2003; Lieberman, Van Horn, & Ozer, 2005; Osofsky, 1995, 1997), writings on assessment and intervention with young children exposed to violence (e.g., Osofsky, 2004; Lieberman & Van Horn, 2005; Scheeringa, Zeanah, Drell, & Larrieu, 1995; Scheeringa, Zeanah, Myers, & Putnam, 2003), intervention studies (Lieberman, Van Horn, & Ippen, 2005), and observational

case studies of infants' and toddlers' responses to traumatic events (Drell, Gaensbauer, Siegel, & Sugar, 1995; Gaensbauer, 1995; Sugar, 1993). These writings have demonstrated the potential for detrimental impact of trauma on young children, with greater vulnerability ascribed to younger children (e.g., Kitzmann et al., 2003).

Less is known about young children's responses to community trauma, as noted by other researchers (Wang et al., 2006), particularly outside of the domain of natural disasters (Lonigan, Shannon, Taylor, Finch, & Sallee, 1994; Swenson, Saylor, Powell, Stokes, Foster, & Belter, 1996) or war and terrorism abroad (Laor, Wolmer, & Cohen, 2001; Laor et al., 1997; Laor et al., 1996). How young children responded to the intentional, brutal killing of almost 3,000 people in this terrorist attack warrants careful examination. Further, the developmental vulnerability of infants, toddlers, and preschoolers coupled with the importance of this period as a foundation for ongoing development make this a particularly vital age to study.

While much of what we know about the responses of these youngest children is derived from clinical observations and case studies (Gurwitch, Stitterle, Young, & Pfefferbaum, 2002; Sugar, 1993; Terr, 1991), the few empirical studies of this age group underscore the potentially negative and cross-cutting impact of disasters on young children (Green et al., 1991; La Greca, Silverman, Vernberg, & Prinstein, 1996; Laor et al., 2001; Laor et al., 1997; Laor et al., 1996). Specific to September 11th, only a few studies have focused on non-bereaved-children's reactions to the events and aftermath. Mirroring the larger body of trauma research, 9/11 studies primarily have focused on the responses of older children. Studies have ranged from epidemiological surveys of adults that include parents in New York City (Galea et al., 2002; Stein et al., 2004) and broad surveys of New York City (Aber, 2004; Hoven et al., 2005) and Washington, DC school-age children (Phillips, Prince, & Schiebelhut, 2004) to studies of service utilization (Covell et al., 2006; DeVoe, Bannon, & Klein, 2006; DeVoe, Bannon, Klein, & Miranda, 2007), with children lacking direct exposure to the events (Otto et al., 2007), and a case report of very young children with direct exposure (Schecter, Coates, & First, 2002). Taken together, this developing body of work is key to understanding children's responses to the 9/11 attacks; yet, much remains to be learned about the youngest children, particularly those with high in-person exposure. Recognizing this gap in knowledge, our aim is to provide qualitative descriptions (e.g., Palinkas, 2006), from parents, of the responses of very young, nonbereaved children (infant to 5 years of age) directly exposed to the WTC attacks.

Young children's limited verbal and cognitive capacities present a significant barrier to obtaining information regarding traumatic experiences and impact, which leaves us dependent on parents for information. The limitations of parental report of child behavior and symptoms (Koplewicz et al., 2002) are documented elsewhere. With acknowledgement of parents' tendency to minimize and underreport children's distress and responses, we recognize the value in what parents have to say about their children's reactions to this traumatic event, particularly because clinicians rely upon parental report as a starting point in their intervention with young children. Much can be learned from parental reports following a trauma of this magnitude due to their central and influential role in the adaptation of young children and their dependence on parents. We aim to move beyond the current narrow conceptualization of posttraumatic stress reactions to broadening the base for understanding how young children respond and adapt to community trauma by describing a range of reactions (normative, subclinical, and clinical). Parents were asked simply to *describe* children's reactions on September 11, 2001, and the months following, with the goal of minimizing parental bias and eliciting their observations without interpretation or causal attribution.

Context of the Current Study

The current work is part of a larger, two-phase, mixed-method study focused on the experiences of very young children and their families in New York City in response to the attacks on the WTC. Because most large-scale screening and epidemiological efforts were focused on older children after September 11th (e.g., Hoven et al., 2005) or did not include directly exposed samples (e.g., Phillips et al., 2004), we were particularly interested in exploring in-depth young children's exposure to the disaster, parents' observations of how children responded, and how parents experienced changes in parenting attitudes, beliefs, and behaviors as a result of the attacks. The first phase of the study began in November 2001, just 6 weeks post-9/11, with a focus group of nonbereaved parents of young children in lower Manhattan. Following the principle of saturation (Lincoln & Guba, 1985) in focus-group work, sampling continued through May 2002 to elicit rich and exhaustive narrative in response to all questions in the protocol, particularly as new themes emerged over time. In the second phase of research beginning in June 2002, in-depth semistructured interviews were conducted with parents from 180 families of young children in New York City (DeVoe et al., 2006; DeVoe et al., 2007; Klein, DeVoe, & Miranda, 2003) and videotaped interviews were administered with over 80 preschoolers regarding their experiences and understanding of the terrorist attacks.

