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CHILDHOOD MALTREATMENT, INTERVENING VARIABLES, AND ADULT PSYCHOLOGICAL DIFFICULTIES IN WOMEN

An overview

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This article reviews the complex relationship between child maltreatment and later psychosocial difficulties among adult women. Specifically addressed are (a) the various forms of childhood maltreatment, (b) the range of potential long-term psychological outcomes, and (c) important contextual variables that mediate or add to these maltreatment–symptom relationships. Among the latter are characteristics of the abuse and/or neglect; effects of impaired parental functioning; premaltreatment and postmaltreatment psychobiology; qualities of the parent–child attachment; abuse and/or neglect-related affect dysregulation that may lead to further symptomatology; the extent to which the child responds with significant emotional or behavioral avoidance; and whether later traumas are also present. Also relevant are sociocultural contributors to both child maltreatment and maltreatment effects, especially poverty and marginalization. Clinical and research implications are considered.

Key words: *child maltreatment; adult mental health; violence against women*

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INTRODUCTION

Research over the last several decades reveals a significant association between psychological dysfunction in adulthood and a history of childhood abuse or neglect. The major types of childhood maltreatment associated with lasting impacts on adult women¹ include *sexual abuse* (generally involving sexual acts against children in the context of an age-related power imbalance for the sexual gratification of the offender), *physical abuse* (physical acts against a child, typically by a parent or other authority figure, which result in some level of tissue injury, ranging from bruises or lacerations to broken bones or teeth, or in extreme cases, death), *psychological abuse* (e.g., ongoing parental/caretaker criticism, rejection, devaluation, or humiliation), and *psychological neglect* (involving parental/caretaker failure to provide significant caring, support, emotional stimulation, and/or attunement to the child; see reviews by Briere, 1992; Myers et al., 2002).

This article provides an overview of the complexity of the abuse-symptom relationship. We suggest that childhood maltreatment occurs in the context of a variety of social, psychological, and biological factors that both influence the maltreatment-symptom relationship and produce effects of their own. As a result, the long-term impacts of childhood abuse and neglect on women are often complex, reflecting not only specific maltreatment experiences but also the role of these additional variables.

MENTAL HEALTH OUTCOMES ASSOCIATED WITH CHILD MALTREATMENT

Before describing the various variables and factors that may intervene between child maltreatment and adult psychological distress, we begin with a brief review of the known impacts of child abuse and neglect. The reader is referred to more extensive discussions of these various outcomes for additional information (e.g., Cook et al., 2005; Myers et al., 2002;

van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005).

Posttraumatic Stress

Posttraumatic stress has been associated with childhood (especially sexual) abuse in a number of studies, both in children (e.g., Kaplow, Dodge, Amaya-Jackson, & Glenn, 2005; Nader, 2008) and later in adults (e.g., Briere & Elliott, 2003; Zlotnick et al., 2008). Symptoms associated with posttraumatic stress are (a) intrusive reliving experiences, such as sensory flashbacks and nightmares; (b) attempts to avoid people, places, and situations associated with the abuse, as well as emotional numbing; and (c) autonomic hyperarousal, including heightened startle responses, sleep disturbance, and irritability (American Psychiatric Association [APA], 2000).

Cognitive Disturbance

Childhood maltreatment, and social supports or justification for child abuse, can result in a range of subsequent cognitive distortions in adult women. When these cognitions are developed early in life in the context of abuse or neglect, they may form complex relational schemata (Baldwin, Fehr, Keedian, Seidel, & Thompson, 1993) or negative working models (Bowlby, 1988) that are easily activated by triggers in the interpersonal environment. Cognitive effects of child maltreatment include low self-esteem, self-blame, hopelessness, expectations of rejection or abandonment, and preoccupation with danger (e.g., Briere, 2000; Janoff-Bulman, 1992; Messman-Moore & Coates, 2007).

Mood Disturbance

Anxiety (including panic and phobias), depression, and anger have been associated with child abuse and neglect in many studies, both as a short-term (Putnam, 2003) and long-term (Allen, 2008) effect. Overall, anxiety and depression may be the most common effects of child maltreatment (Briere & Scott, 2006).

