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Assessing child neglect: A review of standardized measures

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Abstract

Child neglect is the most prevalent type of child maltreatment, yet only a few standardized methods exist to assist in the assessment of this widespread problem. Existing measures of child neglect are limited by the nature of child neglect itself, in addition to issues of social desirability responding, and items that may infer blame and parental responsibility. This review first delineates child neglect, including its prevalence and characteristics, to provide a context in which to examine assessment issues. Later, standardized measures of child neglect are underscored, including a review of their response format and relevant psychometric support, if any. Future directions for practice and research are reported in light of these findings.

Keywords: Child neglect; Parent–child interactions; Care-taking behaviors

Contents

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1. Assesing child neglect: a comprehensive review of the literature

1.1. Prevalence rates

During the past 150 years, child maltreatment has increasingly been recognized as a complex social problem (Giovannoni, 1989). Although child maltreatment has been an issue of much focus, child physical abuse has received more attention than child neglect. However, child neglect is the most common form of child maltreatment in the United States, and the consequences and effects are more enduring than that of child physical abuse (Berry, Charlson, & Dawson, 2003; Hildyard & Wolfe, 2002). Indeed, more children suffer from child neglect than from physical and sexual abuse combined (National Clearinghouse on Child Abuse and Neglect Information, 2001, 2004). According to the National Clearinghouse on Child Abuse and Neglect Information (2004), in 2002, 896,000 children were victims of maltreatment and 60% of those victims suffered neglect. Child neglect is the most prevalent reason for family intervention in Child Protective Services (CPS; Slack, Holl, Altenbernd, Mc Daniel, & Stevens,

2003). In 2001, 3 million referrals concerning the welfare of approximately 5 million children were made to CPS agencies throughout the United States, of those 67% were screened in and 33% were screened out[1] (National Clearinghouse on Child Abuse and Neglect Information, 2003). It is important to note that the aforementioned results only include children who have been reported to Child Protective Services (CPS) agencies and whose cases were substantiated. The preceding statistics therefore do not represent all children who are victims of child neglect.

The Third National Incidence Study of Child Abuse and Neglect (NIS-3; Sedlack & Broadhurst, 1996) was based on data pertaining to children seen by community professionals, in which incidents of child neglect were not reported to CPS or were screened out by CPS without investigation, as well as data pertaining to children investigated by CPS. Rates were reported using both the "harm standard" and the "endangerment standard."[2] Sedlack and Broadhurst (1996), using the endangerment standard, reported that the number of children who were victims of neglect more than doubled from the NIS-2 (Sedlack, 1991) from 917,200 to 1,961,300 (114% increase). Sedlack and Broadhurst also reported that CPS investigated only 28% of children who were considered neglected under the harm standard, and that only a minority of children who were abused or neglected by either standard received CPS attention. Children under 3 years of age are the most vulnerable and suffer the most devastating consequences of neglect (see Berrick, 1997; Scannapieco & Connell-Carrick, 2002). Children in this age category spend more time with caregivers and are more physically and psychological dependent upon parents, which leaves them more vulnerable to injury (Belsky, 1993). Neglect is associated with malnutrition, accidents, injuries, untreated health conditions, and developmental delays (Slack et al, 2003).

2. Defining child neglect

2.1. Generally agreed upon definitional aspects

Child neglect is determined by factors operating at multiple levels of analysis and is heterogeneous in behavior, outcomes, and situational factors (Belsky, 1993; Slack et al., 2003). Child neglect is considered an act of omission in contrast to child abuse, which is an act of commission (Giovannoni, 1989). For instance, child neglect is often indicated by inadequate nutrition, clothing, hygiene, supervision, medical, dental, or mental health care, unsafe environments, and abandonment or expulsion from the home (National Clearinghouse on Child Abuse and Neglect Information, 2001), and these neglect situations are influenced by the

[1] Some screened reports were referred to other outside agencies depending on the level of perceived risk (National Clearinghouse on Child Abuse and Neglect Information, 2003). Some states, such as Washington divert "low-risk" cases to community agencies for assistance rather than investigating them (Pecora, 1991).