In this article, we report findings regarding parental observations of child functioning from the 13 focus groups. While the critical importance of parental mental and physical health (Miller, 1996; Osofsky, 1995; Laor et al., 1997) and parenting (e.g., Banyard, Rozelle, & Englund, 2001; Levendosky et al., 2003; MacFarlane, 1987; Appleyard & Osofsky, 2003; Punamaki, Qouta, & Sarraj, 1997) in influencing children's responses to trauma has been established, qualitative findings on children's functioning are presented here separately from parental responses. We believe these descriptions vividly represent the types of behaviors clinicians, educators, childcare professionals, medical staff, and other helping professionals encounter when working with very young children in a postdisaster context. In addition, despite recent updates in the nosology for classification of posttraumatic stress responses in very young children (e.g., Scheeringa, Zeanah, Myers, & Putnam, 2003; Zero to Three, 2005), there continues to be a need for "thick description" (Palinkas, 2006) of children's behavioral and emotional functioning as observed by parents in response to mass community trauma (Wang et al., 2006) including, but not limited to, formal diagnostic criteria for posttraumatic stress disorder (PTSD). Finally, by pulling apart these issues, we are able to focus elsewhere on providing "thick description" of the subtleties of changed parenting as a result of parents' experiences of September 11th.

In sum, this study aims to provide insight into children's reactions to the disaster as the events unfolded, immediately after, and over the next months as a way to better understand very young children's responses and adaptation to a highly traumatic community and national disaster. Our aim is not to predict why young children responded as they did, which is likely related in part to parental reactions; rather, the article is a descriptive catalog of behaviors across a large group of very young, highly exposed children.

METHODS

Sampling and Recruitment

A volunteer sample of 67 parents of children 5 years or younger on September 11, 2001 was recruited through one residential building and six early childhood programs in close proximity to Ground Zero; five in downtown Manhattan and one in Brooklyn within sight of the twin towers where children and adults witnessed the disaster firsthand. Thirteen focus groups were conducted between November 2001 and May 2002. Sixty-one of the parents were mothers. Parents reported on a total of 104 children, including 1 target child (oldest under 6 years on September 11, 2001) and other siblings younger than 6 years of age. The average age of the target child was 4.4 years at the time of the focus group (range = 9 months to 6 years).

Recruitment for the first two focus groups was conducted through a residential building, three blocks from Ground Zero, in which many families with young children resided. The residential building was selected because of interest from a community member who herself was the mother of a preschool child. The first group was conceptualized as a pilot test to determine whether parents would be interested in participating in focus-group research and to identify potential barriers to participation (Morgan, 1988). Furthermore, in the near-term aftermath of the disaster, it was difficult to gain access to lower downtown locations, and many preschools and early childhood centers had not yet reopened or were holding classes in borrowed or temporary space. Because of these significant challenges in the postdisaster environment, we were not able to move focus-group sites to the preschools until January 2002; however, we believed it was important to launch this inquiry as early as possible postdisaster and use available space for focus groups because of the important temporal element in the unfolding of parents' and children's responses.

Recruitment for all but the first two groups consisted of sending letters home through the preschool sites. Letters invited all parents to participate in a focus group regarding the experiences and responses of young children and their parents to the WTC disaster.

Focus-Group Protocol

Focus-group questions were developed with several "key questions" (see Krueger, 1998) in mind. Following an introduction, parents were asked to give detailed accounts of their own and their children's experiences on September 11, 2001 (including detailed descriptions of what they witnessed), children's responses on September 11, 2001 and since, their main concerns about their children, new parenting challenges since 9/11, and newly identified needs they had as parents of young children in the context of this disaster. The questions were open-ended (Morgan & Krueger, 1998). More difficult and sensitive questions related to parental concerns about their children and about parenting were deliberately placed later in the protocol so that participants would have time to become comfortable within the focus group and to assure that key issues would be addressed (Palinkas, 2006).

All focus groups were conducted by two trained facilitators with graduate-level training in social work and/or psychology. One facilitator took the lead in asking a standard set of questions while the second facilitator asked clarifying questions, wrote notes, and monitored the audiotaping. After explaining the purpose of the focus group and answering questions, written informed consent was obtained. All sessions were audiotaped for later transcription with participants' consent.

In general, parents spoke in turn and gave a description of their own and their children's experiences of the day, followed by descriptions of the children's emotional and behavioral responses. Both because of saturation and participant choices, not all parents answered every question (Lincoln & Guba, 1985). One group lasted over 3 hr; other groups were $1\frac{1}{2}$ to 2 hr. Parents completed a brief survey of contact and demographic information at the completion and were offered \$20 for participating.

DATA ANALYSES

Verbatim transcripts of the audiotapes were used for analyses. A developmental framework (Marans & Adelman, 1997), taking into account children's ages as well as cognitive, social, and emotional capacities, was used to guide us in identifying appropriate behaviors for coding. For example, crying, bed wetting, or being overly clingy were considered developmentally relevant behaviors for children under 5 years in response to experiencing the events of 9/11.

Transcripts were analyzed based on a modification of the coding system described by Krueger (1994, 1998) and recommended by others (Taylor & Bogdan, 1998) for identifying themes in qualitative data. The first three authors served as coders for this narrative analysis, meeting regularly to discuss and refine codes. First, a preliminary set of analytic coding categories based on theory and a review of all transcripts was established. Specifically, two broad code families were first derived: acute reactions and longer term reactions. Next, a list of themes and concepts from across the groups were established as an organizational framework for coding. Specifically, within each code family, subcategories (i.e., themes) of children's behavioral and emotional responses emerged and are described in Table 1, with examples included by theme. Following the establishment of these coding themes, two coders reviewed each transcript independently for reliability purposes; coder disagreements were conferenced to agreement. Interrater reliability, prior to conferencing, was greater than 80% for all codes.