Somatization

Bodily distress or dysfunction that arises from (or is significantly intensified by) psychological phenomena has been linked to a variety of traumas, most notably childhood sexual abuse (Dietrich, 2003; Loewenstein, 1990). Typical abuse-related somatization responses in women include chronic pelvic pain and other genitourinary problems and gastrointestinal distress (Drossman, Li, Leserman, Toomey, & Hu, 1996; Springs & Friedrich, 1992; Walker, Katon, Roy-Byrne, Jemelka, & Russo, 1993).

Identity Disturbance

Recently, increased empirical attention has been focused on the impacts of abuse and neglect on identity and self-awareness (Briere & Rickards, 2007; Briere & Runtz, 2002; Cole & Putnam, 1992; Pearlman, 1998). Maltreatment-related self-disturbance typically involves problems in the self-monitoring that would otherwise inform abuse survivors about their feelings, thoughts, needs, goals, and behaviors, and may result in confusion about the boundaries between self and others, as well as greater susceptibility to the influence of others (Briere & Runtz, 2002; Pearlman & Courtois, 2005).

Chronic Interpersonal Difficulties

Childhood maltreatment experiences are frequently correlated with difficulties in the interpersonal domain (Briere & Runtz, 2002; Cole & Putnam, 1992; Cook, et al., 2005). Because childhood maltreatment occurs relatively early in the human life span, when assumptions, beliefs, and expectations are initially formed regarding interpersonal relationships, and when positive or negative emotional states are conditioned to relational stimuli (Bowlby, 1982; Pearlman & Courtois, 2005), adult survivors of childhood abuse or neglect may experience sensitivity to rejection, abandonment issues, unstable or chaotic relationships, problems trusting others, and ambivalence regarding intimacy (Dietrich,

2007; Elliott, 1994; Neumann, Houskamp, Pollock, & Briere, 1996).

Difficulties with Emotional Regulation

A history of childhood abuse or neglect has been associated with difficulties in tolerating and controlling negative internal states without resorting to avoidance strategies (e.g., Briere & Rickards, 2007; van der Kolk et al., 1996; Zlotnick, Donaldson, Spirito, & Pearlstein, 1997). Maltreatment-related affect regulation deficits have been implicated in the development of various maladaptive or self-endangering behaviors (e.g., Brennan & Shaver, 1995; Herpertz et al., 1997; Zlotnick et al., 1997), especially those involving emotional avoidance, as described below.

Avoidance Responses

Various studies and clinical writings suggest that survivors of child abuse engage in avoidance responses as a coping response to abuse-related distress (e.g., Briere, 2002, 2006; van der Kolk et al., 1996). The most common forms of potentially abuse-related avoidance are dissociation, substance abuse, and tension reduction behaviors (TRBs).

Dissociation. Dissociation, defined as alterations in awareness that arise from defensive changes in otherwise integrated thoughts, feelings, memories, and behavior (Briere & Armstrong, 2007) is often associated with child maltreatment in the literature (e.g., Chu, Frey, Ganzel, & Matthews, 1999; Putnam, 1997; van Ijzendoorn & Schuengel, 1996). Examples include depersonalization and derealization experiences, fugue states, certain forms of psychogenic amnesia, and dissociative identity disorder.

Substance abuse. Alcohol and drug abuse has been linked to the history of child abuse in a number of studies (see a review by Ouimette & Brown, 2003). Although there are likely a number of reasons for substance abuse, including social and genetic factors, various writers and researchers have posited that alcohol and drug use may function as a form of anesthesia

or self-medication against painful trauma memories, including those of child abuse (e.g., Khantzian, 1997).

TRB. TRBs can be defined as external activities that are used in an attempt to reduce negative internal states, typically through distraction, self-soothing, or induction of a distress-incompatible positive state (Briere, 2002). Examples of such behavior are compulsive sexual behavior, binge/purge eating, impulsive aggression, suicidality, and self-mutilation. TRBs have since been linked to a range of childhood abuse and neglect experiences (Briere & Rickards, 2007; Herpertz et al., 1997; Zlotnick et al., 1997).