[2] Using the harm standard, children identified were considered maltreated only they had already experienced harm form abuse or neglect. Using the endangerment standard, children who experienced abuse or neglect that put them at risk of harm are considered to be maltreated (Sedlack & Broadhurst, 1996).

perpetrator's lack of care-taking behaviors. Indeed, there is considerable agreement that it is important for caregivers to provide for the physical needs of their children, including food, clothing, shelter, supervision, medical care, and education (Slack et al., 2003).

Dubowitz, Klockner, Starr, and Black (1998) conducted a study to examine individuals' perceptions of child neglect across ethnic groups. The measure used in this study was an Adequacy of Care measure comprised of 45 vignettes that was derived from the Child Well-Being Scales (Magura & Moses, 1986). Dubowitz et al. (1998) found few differences among racial groups' perceptions, but low socioeconomic status (SES) African-Americans rated physical care vignettes more serious than Caucasians. There was substantial agreement among low SES African-Americans, middle SES African-Americans, and middle SES Caucasian caregivers about neglectful situations in which young children were at risk of being harmed (i.e., a child is left home alone). This study also suggested that professionals have a significantly higher threshold for concern regarding both physical and psychological care than the lay community. This may reflect professionals' experience with neglectful families, greater education about children's needs and development, and the more stringent criteria for child neglect required by CPS compared to standards for the general community. Although there is a difference in what level of behavior constitutes neglect between professionals and lay persons, there are still many similarities in what type of behaviors constitute child neglect (Dubowitz et al., 1998).

2.2. Varying definitions of child neglect

Various professions and social institutions have emerged as concerned participants in the definition and management of child neglect, including judges interpreting the statutes, social workers intervening in the problem, medical practitioners managing a medical problem, and lawyers ensuring legal rights (Giovannoni, 1989). At one time, the primary profession involved in the examination of child neglect was social work. However, today professional boundaries are blurred. Certain members of clinical psychology, psychiatry, and other counseling professions are also considered experts in the area and impact the varying definitions (Giovannoni, 1989).

The Federal Child Abuse Prevention and Treatment Act (CAPTA) provided minimum standards for definitions of child abuse and neglect: "The term 'child abuse and neglect' means, at minimum, any recent act or failure to act on the part of a parent or caretaker, which results in death, serious physical or emotional harm, sexual abuse or exploitation, or an act or failure to act which presents an imminent risk of serious harm" (The Child Abuse Prevention and Treatment Act of 1996). This definition however provides only minimum standards and uses vague and broad terms. Each state establishes its own definition of child neglect but must adhere to the minimum standards set forth by CAPTA (National Clearinghouse on Child Abuse and Neglect Information, 2001).

About one-fifth of states do not define neglect separately from abuse, and of those that define it separately, some also specify particular subtypes of neglect, such as abandonment and medical neglect (National Clearinghouse on Child Abuse and Neglect Information, 2001). Some state definitions of child neglect may address endangerment and harm, whereas others

only address harm (Slack et al., 2003). Definitions of child neglect based on state statutes also vary due to interpretation of vague language. Statutes are vague, particularly about setting boundaries (Barnett, Manly, & Cicchetti, 1993; Giovannoni, 1989; Portwood, 1998; Roscoe, 1990). Statutes tend to include phrases, such as "a home or suitable place of abode," "an unfit place by reason of neglect, cruelty, depravity, or physical abuse," "mental suffering," "endangering health," and "failure to maintain a reasonable degree of interest, concern, or responsibility for the child's welfare" (Giovannoni, 1989; Portwood, 1998).

Different definitions for child neglect exist in different contexts, but these delineations are often not detailed enough for research, and definitions that are developed for research purposes may be useful in that context but often do not generalize to nonresearch settings (Giovannoni, 1989; Slack et al., 2003). Definitions of child neglect vary depending on the reasons they are needed, the purpose of the definition, and the professionals who developed and will use the definition (Giovannoni, 1989). Broad definitions are often found in the areas of social policy and education and tend to be vague and difficult to implement (Hutchison, 1990). Broad definitions tend to focus on environmental conditions, not parental responsibility. The positive aspects of broad definitions provide judicial flexibility to individualize cases and greater sensitivity to local community standards (Dubowitz, Black, Starr, Raymond, & Zuravin, 1993). Narrow definitions, on the other hand, focus on parental omission in care and are most often used in the legal and CPS system (Dubowitz et al., 1993; Hutchison, 1990). Narrow definitions often imply parental responsibility and blameworthiness and are specific with a goal to protect children from serious harm but avoid overloading the CPS system as broad definitions may do (Dubowitz et al., 1993; Hutchison, 1990). Narrow definitions are often easy to operationalize and implement.