TABLE 1. Categories for Child Behavioral and Emotional Responses

Reactions as the day unfolded

- Calm/Cooperative Reponses on September 11, 2001: behavioral reports of children staying calm, quiet, or cooperating with parental instructions (i.e., wearing face masks, walking long distances), playing quietly as adults figured out safety plans, or simply being quiet, withdrawn, or even in shock.
- Difficult Responses on September 11, 2001: behavioral reports of children exhibiting difficult behaviors: frightened, screaming, or noncompliant responses, including refusal to wear masks, walk during the evacuation, or stay in stroller.
- Fear Responses on September 11, 2001: descriptions of children exhibiting fear during the crisis on September 11, 2001—through panicked, crying behaviors, or withdrawn/catatonic reactions. Often, reactions are due to fear of being separated from a loved one or to the terror and chaos surrounding what they have witnessed.
- Sleep and Regulatory Changes on September 11, 2001: includes changes in sleep and eating, increased irritability, inconsolability, tantrums, and motor agitation on September 11, 2001.

Reactions over time

- Expressions of Sadness: descriptions of sadness expressed by children usually tied to the loss of personal objects on September 11, 2001, or of routines that could no longer occur due to the loss of the World Trade Center (i.e., visiting the World Trade Center; playing in a nearby park).
- Separation Issues: descriptions of children's increased separation issues following September 11, 2001, including not wanting to be away from parents, difficulty saying goodbye, and difficulties separating at school.
- New Fears: descriptions of new fears developed after September 11, 2001, either disaster-specific (i.e., airplanes, loud noises, tall buildings falling down) or more generalized (i.e., fear of the dark, being alone).
- Sleep and Regulatory Changes: changes in sleep, including frequent wakening, nightmares, and refusal to sleep alone; increased irritability, inconsolability, frequent crying or tantrums.
- Need for routine/normalcy: on September 11, 2001 and later, descriptions of children's attempts or requests to maintain or return to regular routines in the face of the disaster or in the days and weeks afterward. Includes requests to return home or go to school, playing throughout the disaster as they normally would, telling adults to stop talking about the disaster, or requesting that televisions be turned off to avoid seeing coverage of the day.

RESULTS

As shown in Table 1, codes were divided into two time points: reactions as the day unfolded and reactions over time. "Reactions as the day unfolded" include behavioral responses (calm/cooperative; difficult; and fear) and sleep and regulatory changes. "Reactions over time" include expressions of sadness; separation issues; new fears; and sleep and regulatory changes. The need for routine/normalcy covers both time points. Findings will be reported by the two time points. Within each time point, themes are discussed separately; representative quotes are followed by the date of the focus group.

Reactions as the Day Unfolded

We begin with parental descriptions of children's emotional and behavioral reactions on September 11th reported by theme: calm/cooperative; difficult; and fear reactions. While parents were caught off-guard and forced to make "in-the-moment" decisions, children reacted to the rapidly changing situation as well as to the adults around them. Vivid descriptions of children's reactions during this unfolding crisis help us better comprehend their experience of this unprecedented event. The first theme reported—calm/cooperative responses—is one that parents found both unusual, given the children's young ages, and helpful, as it allowed parents time to prepare and plan.

Calm/Cooperative Responses. Children were described by parents as unexpectedly (given their young age) cooperative, calm, or resourceful throughout the crisis on September 11th, as adults frantically assessed the developing situation and made decisions. This response was a relief for parents, allowing them to digest the situation and make plans (i.e., deciding what to do, where to go and what to take; devising a plan to evacuate). Yet, looking back, parents wondered if their children had been in shock. A mother who worked in the WTC exemplifies what others reported. Just as she emerged from the subway station heading to her 2-year-old's nearby childcare center, she was witness to the attacks. The mother described her child sitting calmly while she was transfixed on her own burning office building:

He was incredibly cooperative. He was sitting in his stroller. I was just gawking at what was going on with the building [I work in] and just needed some moments to really, really kind of take it in. And he just sat—quietly, quietly. (1/16/02)

Parents similarly described children's uncharacteristic (for this age) willingness to follow parental demands in the heat of the moment. Particularly noted was children's willingness to wear face masks (needed to protect from the thick, debris-filled air after the buildings collapsed) that at other times would have felt intrusive and follow evacuation plans—all of which took place in a crisis mode. Parents described children incorporating what they were witnessing or being asked to do as if it were playtime or their daily routine. After all, play is the world children this age live in (Klein, Wirth, & Linas, 2003). In one example, a 4-year-old reacted as if he was participating in a fun game:

[He] was just acting like, 'Hey—it's dress up time!' when it came to wearing the mask. He was ready to do whatever was needed. And he had his water and he was really going along with the plan—wearing the mask very dutifully. (2/20/02)

Another mother described her toddler as calm, and the child's reaction to the falling debris was "Look, mommy, it snows!" (1/16/02). In a particularly poignant example, a 5-year-old commented about birds flying from the building as he and his mother watched people jump from the burning tower.

Children also remained calm in the face of what under normal circumstances would have upset them. One toddler, normally distressed by strangers, acted otherwise in the moments of fleeing from the disaster. This mother and child were trapped between the WTC and the Hudson River, forced to cross the river by boat. A stranger grabbed the child out of a crowd and ran: "She didn't even know this guy who was carrying her through the evacuation . . . and she was just so good. I asked her to put on a mask and she just cooperated" (1/16/02).