Complex Trauma Syndromes

When the symptoms associated with child maltreatment are especially pervasive and varied, they are sometimes characterized as “complex posttraumatic stress disorder” (Herman, 1992) or “disorders of extreme stress” (DESNOS; van der Kolk et al., 2005). However, the multiple psychological effects of childhood traumas may not easily fit into any single diagnostic framework or syndrome (Briere & Jordan, 2004; Briere & Spinazzola, 2005), especially because the ultimate expression of complex trauma impacts in adults may vary as a function of a range of developmental, biological, sociocultural, and psychological phenomena, as described below. Similar arguments may be made for borderline personality disorder (APA, 2000), which has also been linked to childhood trauma in a number of studies (e.g., Herman, Perry, & van der Kolk, 1989; Ogata et al., 1990) and can also be viewed as a complex trauma syndrome (Briere & Scott, 2006; Herman, 1992).

INTERVENING AND CONTRIBUTORY VARIABLES IN THE ABUSE-OUTCOME RELATIONSHIP

Although it is possible to demonstrate a simple, direct relationship between abuse exposure and a specific symptom outcome in some cases, more typically abuse and neglect effects are multidetermined in etiology and

multivariate in their ultimate presentation. The remainder of this article describes the complexities that may intervene between (or before) child maltreatment and the adult psychological disturbance described in the first section of this article. Unfortunately, the literature on which this discussion is based is insufficiently developed to allow definitive statements regarding the relationship between these variables and specific psychological outcomes. As a result, we treat abuse-related symptomatology hereafter as a relatively unitary construct, which we then link to a range of mediating or moderating variables. The reader should keep in mind, however, the limitations of this approach, most importantly the potentially problematic “lumping” together of various symptoms or problems that may be, in fact, differentially related to different intervening factors or conditions.

Specific Characteristics of Maltreatment

A review of the child abuse literature suggests that specific characteristics of child maltreatment are moderately correlated with later symptomatology. Abuse variables that have been associated with long-term psychological and social difficulties include age of the child at the onset of maltreatment (Kaplow & Widom, 2007; Stevens, Ruggiero, Kilpatrick, Resnick, & Saunders, 2005; Stewart, Livingston, & Dennison, 2008); whether the abuse was intrafamilial or extrafamilial (Hanson et al., 2006; Lorentzen, Nilsen, & Traeen, 2008; MacMillan, MacMillan, Offord, Griffith, & MacMillan, 1994); the frequency and/or duration of abuse incidents (English et al., 2005; Stevens et al., 2005); and whether, in the case of sexual abuse, there was bodily penetration (Fergusson, Boden, & Horwood, 2008; Senn, Carey, Venable, Cury-Doniger, & Urban, 2007) or, in the case of physical abuse, physical injury (Elder, 2005; Hanson et al., 2001). Although many studies indicate that such parameters are important determiners of outcome (e.g., Manly, Kim, Rogosch, & Cicchetti, 2001), the reported correlations are smaller in magnitude than might be assumed; in fact, some fail to show any association at all between

maltreatment characteristics and later outcomes (e.g., Bal, De Bourdeaudhuij, Crombez, & Van Oost, 2004). It is unclear why specific abuse parameters correlate more in some studies than in others, given the impressions of many clinical writers that age of onset, presence of incest, level of violence, and other variables are important traumagenic factors (see reviews by Briere & Hodges, in press; Courtois & Ford, 2009). Among other possibilities, the retrospective nature of many abuse-impact studies may introduce memory distortion, and increased trauma-related distress is known to motivate avoidance, which may reduce self-disclosure (Krinsley, Gallagher, Weathers, Kutter, & Kaloupek, 2003; Widom & Morris, 1997). Furthermore, in some instances, the fact that abuse has occurred may be more relevant than specific aspects of that abuse (Briere, 1992).