Definitions of child neglect vary, because there are dilemmas in the recognition and reporting of neglect, as well as a lack of professional training and guidelines of what constitutes neglect (Cowen, 1999). Definitions of child neglect have been criticized as imposing middle-class values as interpreted by professionals on lower-class families (Dubowitz et al., 1998). Other criticisms of neglect definitions involve a lack of cultural consideration, and some have proposed definitions should take into account whether the omission is an idiosyncratic departure from one's cultural practice (Cowen).

2.3. Characteristics of child neglect

The contexts of child maltreatment include parent and child characteristics, parent–child interactions, community and societal support, and the societal–cultural context (Belsky, 1993; Dubowitz et al., 1993). Neglect is typically chronic and rarely traceable to a single incident, and most children who have been found to be neglected experience multiple types of neglect (Cowen, 1999). Child neglect occurs on a continuum from mild to severe, and the risk and protective factors vary depending on the age and developmental abilities of the child (Slack et al., 2003).

Important differences exist among neglectful parents (Belsky, 1993). There are general characteristics that are correlated with the presence of neglect, but not all families will share

the same characteristics and even those that do will vary in degree. Relative to child physical abuse, child neglect is more strongly associated with poverty, few social networks, single parenthood, and parental age under 30 (Berry et al., 2003). Emphasis on caregiver behavior is often complicated by environmental constraints that the caregiver may, or may not, be able to control, such as insufficient income, an abusive spouse, and limited access to medical care (Slack et al., 2003). Characteristics that are typically identified as being related to child neglect include single parenthood, economic hardship, lack of social support, strained parent–child interactions, mental health issues, substance abuse, and domestic violence (Belsky, 1993; Dubowitz et al., 1993; Slack et al., 2003).

2.4. Child neglect subtypes

There are important differences within each of the identified types of neglect (Belsky, 1993). Therefore, identifying subtypes is useful, as treatments should be focused on specific skill domains (e.g., Project SafeCare focuses on home safety, infant and child health care, and bonding; Lutzker, Frame, & Rice, 1982). The Second and Third National Incidence Studies of Child Abuse and Neglect (NIS-2 and NIS-3) described three categories of neglect (i.e., physical, educational, and emotional neglect). Among these three types of neglect, physical neglect is generally viewed as the most serious, most predictable, and most distinguishable (Jones & McCurdy, 1992). It is important to note that as with the general definition of child neglect, definitions of subtypes of neglect vary.

2.4.1. Physical neglect

Physical neglect is defined in the NIS-3 as harm or endangerment resulting from inadequate nutrition, clothing, hygiene, and supervision (Sedlack & Broadhurst, 1996). Signs of physical neglect include poor or inconsistent growth development, failure to thrive, consistent hunger, poor hygiene, constant fatigue, bald patches, apathy, and inappropriate dress for weather conditions (Berry et al., 2003). Some sources include more than the three subtypes identified by the NIS-2 and NIS-3. In general, these additional subtypes still fall within the categories established by the NIS-2. For instance, abandonment, supervision neglect, health care neglect, and nutritional neglect are sometimes categorized as their own subtype but are types of physical neglect (Cowen, 1999).

2.4.2. Emotional neglect

Emotional neglect is the most difficult child neglect subtype to detect and confirm, as emotional elements deemed essential for children's development are not readily agreed upon (Berrick, 1997). Although physical neglect is often accompanied by psychological neglect, the converse is not always the case (Glaser, 2002). Definitional problems are most pronounced in the area of psychological neglect (Brassard & Hardy, 1997). According to the NIS-3, emotional child neglect includes failure to provide adequate affection and emotional support and permitting a child to be exposed to domestic violence (Sedlack & Broadhurst, 1996). In cases of emotional neglect, parents may be providing adequate physical care but not adequate nurturing (Cowen, 1999). Emotional child neglect can occur in acute instances or in

a chronic pattern of interaction and can occur in subtle behaviors or more extreme pronounced behaviors (Brassard and Hardy). Cases of emotional child neglect are often marked by parents who are detached and uninvolved with their children and seldom speak, cuddle, or hug their children (Cowen, 1999).