Parents expressed surprise or relief at their children's cooperativeness. A mother of two toddlers described their calm state throughout the disaster that culminated with the family staying at the home of a fireman they met during the evacuation:

And then after my sons saw everything [of the WTC attacks] we went down to our apartment lobby. The two kids didn't say a word. They were not crying. They didn't say anything. [Later] when we escaped, we took the boat to New Jersey. We spent the first night at this fireman's house and the kids were really, really nice. They didn't ask questions-I mean I was really surprised, because we were really nervous and we were thinking that they would be really nervous and make us more nervous. But, no—they were really quiet. (1/28/02)

While these behaviors were framed in a positive light, parents also described such behaviors as "withdrawn" or wondered if their children had been "in shock." Two notable examples describe the responses of a $4\frac{1}{2}$ -year-old and a 3-year-old:

[He was] sort of withdrawn. I'm not sure he knew what was going on, but he knew that our house was very emotionally charged. He'd never seen me crying before, probably, but I was just sobbing . . . he was quieter than usual. (2/21/02)

I remember running down Greenwich Street [close to WTC]. She's pretty loud usually, but she just kept looking at me and looking at the people walking out, looking at me, looking at the people. And then even at the train station [during evacuation], she was so quiet and so good, and didn't say anything until that night, when we were in the hotel. (3/21/02)

Difficult Responses to the Crisis. In contrast to calm responses, parents discussed children's behaviors that would be considered more typical for this age, including screaming, frightened responses, and refusals to comply with parental requests. One mother described attempts to get a young toddler into his stroller so they could begin the emergency evacuation from an apartment near the WTC:

... and the other insane thing is getting a 14 month old into the stroller. He did not want to get in—I just think that he didn't want to. We were wrapping the stroller up [to protect him from the air and debris]. It was very claustrophobic . . . I remember my older child was wearing the face mask very dutifully and my baby wasn't. He was not passing out at the time either. He was screaming and kicking. (2/20/02)

Similar behaviors were reported for preschoolers. In one example, a screaming 5-year-old (too big to be carried) refused to walk as the family fled from an apartment close to the WTC. Parents reported children refusing to wear masks—a necessity given the density and unknown nature of the debris-filled air, or screaming uncontrollably, making it difficult to evacuate.

Fear Responses. Children's emotional reactions on September 11th involved expressions of fear. Children conveyed fear in different ways and in response to varying aspects of the crisis: Events witnessed, fear of being separated from parents or caregivers, general chaos of the day, or observing the reactions of parents and other significant adults.

Fear of being separated from parents was particularly powerful for children given the salience of separation at this age. This reaction is described by a mother forced to flee across the river with her 3-year-old:

... and then she did start to cry—intensely—because they lifted the stroller up to go into the boat and she thought they were separating me from her. That really did freak her out, even though I was right there. (1/28/02)

In an illustration of the depth of fear expressed by a young child, a $3\frac{1}{2}$ -year-old "froze," then screamed when she thought her father was at the WTC the day following the attacks. The mother describes her child's reaction when she overheard that the father was at work. Upon seeing her child's reaction, the mother ran to her:

My 3-year old was frozen, just frozen, "What's wrong?!" I yelled. She began to scream and scream, "Where's Daddy?! Where's Daddy?!" I said, "Daddy's at work, but he's okay. Daddy's okay."

Child continued: "No, Daddy can't be at work, he works across from the big fire! Where is he?! Where is he?!" And I had to explain: "Daddy is at work; he doesn't work there anymore. He works at Midtown, which is very safe . . . he has a new office now." (5/22/02)

In contrast to descriptions of fear expressed as emotional outbursts, parents recalled children shutting down or withdrawing. In one example, the mother of a 4-year-old who lived three blocks from the WTC described her reunion with the child on the street near their home, following the collapse of the second tower:

My daughter just looked white as a sheet. She was completely petrified because my babysitter had been standing with her and watching the planes and fires and everything. When I arrived, she just looked at me quietly saying "Mommy, mommy, the World Trade Center is on fire." (5/22/02)

Another mother described the reunion on the street with her $2\frac{1}{2}$ -year-old who heard the plane's engines roar, looked up in time to watch it hit the building, and was outside evacuating when the first tower collapsed, catching her in the debris and dust:

She was catatonic. She wasn't saying a word. My husband said she hadn't said a word since he got to her . . . So by the time I got to her and she got to me too, she was just—nothing there. She wouldn't talk. She was dazed. (1/28/02)

Parents described children's frightened responses to the deafening noise from the planes' roaring engines, the plane crashes, and the collapse of the buildings. Fears of loud noises—particularly sudden ones—continued for weeks or months. In one illustrative example, a mother described holding her $2\frac{1}{2}$ -year-old during the second WTC collapse with its unbearable noise,

two blocks away. The child covered his ears repeatedly yelling, "It's too loud! It's too loud!" before falling asleep for an unprecedented 4 hr (11/7/01). Loud noises are typically frightening to young children, so one can imagine the level of fear generated by noises of this magnitude.

As expected from children this age, fear was expressed outwardly with frightened words, screaming, and crying as well as through shutting down and withdrawal. Parents reported these "in-the-moment" fear responses in toddlers as well as preschoolers, demonstrating that children, regardless of age, reacted to the trauma of the day.