Exposure Complexity

Although the earlier literature sometimes implied that children exposed to child abuse or neglect were likely to have experienced just one form of maltreatment (e.g., sexual abuse), it is now clear that many abuse victims have experienced a number of incidents and types of maltreatment during childhood (Finkelhor, Ormrod, & Turner, 2007) and are at greater risk of revictimization in adolescence and adulthood (Cloitre, Tardiff, Marzuk, Leon, & Portera, 1996). Abuse victims, for example, are more likely to have also experienced psychological neglect (Manly et al., 2001), children exposed to physical abuse are also more likely to experience psychological abuse (and vice versa; Briere & Runtz, 1990; Higgins & McCabe, 2003), intrafamilial abuse is associated with extrafamilial abuse (Hanson et al., 2006), and being sexually abused as a child substantially increases the likelihood that a woman will be sexually assaulted in adulthood (Classen, Palesh, & Aggarwal, 2005; Elliott, Mok, & Briere, 2004). Furthermore, it appears that there are cumulative effects of different forms of childhood trauma, above and beyond their individual impacts (Briere, Kaltman, & Green, 2008; Follette, Polusny, Bechtle, & Naugle, 1996). As a result, the specific

relationship between a given childhood maltreatment experience and adult symptomatology may be difficult to ascertain, both clinically and in research, because whatever form of maltreatment is being examined has a significant chance of having occurred in the context of other maltreatment, adverse environments, and later revictimization (Briere & Jordan, 2004; Briere & Spinazzola, 2005).

Conditions that Antecede or Serve as Context for Abuse and/or Neglect

It is generally not sufficient to consider child maltreatment and its characteristics in isolation when considering its ultimate effects on adult functioning. A variety of phenomena increase the likelihood that abuse or neglect will occur, and many of these factors both moderate the effects of child maltreatment and, potentially, produce their own lasting impacts.

Social Variables

An important aspect of the abuse-effect relationship is the social matrix within which child maltreatment occurs. Two primary mechanisms appear relevant: (a) the fact that North American society, to some extent, supports aspects of child maltreatment, and (b) the harmful presence of social marginalization, such as racial/ethnic discrimination, and deprivation of social and economic resources for some demographic groups.

Support for abuse. As is true for other forms of victimization, socially transmitted attitudes appear to increase the likelihood of child abuse. These include myths about children's sexuality, especially that children may desire sexual contact with parents or other adults and thus may behave in ways that lead to their own victimization (Back & Lips, 1998; Muller, Caldwell, & Hunter, 1995; Rogers & Davies, 2007); beliefs regarding the social appropriateness of corporal punishment (Bauman & Friedman, 1998; Bensley et al., 2004; Clément & Chamberland, 2007), which may extend to behaviors that meet current definitions of physical child abuse (Bensley et al., 2004; Clément & Chamberland, 2007; Whitney,

Tajima, Herrenkohl, & Huang, 2006;); and broader-based support for parents' rights over those of children (Henricson, 2008), including acceptance of parental authoritarianism (Grusec & Walters, 1991; Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Paulussen-Hoogeboom, Stams, Hermanns, Peetsma, & Van Den Wittenboer, 2008). These various attitudes and beliefs are often communicated to the child, who may, as a result, feel responsible for maltreatment (i.e., because she "asked for it" or deserved it) or believe that she is not entitled to better parental behavior and care (Back & Lips, 1998; Celano, 1992; Feiring & Cleland, 2007). These understandings, in turn, may lead to guilt, shame, or denial, all of which may compound or exacerbate abuse effects. Abuse-supportive or justifying beliefs may also result in later abusive or exploitive behavior (Bailey, 2003; Bouvier, 2003; Loh & Gidycz, 2006) as the former abuse victim comes to assume that dominance and aggression are acceptable ways to get one's needs met or to raise children.

Marginalization, discrimination, and deprivation. Social and economic deprivation, as well as racism, sexism, and homophobia, not only produce their own negative effects on children and adults (Bassuk et al., 2003; Carter, 2007), they also may intensify the effects of victimization and increase the likelihood of exposure to community violence and peer assault (Breslau, Wilcox, Storr, Lucia, & Anthony, 2004; Chen, Keith, Airriess, Li, & Leong, 2007). Most relevant to the current article, parents who are stressed by poverty and inadequate social support are more likely to abuse or neglect their children (Coulton, Crampton, Irwin, Spillsbury, & Korbin, 2007; Sedlak & Broadhurst, 1996), and children abused in such contexts may lack the internal and external resources that might otherwise provide them some level of resilience in the face of maltreatment, potentially leading to more severe abuse effects (Bonanno & Mancini, 2008; Hall, Sachs, & Rayens, 1998; Teisl & Cicchetti, 2008).