2.4.3. Educational neglect

Educational neglect at its most severe level may include failure to comply with state laws requiring school attendance, failure to provide an approved home curriculum, consistently permitting truancy without reason or for nonlegitimate reasons, as well as an inattention to special educational needs, if present (e.g., failure to follow special interventions recommended by the school; Cowen, 1999). Children experiencing any form of child neglect are at a significant risk for school failure and socioemotional difficulties (Berry et al., 2003). Kurtz, Gaudin, Wodarski, and Howing (1993) found that both abused and neglected children scored significantly lower than nonmaltreated children on language and math portions of the Iowa Test of Basic skills, with deficits especially evident in neglected children. Moreover, children in the neglected group had a rate of absences nearly five times that of the comparison group, and parents of neglected children had lower educational aspirations for their children. Neglected children scored higher on the Internalizing scale of the Teacher Report Form of the Child Behavior Checklist (Reyome, 1993). Educational neglect is controversial because tardiness, lethargic behavior in the classroom, and delinquency are generally seen as issues that are more appropriately addressed by school systems and are not always reported to authorities as neglect (Berrick, 1997).

3. Child neglect assessment measures

Despite the very high prevalence of child neglect, and potentially fatal consequences of this problem, no papers have been written that critique methods of assessing this widespread problem. This review therefore focuses on assessment measures that are pertinent to professional observation and interviewing methods of parents suspected of child neglect. Measures relying upon self-report of children or adult self-report measures using retrospective data based on childhood neglect experienced by the victim are not included in this review. Types of child neglect measures to be examined include CPS risk assessment models, measures that focus on the environment of the child, parent self-report measures, and clinical interviews and subscales of measures that do not primarily assess for neglect.

3.1. CPS risk assessment models

Increasingly, CPS agencies are using structured risk assessment tools in their investigations to manage service demands due to shrinking resources and dramatic increases in maltreatment referrals. These tools are used to determine the likelihood that a

child will be maltreated at some future time (Camasso & Jagannathan, 2000; Lyons, Doueck, & Wodarski, 1996). Although risk assessment may be used to define a number of different assessment and decision-making processes, these measures are primarily focused on prediction of whether or not a child will be maltreated at some future time (Pecora, 1991). Many states use formal risk assessment instruments to aid in case decision making, but most use them after substantiation of abuse or neglect to determine appropriate levels of service (Fluke, Edwards, Bussey, Wells, & Johnson, 2001). Many CPS agencies do not use structured assessment instruments. Of those that do, there is not consensus as to which instruments are the best to use, leading to variability among states in the investigative process (Lyons et al., 1996). Furthermore, few risk assessment models used by CPS are empirically based (Lyons et al.). Despite the growing number of risk assessment instruments and models, CPS case decision-making procedures in many states is limited to unstandardized processes structured more by practice than by empirical research (Pecora, 1991).

As reported by Pecora (1991), the risk assessment systems allow CPS workers to focus attention on the most critical risk factors, which is, of course, vital when resources are limited. As part of an initial investigation, a small number of risk factors can be assessed over the phone. Risk assessment models can help to structure worker documentation and decision making, while reducing bias in the decision-making process (Pecora, 1991). Although risk assessment models have some utility, most do not explicitly help workers distinguish risk factors that may be unique to assessing the risk of future neglect (Pecora, 1991). There are five basic types of CPS risk assessment models (i.e., matrix model, empirical predictor model, behaviorally anchored items or scales, comprehensive ecologically structured scales, and computerized expert systems; English & Pecora, 1994). The computerized expert systems combine CPS expertise and artificial intelligence to derive computer-based decision rules. These models generally focus on the detection of both child abuse and neglect. The Ontario Child Neglect Index is one of the few CPS risk assessment measures used that focuses only on child neglect, which will b discussed in greater detail below. Although these models are currently used by various CPS agencies, it should be noted that all these risk assessment systems lack validation and implementation, and many have been criticized for not being culturally sensitive (Pecora, 1991).