Sleep and Other Regulatory Changes on September 11, 2001

Regulatory changes, particularly in sleep, are classified as a symptom of PTSD in young children (Zero to Three, 2005). Sleep and other regulatory changes (poor eating, increased arousal and irritability) were reported by parents as occurring on September 11th. Parents described children sleeping during the disaster and evacuation at unusual times or so deeply that they could not be awakened. This is particularly remarkable given the magnitude of chaos, emotion, and noise that enveloped them. Parents reported infants and toddlers staying asleep for many hours. In one example, a newborn previously known to sleep only in 2-hr stretches slept for over 5 hr. This could be a coping response—a newborn closing out the situation in the only way an infant has access to, sleep. Another mother recalled her toddler passing out ("not really sleep," the mother stated) as they fled:

She kind of passed out, actually. When we were going [to a friend's apartment], it wasn't really a nap because it was impossible to even wake her up. We were a little concerned about that. So we just kept awakening her—on and off We shook her as we were making our way [to be sure she was ok]. (2/20/02)

Parents described children sleeping all morning following the attacks regardless of their normal sleep hours; in one case, a toddler slept for 4 hr, even as his apartment rumbled and shook, then filled with smoke and darkness following the collapse. Another child slept through a sibling's first-time seizure and subsequent hospital admission on September 11th. These deep and unusual levels of sleep point to the strong impact of the disaster on these young children.

Other reported regulatory disturbances included increased irritability and being inconsolable. A mother described her $2\frac{1}{2}$ -year-old's extreme tantrum, lasting several hours: "We walked home from school and he had a huge meltdown—huge meltdown, which he never does. Huge tantrum. The most intense tantrum he's ever had" (2/19/02).

Parents also reported unusually high levels of motor activity or irritability in their young children on the day of the attacks. Toddlers and preschoolers were described as highly distractible, running around uncontrollably, or incapable of staying in one place for more than a brief moment—behaviors that parents characterized as atypical for the children involved. These behaviors, coupled with sleep changes, suggest that young children were taking in the events around them and reacting in age-consistent ways.

Children's Reactions Over Time

The aftermath of a crisis can inform us about children's ongoing adaptation. In the 8 months following the WTC tragedy, parents described children's reactions and symptoms consistent

with current understanding of traumatic stress in young children, including sadness, increased clinginess and separation anxiety, and continued sleep difficulties as well as disaster-specific and more generalized fearfulness (Scheeringa et al., 2003; Zero to Three, 2005).

Sadness and Loss. Parents recalled children's expressions of sadness, usually tied to the loss of a personal object on September 11th or of rituals that could no longer happen (i.e., eating at a favorite restaurant near the WTC, playing in now-inaccessible parks). Reactions were idiosyncratic based on children's experience on the day as well as their prior experience of the WTC. In one noteworthy example, a 4-year-old was evacuated from the daycare center inside the WTC, leaving her stroller behind. Her parents described their daughter's overwhelming sadness surrounding the loss:

The only thing in her mind was that she left her stroller in the school. Whenever we go anywhere we always take it with us. The bottom line is that (it) is something she still brings up [4 months later]. Like two days ago she starts crying in the middle of the night about her stroller. And she said, "You know, when they rebuild the World Trade Center, by the time they rebuild it, I'll be too old to use my stroller." (1/28/02)

Note that parents talked about their children's strollers because in New York City, as in other urban contexts, the stroller is a regular means of transportation, and hence, a means of escape. Here, it is the child who mourns the stroller—a part of her life that was lost forever. Parents fixated on strollers post-9/11 as part of future evacuation planning.

For children and families living near the WTC, the twin towers themselves were a focal point in their everyday lives. Neighborhood children visited, played in surrounding parks, attended story time at the bookstore, said goodnight to the towers from their windows, and saw the towers—many times a day, everyday. A 4-year-old's response to missing a park she played in illustrates this loss:

The other thing that really bothered her is that there was a great park in Battery Park City that had a merry-go-round and little water fountains. And every time it was warm we'd head down there to be out by the water and grass. And we told her that the WTC was really close to that park. We tried to explain where the disaster happened and she was so upset that the park was inaccessible . . . it was really hard on her level—she misses it. (2/15/02)

Because of the close proximity to the twin towers, parents discussed their children's (and their own) grieving over the loss of the buildings themselves: A parent of two children ages 3 and 6 years commented:

I will look in on her [3-year-old] and there is a certain sadness in her face. They both tell me all the time how sad they are when they see pictures of the WTC, because we passed there every day—we did things there constantly. (1/30/02)

It is not surprising that children expressed sadness for months afterward, tied to their experiences prior to the demise of the buildings and the area. Young children thrive on consistency and routine, and here, a piece of their lives—and routines—was destroyed.

Separation Issues. Although separation is a continuing and central task for young children, parents were struck by the level of separation anxiety and clinginess that developed following

9/11. Again, this is consistent with current thinking about PTSD as occurring within the context of relationships for young children (Zero to Three, 2005). Post-9/11 separation dynamics emerged in a variety of circumstances. In one example, a mother described the new separation anxiety of her 19-month-old, who lived two blocks from the WTC. The toddler heard the planes hitting and towers collapsing, saw the emotional outbursts of close adults, and fled through crowds with her parents. Seven weeks later, the child had not returned to her home. Following the disaster, she was unable to say goodbye to anyone upon leaving—close, well-known family members or just-met playground acquaintances: "When we are at playgrounds, when anybody, any child, leaves the playground—even if it was somebody she met for only ten minutes—she just starts crying" (11/7/01).