The fact that social variables correlate with abusive behavior and maltreatment-related symptomatology does not, however, mean that attitudes, beliefs, and/or social marginalization

are the sole or even most important etiological factors in either instance. Child abuse and neglect are no doubt present in all societies, and other variables, as outlined below, are also contributory. Nevertheless, awareness of the social components of maltreatment and its impacts may not only inform research but also assist in interventions with survivors of child maltreatment and their perpetrators.

Parental Psychopathology or Substance Abuse

Although parental/caretaker abusive behavior in childhood is obviously a significant predictor of adult psychological functioning in women, such behavior often occurs in the context of psychological disturbance. To the extent that the abusive parent is also suffering from psychological symptoms or substance abuse, his or her capacity to parent the child may be further compromised, and his or her behavior may further traumatize or upset the child (Chaffin, Kelleher, & Hollenberg, 1996). Specifically, parents or caretakers with major mental disorder, such as psychosis, bipolar affective disorder, or severe personality disorder, or who experience less disorganizing mental issues, such as chronic depression or anxiety, are often challenged in their capacity to provide positive, consistent care to children, and some may behave in ways that are abusive (Burke, 2003; Rinehart et al., 2005; Smith, 2003). Similarly, substance abuse may not only increase the likelihood that a parent will maltreat a child (Walsh, MacMillan, & Jamieson, 2003), it often is associated with either aberrant behavior that frightens the child or emotional disengagement from her or him (Suchman & Luther, 2000). Parents or caretakers with significant depression, substance abuse, or psychological disorder may be less attuned and responsive to the child, leading to difficulties in the parent-child relationship and subsequent child symptomatology (Suchman & Luther, 2000). Finally, some parental psychopathology may reflect underlying psychobiological disturbance which, in turn, may be transmitted genetically as a greater risk for psychopathology in the child. For example, heritable parental

depression may lead to a greater likelihood of child abuse and/or neglect while, at the same time, increasing the child's vulnerability to depression in response to maltreatment.

Family Functioning

A number of studies indicate that child maltreatment often occurs in the context of dysfunctional family relationships (Cash & Wilke, 2003). It is likely that some parents who abuse and/or neglect their children also contribute to a generally negative family environment by virtue of an authoritarian, rigid, neglectful, and/or chaotic approach to parenting (Briere & Elliott, 1993; Mammen, Kolko, & Pilkonis, 2002). As well, certain forms of child maltreatment may promulgate dysfunctional family dynamics, such as the keeping of family secrets, triangulation of different family members, differential punishment or rewards for certain children, and fear or even competition among young family members regarding abuser attention (Sunday et al., 2008). For these reasons, it is often difficult, from a statistical as well as theoretical perspective, to disentangle the effects of abuse versus family dysfunction when examining long-term effects (Briere & Elliott, 1993; Nash, Hulseley, Sexton, Harralson, & Lambert, 1993). Nevertheless, the individual and joint effects of family dysfunction and child maltreatment should be taken into account when considering the etiology of adult psychological distress and disturbance.

Exposure to Intimate Partner Violence

Among the most deleterious phenomena to which children can be exposed is violence between parents or caretakers in the home. National surveys find that 11% to 20% of adults reporting witnessing violent partner incidents as children (Henning, Leitenberg, Coffey, Turner, & Bennett, 1996; Straus & Smith, 1990). Exposure to intimate partner violence is complex: in some instances children witness adult violence, in others they are also targeted for abuse, and in still others children are frightened or injured in their attempts to protect a

victimized parent (Jordan, Nietzel, Walker, & Logan, 2004). Although less research has been conducted on the long-term psychological impacts of witnessing intimate partner violence than, for example, childhood sexual or physical abuse, studies suggest a greater risk of victimization or perpetration in subsequent relationships (e.g., Whitfield, Anda, Dube, & Felitti, 2003) as well as greater symptomatology in adulthood (e.g., Teicher, Samson, Polcari, & McGreenery, 2006).