3.1.1. Matrix model

The matrix model consists of assessment measures that have tables of risk factors that are rated in terms of severity by caseworkers (English & Pecora, 1994; Pecora, 1991). The Washington State Risk Assessment Matrix (WARM) is one specific measure that is encompassed in the matrix model.

3.1.1.1. Washington State Risk Assessment Matrix (Palmer, 1988). The WARM is a 32-item list of risk factors and consists of seven subscales (i.e., child characteristics, severity of child abuse and neglect, chronicity of abuse and neglect, caretaker characteristics, parent/child relationship, and social and economic factors). Marks and McDonald (1989) found predictive validity for the predictors of "ability of child or age of child," "perpetrator access to child,"

"dangerous acts," "provision for basic needs," "protection of child or mother," "sexual contact," "adequacy of supervision," and "lack of adequate care." In contrast, Camasso and Jagannathan (1995) found little support for the severity, chronicity, parent/child, and caretaker characteristics items on the WARM as predictors of alleged child neglect. One of the main criticisms of the WARM was that the long list of items should be truncated into more carefully measured indices of 8 to 10 items, and that items should have high reliabilities and be stable in populations that do not receive CPS service (Camasso & Jagannathan, 1995). Other suggestions for improvement included risk items containing measures of chronicity, including caretaker characteristics, such as alcohol and drug problems, and that the scale itself should be empirically linked to the labeling and decision processes that influence CPS workers to substantiate a case as child abuse or child neglect (Camasso & Jagannathan, 1995).

3.1.2. Empirical predictor models

Empirical predictor models contain small sets of factors found to be predictive of substantiation or reoccurrence of child abuse and/or child neglect (English & Pecora, 1994; Pecora, 1991). This type of model is considered the most concise approach to risk assessment and generally focuses on identifying a small set of risk factors most predictive of child maltreatment (Pecora, 1991). These models do not include characteristics associated with child maltreatment in the final set of risk factors unless they actually predict the recurrence of one or more types of child maltreatment.

3.1.2.1. Child Endangerment Risk Assessment Protocol (Illinois Department of Children and Family Services, 1996). The Child Endangerment Risk Assessment Protocol (CERAP) is an example of an empirical predictor model. CERAP was developed by the Illinois Department of Children and Family Services in response to a legislative mandate in 1994. Development of this measure was a collaborative effort of professionals in the field of child neglect; these professionals included members from the Illinois Department of Children and Family Services, American Humane Association, University of Illinois, and specialists in law enforcement, mental illness, domestic violence, and clinical practice (Fluke et al., 2001). The CERAP was adapted from a 160-item safety assessment tool used in New York's child protective services division and has roots in the Child At Risk Field System. CERAP has 14 factors that are associated with immediate danger to children, followed by documentation of the decision about the safety of the child. The 14 factors focus on readily observable, immediate, and harmful behavior. If it is determined that any children are unsafe, documentation of the safety plan that was developed to protect the child is administered (Fluke et al., 2001). Risk factors, such as parental history of abuse as a child, substance abuse, mental illness, and domestic violence, are included only if they seriously affect the caretaker's ability to supervise, protect, or care for the child (Fluke et al.). The overall intent of CERAP is to address caretakers cooperation with the investigation and willingness to protect the child, current behavior, extent to which they describe children in negative terms, severity and chronicity of previous harm to children, the possibility of sexual abuse, and children's fear of people in the home.

Fluke et al. (2001) used data from Illinois's DCFS Child Abuse and Neglect Tracking System, which has detailed data on approximately 400,000 child records with reports of alleged maltreatment from December 1, 1994 to November 30, 1997, to determine the impact of CERAP. They found that the recurrence of indicated maltreatment for at risk children in Illinois was significantly reduced following the implementation of the CERAP, and that there was a significant reduction in the 2-year postimplementation. The authors state that these results suggest a coordinated effort by the state to design, train for, and implement a safety protocol could have a positive impact on the safety of children. It should be noted that the ex post facto design of this study makes it impossible to test all policies, historical changes, and factors that could affect child abuse recurrence rates. Further research on the psychometric properties of this assessment measure is needed to determine its true impact and utility.