Preschool-age children also had difficulties with separation. A parent described her 4-year-old daughter 8 months after the disaster:

She is more anxious about being separated from me than she had been [prior to 9/11]. If we are biking, she can't stand if we go single file, she has to go next to me because if I am in the front of her she keeps saying, "Don't leave me, wait for me, wait for me." If she is in front of me she worries that I am not here and she is always looking back and crashing into other people. (5/22/02)

The father of a 4-year-old described his daughter's ongoing separation fears:

Every time that she saw on the news or the computer pictures of it, she thought that it was happening again \dots then she would not want her mother to go (to work) at all \dots She got clingy. She really wanted to make sure her mom and dad were both OK, and that's something to this day that she really wants to make sure—both parents are there. (2/15/02)

In examples of separation anxiety stemming from the disaster, parents described children's need to be close to them, often within eyesight or in physical contact, up to 8 months post-9/11. Reported behaviors ranged from general increased clinginess, increased crying when parents left, and difficulty with separation at school to having difficulties sleeping alone or even staying alone briefly in a room to play.

New Fears. Over time and with distance from the actual day, children developed new fears, included in the "associated features" of PTSD in very young children (Zero to Three, 2005). Although there is current discussion about the role of new fears in the PTSD diagnosis for this age (Scheeringa et al., 2003), it is important nonetheless to consider it here because parents across groups reported newly developed fears in their children. Further, newly developed fears, regardless of their diagnostic utility, can be disruptive and add stress within the family, particularly in the context of postdisaster adaptation.

New fears ranged from disaster-specific (i.e., planes, sirens, loud noises) or related to an identifiable aspect of the child's disaster experience (i.e., a child fearing a television show she was watching when the first plane crashed near her apartment) to more generalized (i.e., the dark, being alone). Parents described their children's fears of buildings collapsing, including children asking on a daily basis whether buildings were going to fall. When children saw other tall buildings (i.e., Empire State Building), they would ask if it was going to collapse. In one example, a parent reported the "near panic" of her 3-year-old, who feared that the Chrysler Building was no longer standing. The child repeated daily "I think those buildings are falling, I see them falling." These fears escalated until an actual visit to the Chrysler Building put the child at ease. (2/19/02)

14 • T. Klein et al.

Not surprisingly, parents reported children's fears of airplanes, up to many months later. A 5-year-old exemplifies this soon after 9/11 when his preschool reopened near Ground Zero. Watching a plane fly overhead was visibly distressing:

We went back to school—it reopened the next week—and he just broke down in the middle of the school yard, because it was really windy out. He was out in the yard and saw this plane that just looked too low, and he thought it was going to crash into his school. He got really upset, and his teacher calmed him down and brought him back into the classroom. (5/23/02)

Fears of planes translated into children not wanting to travel by plane, requiring much parental reassurance that their plane was safe. Other children expressed fear each time they saw a plane in the sky.

Parents also observed that their children remained fearful of loud or sudden noises for months, causing children to startle or cry. Toddlers were described as having worried looks or commenting on the noises (e.g., "uh-oh, uh-oh") while more verbal toddlers asked if there would be more loud noises or "booms." Preschoolers were fearful as well. Two 4-year-olds are described by mothers as developing fears of noises:

For about four weeks after, if she would hear a loud noise she would get startled and cling on to me, and went back to her bottle Any loud noises and she would run. (1/16/02)

She gets easily frightened with noises. The other day in my kids' bedroom they heard something, and the first thing she told me when I walked in was, "Mommy there was a noise upstairs!" Before the disaster, she wasn't even afraid of the lights being out. (1/16/02)

Parents discussed children's fears leading to disruptions to the families' daily lives. In one case, a $2\frac{1}{2}$ -year-old was nearly stopped by fear of noises, dust, and smoke, forcing the family to move out of the city. In their newly built apartment building, the child reacted strongly to repeated fire-alarm tests:

Ever since we moved in, several times a week they have fire alarms. They are still working on electricity and stuff, but it has happened probably fifteen times since we moved in. And our son is absolutely scared to death of the fire alarm—it's really loud. He frantically runs to his bed, jumps in and wants to go back to sleep. He says he is going to sleep. He says he is coming to school when he doesn't have it. Since 9/11, anytime he sees dust or smoke, he is scared of it, too. (1/16/02)

This child's deep fear of the fire alarms eventually forced the family to move again.

Finally, parents described generalized fears (i.e., dark, being alone, elevators), which they recognized can be typical of early childhood years, yet all reported their emergence after 9/11. While considered to be normal responses to trauma, fears were common and were disruptive to the lives of entire families trying to adjust to and manage their children's fear-related behaviors.

Sleep and Other Regulatory Changes. In stark contrast to children sleeping through the actual disaster (reported earlier), nighttime sleep problems developed for children on and after September 11th, including inability or refusal to go to sleep or sleep alone, frequent night wakening, crying out during sleep, and nightmares. Sleep disturbances are common among young

children and can be disruptive to family functioning, particularly when coupled with parental stress resulting from a crisis such as 9/11.