Attachment Disturbance

There is now considerable evidence that the quality of the parent/caretaker-child relationship in the child's early years has substantial impacts on his or her psychosocial functioning during childhood and into adulthood (Haskett & Willoughby, 2006; Koenig, Ialongo, Wagner, Poduska, & Kellam, 2002; Smith, 2003). Early relationships that are characterized by instability, insecurity, reduced parental attunement, and threats or experiences of abandonment or violence often produce attachment insecurity (Bowlby, 1988; Higgins & McCabe, 2003; Solomon & Siegel, 2003), with resultant effects on the child's self-perceptions and views of others, as well as his or her capacity to regulate internal states and external relationships (Briere, 2002). Because these effects are often relatively persistent, a significant proportion of the attachment-related problems of maltreated or emotionally neglected children (as well as children with psychologically compromised caretakers, as described above) may continue into the long term as adult psychological disturbance (Allen, 2001; Cloitre, Stovall-McClough, Zorbas, & Charuvastra, 2008; Pearlman & Courtois, 2005).

Neurobiology

In addition to social and psychological variables, the child's neurobiological status before and after child maltreatment appears to exert an influence on his or her later psychological functioning (Ford, 2009; Heim & Nemeroff, 2001). Some children are born with nervous systems that are less able to regulate stress and

arousal than other children, either due to inherited characteristics or prebirth physical traumas or insults (Koenen et al., 2002). Recent research on the genetic contribution to abuse-related psychological outcomes suggest a “gene \times environment” interaction: it appears that individuals with certain genotypes are especially likely to respond to childhood maltreatment with psychological symptoms or dysfunctional behaviors (Binder et al., 2008; Weder et al., 2009). As well, child maltreatment may alter subsequent gene expression, leading to abnormal psychobiology and associated psychological disturbance (McGowan et al., 2009).

Children with inherited or acquired biological components of abuse-related disturbance may have an anxious or reactive temperament, as opposed to other children with more robust neurobiological responses to stress. They may respond more intensely to maltreatment experiences and/or may be less able to modulate the subsequent arousal—in either case presenting with potentially greater levels of anxiety, posttraumatic stress, and related symptoms thereafter (Heim & Nemeroff, 2001). In other cases, early abuse and/or neglect may dysregulate or adversely affect the child’s developing neurobiology, both reducing his or her resistance to the effects of later child maltreatment, as well as leading to later problems in emotional regulation (Schore, 2003). Finally, there are hints in the literature that individuals with higher intelligence may be somewhat less affected by traumatic events (Koenen, Moffitt, Poulton, Martin, & Caspi, 2007), perhaps suggesting that those with more competent central nervous systems have cognitive advantages that to some extent mitigate against the effects of adverse experience.

Other Traumas

In addition to the various forms of child abuse and neglect, children may be exposed to other traumas, such as peer physical and sexual assaults, community violence, motor vehicle accidents, disasters, mass casualty events, war, and medical traumas such as life-threatening illness or medical procedures—

all of which are associated with lasting psychological effects (Berthold, 2000; Breslau et al., 2004; Singer, Anglin, Song, & Lunghofer, 1995). These events may also occur after childhood, at which time they may both add to the woman’s overall posttraumatic distress as well as potentially trigger or exacerbate earlier abuse effects (Briere, 2004). Some of these traumas (especially those involving interpersonal violence) are more common among those who have experienced abuse (e.g., Classen et al., 2005). Others are not statistically correlated to child maltreatment but are still potentially present in all individuals, abused or otherwise. As a result, a woman’s current trauma-related symptoms may be related not only to childhood maltreatment but also to other adverse experiences that may have occurred in her lifetime.