3.1.3. Behaviorally anchored items or scales

Behaviorally anchored items or scales assess levels of parent and/or parent functioning in order to identify areas of concern (English & Pecora, 1994; Pecora, 1991). These areas of concern could be focused on levels of parent, child, family, and/or household functioning. The Child Well-Being Scales (CWBS) is a prime example of a behaviorally anchored scale and has received more research attention than other CPS risk assessment measures. The Ontario Child Neglect Index (CNI) is an example of a behaviorally anchored scale that assesses specifically for the presence of child neglect.

3.1.3.1. Child Well-Being Scales (Magura & Moses, 1986). The CWBS were developed as an outcome measure for evaluating programs in child welfare services. The scales are scored for the family as a whole, and on some scales for each child in the family. There are 43 scales that cover a broad spectrum of content. The scales cover four main areas of functioning: parenting role performance, familial capacities, child role performance, and child capacities (Magura & Moses, 1986). A factor analysis performed on the 43 scales revealed that "household adequacy," "parental disposition," and "child performance" were measured by 28 of the 43 scales and accounted for 43% of the common variance of the individual scale scores (Magura & Moses, 1986). Each scale has anchoring points that are depicted with anchoring definitions to increase face validity. Each scale point is also weighted by a common dimension or the seriousness of the condition. Weightings for seriousness are based on opinions collected from practioners and administrators of child welfare services (Magura & Moses, 1986). The maximum score on weighted scales is 100. It is important to note that a high score does not imply superior performance, but rather on most scales, it signifies that the care is not problematic and is within acceptable limits. The scales themselves are asymmetrical, which affords them sensitivity to degrees of deficit or pathology, but not to degrees of goodness or competence.

Gaudin and Polansky (1992) found that the CWBS discriminated neglect successfully, and discriminant analysis scores on three of the combined factors identified by Magura and Moses (1986) correctly classified 79% of neglectful families and 87% of control families. Gaudin and Polansky (1992) extracted 17 scales and used them to form a measure of physical and

psychological care of children. Composite indices from the scales showed good internal consistency, and concurrent validity of this segment was supported. The analysis of this modified form yielded three factors that reliably classified families externally verified as neglectful or nonneglectful control mothers. Indeed, the three combined factors correctly classified 79% of neglectful cases as neglectful and correctly classified 81% of the controls. Overall, Gaudin and Polansky (1992) found the CWBS to discriminate between neglectful and nonneglectful families with household adequacy as the strongest discriminant factor. Casady and Lee (2002) assessed low-income families and found significant differences between means on the physical factor of the CWBS for families with substantiated child neglect and control families. Items indicating the physical factor involved adequacy of the physical environment, which included health care, diet, clothing, hygiene, sanitation, child supervision, utilities, and residence security (Casady & Lee, 2002).

One of the main criticisms of the CWBS is that although the scales incorporate measurement items for different domains of neglect, the assessment measurement itself is not intended for families not yet identified by CPS, thus limiting the application of this measure (Slack et al., 2003). Furthermore, the CWBS are administered by child welfare professionals who are trained to identify problematic situations and are often familiar with the family and their history. Slack et al. (2003) recommended future research to examine effectiveness of the CWBS with limited interviewer training to identify maltreatment without intrusive assessment of family members and their environmental contexts. The scales have also been criticized, because they do not adequately capture levels of extreme poverty (Fanshel, Finch, & Grundy, 1994; Seaberg, 1988). Seaberg (1988) cited a lack of clarity in the definition of child well-being, a lack of clinical cutoff points, and the lack of validity for indicators as limitations to the CWBS. The CWBS have also been criticized, because it does not assess substance abuse, previous family history of maltreatment, and fails take into account the interaction of factors (Lyons et al., 1996).