Because going to sleep involves separating for the night, it was not surprising that parents observed difficulties for children in falling asleep. Parents associated sleep disturbances with other post-9/11 responses. For example, parents described children with increased separation anxiety and clinginess as having sleep disturbances:

We had to sleep together when we stayed with friends I slept with both of [the children]. My 3 year old would get insomnia. In the middle of the night I would look up at her—she would be sitting up, wide awake and just sweating. She would just get scared. She was very clingy and wanted to sleep just with me. (1/16/02)

Sleep difficulties also were connected with children's fears, even many months later, as in this 4-year-old: "He'll say, 'I can't sleep because I'm scared of an angry bad guy." (3/21/02) Similarly, a mother described her 3-year-old, who directly witnessed many aspects of the disaster:

He has never been a great sleeper, but his sleeping really got bad [after 9/11]—it was impossible to get him to sleep. So we started putting him in the car and driving around. Then one night I was driving him for two hours and he would not go to sleep-it was like midnight It had never even dawned on me before-I said, "Why aren't you sleeping?" And he said, "I don't want to go to sleep." I said, "Well that's why we are in the car." He goes, "I don't care, I don't want to go to sleep. I am afraid of the planes." (1/30/02)

Parents reported children with no sleep difficulties pre-9/11 as waking up repeatedly at night, having problems falling asleep, needing to sleep with a parent, or having recurring nightmares following the disaster. In one example, the father of a preschool-aged child recalled the return of an old nightmare for his daughter:

There was the recurrence of an old nightmare. A year ago, there was a period when she was very frightened by something she imagined. She said, "There's a dog in the window." She would say it in the morning and she couldn't sleep. She'd be too scared. And then we didn't hear anything of it for many, many months. All of a sudden, 9/11 happens, and instantly the dog in the window is back. (11/7/01)

Other regulatory difficulties were observed in the children after the disaster. Parents described children becoming easily upset and more irritable. The mother of a 2-year-old described her son in the week after the attacks, while still away from home:

He was at his most brittle because we were distracted . . . we were just on the phone a lot So he just got brittle. He would just crumble . . . any time you said no he would just completely melt down. And he's not that kind of kid. He's a really even-tempered kid. He has temper tantrums, but he was really just not himself. He had no patience or tolerance for any deviation. (11/7/01)

Parents described children's increased "crankiness" and crying, decreased frustration tolerance, and decreased appetite. These behaviors, coupled with reports of sleep changes in children clearly have the potential to exacerbate stress on the entire family system following a disaster.

Need for Routine and Return to Normalcy. In response to the chaos of the day and the disruptions during the weeks and months afterwards, parents noted that their children expressed the desire for a return to normalcy. Children's need for routine emerged immediately, even as the disaster unfolded. Then, as the day progressed, children reminded parents of their regular routines, and parents were remarkably adept at rallying and providing a semblance of it.

Familiar routines bring a calm to the chaos, and provide a means for young children to remove themselves from unfolding terror. In one example, a 3-year-old was headed with her mother to the first day of preschool when they heard the deafening roar of plane engines and watched the first plane crash. While the mother contained her own reactions, the child firmly stated that she was ready to move on to school: "I want to go to orientation now!" (1/30/02). Another preschooler expressed a similar desire. His mother ran screaming into his preschool, two blocks from the WTC, after witnessing the second plane hit. As she fled the school holding her child in her arms, he made repeated requests simply to ". . . go home so we can play with my dinosaurs." (11/7/01)

Other attempts to reestablish life as they knew it were made by children on September 11th, requesting that radios be changed from the news to their own music, or that adults stop talking about the crisis at hand. "You're giving me a headache" (11/7/01), one preschooler commented to her father as he spoke of the disaster. Children played and watched videos as well as requested favorite toys, to go to playgrounds, and to eat meals while they worked hard to tune out the adults who were making moment-by-moment decisions during the crisis.

The desire for normalcy continued in the days or weeks afterward. Families who evacuated from the WTC area were dislocated for periods ranging from days to months. Children asked to return to school, even when they remained closed. A $4\frac{1}{2}$ -year-old, having evacuated with his family, expressed this wish: "We stayed out there [place they evacuated to] for about five to six days and at that point he was saying, 'When are we going to go? I need to get back to school" (5/22/02). Similarly, a father recalled his daughter's wishing to return to normalcy several weeks later:

So, we are watching CNN and the camera pans across the rubble and in the background you can see the World Financial Center basically intact. She says, "Oh Daddy look, the World Financial Center is still standing. Maybe we can go back and play in that after they clear all the dust." (11/7/01)

Evident here are the children's need and desire to return to life as it was before 9/11. This was articulated to parents in words and behaviors. Even on the actual day, parents reported their own attempts to reestablish routine, including taking children to playgrounds later in the day, being sure meals were served, letting children play in one room while adults made evacuation plans in another, and grabbing a child's favorite toy or blanket to take on the evacuation. Following the disaster, returning to or creating new routines was an essential part of helping children feel safe again.

DISCUSSION

This article is an effort to document the reactions of the youngest children who witnessed firsthand the events of September 11, 2001. While we recognize that children's responses are tied, in part, to parental behaviors, the article focuses solely on the children in an attempt to draw a broad developmental picture of the range of responses. A descriptive focus can foster deeper understanding of young children's responses, with the goal of better gauging their needs in the face of large-scale, collective trauma. We view these responses as developmentally appropriate reactions to an extremely abnormal and terrifying situation.

According to their parents, the 104 young children in this study who directly witnessed the events of September 11, 2001 absorbed a great deal, including the overwhelming multisensory experience of what they witnessed themselves as well the emotions and reactions of the important adults in their lives. Parental observations give us an understanding of the range of behaviors and emotional responses young children exhibited during the unfolding of September 11th and in the time afterward. The catalog of behaviors reported here support empirical studies of this age group that point to the impact of trauma on young children (Green et al., 1991; La Greca et al., 1996; Laor et al., 2001; Laor et al., 1997; Laor et al., 1997) and extend our knowledge with rich descriptions of how young children responded.