CONCLUSIONS

This article has reviewed the complex relationship between childhood maltreatment, contextual variables, and psychological outcome as it relates to the mental health status of adult women. It suggests that childhood maltreatment consists of a variety of different types of abuse, as well as psychological neglect, such that each affected child may have experienced a different combination of, for example, sexual and/or physical abuse, psychological maltreatment and neglect, and exposure to parental domestic violence. In addition, each of these forms of abuse or neglect may vary on important dimensions, such as age of onset, severity, frequency and duration, and extent of injury.

This widely varying constellation of adverse childhood events often occurs in the context of a variety of negative social, familial, and neurobiological factors, as well as other potentially adverse phenomena such as parental psychopathology, substance abuse, and disattunement. In combination with these various factors, child maltreatment may disrupt normal parent–child attachment dynamics; an outcome that not only produces symptoms itself but may exacerbate the effects of maltreatment. In turn, these many events, contexts, and factors may produce a variety

of negative psychological symptoms and behaviors, some of which potentially have reciprocal effects on one another, including the possibility of further victimization and thus additional maltreatment effects.

When viewed from this perspective, it may be overly simplistic to refer to the effects of childhood abuse and neglect, *per se*. Instead, maltreatment-related symptoms in adult women are likely to reflect a complex, interdependent, sometimes interactive cascade of conditions and events, leading to a range of negative psychological outcomes that may vary significantly from woman to woman.

IMPLICATIONS FOR RESEARCH

The complex interdependence of maltreatment causes, effects, and contextual variables suggests that research on child abuse and neglect will be most useful when it moves beyond mere correlations between single types of maltreatment (e.g., sexual abuse) and single outcomes (e.g., posttraumatic stress).

Studies will be more ecologically valid to the extent that they examine multiple forms of maltreatment, relevant intermediate variables, and multiple psychosocial outcomes—preferably using multivariate statistical methods that allow simultaneous consideration of all relevant variable and their interrelationships.

Because adult survivors of abuse and neglect continue to develop and experience well beyond childhood, their current symptomatic experience is likely to extend beyond the effects of early maltreatment. Abuse victims have an increased likelihood of being revictimized as adolescents and adults, and, conversely, many survivors of adult assaults were previously abused as children. As a result, a given woman's current posttraumatic stress may be a function of both early and later victimization. For this reason, research on childhood events must take later adult experiences into account, just as investigations of adult trauma impacts (e.g., the effects of rape) must also evaluate the influence of childhood maltreatment experiences.

The complexity of child maltreatment outcomes requires that researchers use a variety of symptom and behavior measures as

dependent variables. Not doing so may result in an underestimation of the effects of the events under study, as well as reducing the likelihood that important symptom covariation (e.g., trauma-related symptom patterns) or specific event-symptom relationships (e.g., differential effects of psychological abuse vs. neglect on depression vs. anxiety or aggression) will be identified.

CLINICAL IMPLICATIONS

Simple cause-and-effect clinical formulations of the basis for adult symptomatology may be misleading. The problems and symptoms of a given "sexual abuse survivor," for example, may not be well defined by her sexual abuse history alone. Also important may be other forms of maltreatment she experienced, the ways in which her family functioned before, during, and after the abuse, her parents' level of psychological functioning, ways she coped with her painful childhood, and even her social status and access to economic resources.

Because the etiology of abuse-related outcomes is multivariate, it may not always be possible to focus treatment on a specific event or events and expect immediately significant outcomes. Instead, multiple events (e.g., instances of sexual or physical abuse or having witnessed an especially terrifying assault on one's mother by one's father) and adverse processes (e.g., the ongoing experience of emotional neglect or relatively unremitting terror) may require specific therapeutic attention. In this regard, therapeutic interventions may require not only classic cognitive-behavioral treatment (e.g., exposure therapy or cognitive restructuring around a specific event) but also broader, relationship-based interventions that activate and process interpersonal schema and negative emotional states linked to relational memories (Pearlman & Courtois, 2005).

Because a childhood characterized by maltreatment and associated factors may produce inadequate development of affect-regulation capacities and interpersonal skills, therapy may be most effective when it not only addresses historical events but also facilitates the development of emotional regulation

strategies and new ways of relating to others (Cloitre, Cohen, & Koenen, 2006).

NOTE

1. Although this article refers to women, much of the literature cited here also apply to men.

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