Children demonstrated a range of reactions and adaptations, some consistent with formal criteria for PTSD in young children (Zero to Three, 2005) and other responses less expected. On the day of the attacks, children were described as calm, cooperative, or in shock while others were uncooperative in the midst of their own experiences of being overwhelmed. Fear reactions were common, turning to panic at times, with both specific and more general fears appearing after 9/11. Fears related to the disaster—of airplanes, sirens, or buildings falling—as well as generalized fears—of the dark or being alone—are symptoms consistent with trauma in children this age. Sleep changes were frequent, on September 11th and after, at times causing great disruption to families' lives, but also allowing parents to make and carry out plans on that day when infants and toddlers slept unexpectedly for hours.

The findings strongly suggest that parents were attentive to what was happening with their children both during and in the aftermath of the disaster. Parents raised the question of what would represent typical behavioral shifts given the young ages of their children and what might signal that children were exhibiting responses warranting concern—essential questions for future research. The finding that children asked for a return to routine and normalcy amidst such terror and chaos suggests important resilience in the children, responsiveness in the parents, and a need to better understand how children made sense of the events of the day.

LIMITATIONS

The descriptions presented here do not differentiate between normative and atypical changes. A critical need exists for future research to better delineate normative developmental shifts versus repercussions from the experience of trauma in young children. With appropriate comparison groups and predisaster data, longitudinally designed studies could provide much needed knowledge on different trajectories for young children affected by mass community trauma. One difficulty in reaching conclusions about behavior at this age is tied to the period's rapid developmental progression and changes. Issues to be considered are the extent to which the behaviors and patterns described here represent departures from the child's predisaster functioning, how such behavioral patterns affect a child's ongoing development, and to what degree parents felt able to cope with or were depleted by their children's responses as well as their own.

We recognize the unique nature of focus groups in conducting qualitative research, particularly participants feeling the need to conform to others in the group or provide answers they believe the researchers seek. However, in the case of the post-9/11 environment, we believe the advantages of focus-group methods outweighed such concerns. The group dynamics provided participants support and permission to discuss emotionally charged and sensitive information, as evidenced in the lengthy responses, high level of idiosyncratic detail, and willingness of

participants to respond to all questions. The data from a focus-group study allow others to decide whether the information is "transferable" to other situations rather than assuming that it is generalizable to all situations (Guba & Lincoln, 1989). Noting these limits on generalizability, we conducted a larger, follow-up interview study.

The findings from this study can be applied to understanding young children in other traumatic situations, with important qualifiers. Because of the chaos and instability of the postdisaster environment and the desire to have firsthand information as soon as possible, this is neither a random nor representative sample of families affected by the disaster. We purposely spoke with families very close to Ground Zero and with a young child. The families were primarily two parents, well-educated, and with financial resources—reflective of the neighborhoods near the WTC. Although life did not return to pre-9/11 "normal," many of these families were able to reestablish their lives relatively soon after the attacks, which likely helped children's longer term recovery. Certainly, this is not the case with all survivors or disasters, particularly the more recent Hurricane Katrina and its aftermath, where families, even at this writing, continue to experience horrendous living conditions, displacement, and lack of educational and other centers (Osofsky, Osofsky, & Harris, 2007). As such, families in this study were displaced for shorter time periods, and the early childhood community had the ability to mobilize quickly by reopening or relocating childcare and preschool.

CLINICAL IMPLICATIONS

Several implications for intervention emerge from these findings. First, separation distress can be minimized by keeping young children with parents whenever possible during a disaster or reuniting families as soon as possible. Second, reestablishing routines—even as simple as serving meals, making space for children to play, or having a bedtime ritual—as soon as possible provides stability and a sense of normalcy for young children, even amidst displacement. The need for parents and other adults to monitor their own reactions in the presence of children and to limit children's exposure—to the actual events when possible and to the media afterwards—is clear. On September 11, 2001, young children responded to their parents and caregivers, and when those adults were able to stay calm and filter the flow of information to children, a safety net was provided. While we know from previous work that adult mental health responses are critical to young children's adaptation (e.g., Laor et al., 1997; Laor et al., 1996), attending to the needs of a child in the midst of mass trauma is a difficult challenge; hence, preparation, support, and guidance from the mental health community is imperative on this front.

In the aftermath of a community trauma, young children need more from parents, who may be less available given their own distress. We need to understand in more depth how parenting processes are affected by trauma so that parents can be supported in reestablishing their own sense of stability and their children's safety. Service providers can provide parents with a context for understanding their children's needs for more closeness and the need to provide a secure base, which for many of these children meant sleeping with or very close to a parent for extended periods of time. Providers also play an important role in supporting parents in their efforts to buffer children from exposure and distress, and in reinstating safety through secure relationships, routines, and physical space.

Identifying factors that lead to optimal and resilient long-term outcomes and providing developmentally appropriate mental health and parenting support (e.g., Covell et al., 2006) are

critical in responding to the needs of the youngest children and their families. The urgent need for a national disaster plan for young children and families is supported by this work and the work of others on young children and community disasters (Osofsky et al., 2007). Such a plan must address the issues highlighted here, including the need to keep families together or reunite them as soon as possible, to minimize ongoing exposure to the trauma (i.e., through the media) and to establish routines and stability in a timely fashion. On the community side, reopening or rebuilding early childhood centers is critical for children, but also so that parents can return to work to rebuild their communities. Finally, a public health screening approach for young children should be developed (Otto et al., 2007) so that the needs of the youngest become broadly visible.

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