3.1.3.2. The Ontario Child Neglect Index (Trocme, 1996). The CNI was designed to provide child welfare practioners and researchers with a validated method of specifying the type and severity of neglect. The CNI is a one-page index with six neglect scales (i.e., supervision, nutrition, clothing and hygiene, physical health care, mental health care, and development/educational care), utilizing a four- to five-level severity rating (i.e., "adequate," "inconsistent," "inadequate," "seriously inadequate"). Rating instructions for the supervision scale require consideration of both the severity of harm and the potential for harm, whereas the physical care scales emphasize actual impairment. For all six scales, an "inadequate" or neglect rating requires either evidence of impairment, harm, or exposure to situations that could cause harm. Scores are calculated by combining the score from the scale receiving the highest severity rating and an age score calculated from a table (range=0 to 80). The scores are then interpreted as a rating of severity of neglect. Trocme (1996) examined concurrent validity by comparing CNI scores to NIS maltreatment classification and scores on the CWB scales. The CNI scores were significantly related to both NIS classifications and the CWBS. Predictive validity was found as CNI scores were more related to child welfare cases that were kept "open" (decision to continue to monitor the case) than "closed." The CNI requires less

administration time than the CWBS. However, Trocme (1996) noted that the brevity of the CNI may not be as accurate and comprehensive as the CWBS. As with the CWBS, the CNI incorporates measurement items for different domains of neglect, but the tool is not intended for families not yet identified by CPS. The CNI is also administered by trained child welfare professionals who have experience in identifying problematic situations (Slack et al., 2003); therefore, its clinical utility is limited. Slack et al. recommended investigators examine the effects of utilizing the CNI with interviewers who have limited training, and that the CNI be modified to be less invasive to the family.

3.1.4. Comprehensive ecologically structured scales

Comprehensive ecologically structured scales identify levels and sources of risk and facilitate identification of strategies to alter and measure risk reduction. These scales are based on the ecological approach to child neglect that views child neglect as an association with child, parent, community, and societal factors (Dubowitz et al., 1993). The Child at Risk Field (CARF) system is the most prominent approach used within this model.

3.1.4.1. Child at Risk Field System (Holder & Corey, 1987, 1989). The CARF uses 14 factors organized around five categories which represent the child, parent, family, maltreatment, and intervention to predict maltreatment. The CARF was designed to enable caseworkers and other professionals to use risk as a basis for decisions regarding the family (Hansen & MacMillan, 1990). CARF is intended to control subjectivity, increase uniformity and accountability, ensure decisions are based on sufficient data, and increase client involvement in problem solving. There are a series of 14 open-ended questions with anchored rating scales to identify risk influences. Answers to the open-ended questions constitute the influences that describe the family and child. Numerous influences can be identified, including danger loading influences, which refer to influences around the child and/or family that would be considered dangerous (Hansen & MacMillan, 1990).

Lyons et al. (1996) reports implementation problems with the CARF, as well as low internal consistency (Cronbach's alpha=0.57). Interrater reliability has been found to be good for the group mean, but single rater means have been found to be poor to moderate (Fluke et al., 1993). System effects, as well as service effects, appear to be marginal (Fluke et al., 1993). As with other CPS risk assessment methods, the CARF lacks validation and implementation data (Pecora, 1991).

3.2. Environmentally focused assessment measures

The environments of children who have been found to be maltreated are often not safe, particularly for toddlers (Donohue, Van Hasselt, Miller, & Hersen, 1997). Family members may be unaware of the potential hazards in their home, such as access to medications, toxins, and electrical outlets. Homes of maltreated children are often messy and may be unsanitary. Environmentally focused assessment measures include assessing the home, access to dangerous material or weapons, and overall adequacy of the environment. The Home Accident Prevention Inventory (HAPI), Checklist for Living Environments to Assess Neglect

(CLEAN), and the Home Safety and Beautification Tour are examples of environmentally focused child neglect assessment measures.

3.2.1. Home Accident Prevention Inventory (Tertinger, Greene, & Lutzker, 1984)

The HAPI was developed in an attempt to assess the safety of home environments of families identified as abusive and or neglectful. The HAPI assesses 26 home hazards in the home, including fire and electrical, suffocation by ingested object, suffocation by mechanical objects, firearms, and solid and liquid poisons. The HAPI-R is a revised version that has seven main categories of hazards: poisoning by solids or liquids, fire and electrical hazards, suffocation by mechanical objects, ingestible small objects, sharp objects, ingestible small objects, sharp objects, firearms, falling hazards, and drowning hazards (Mandel, Bigelow, & Lutzker, 1998). Tertinger et al. (1984) found the HAPI to have adequate content validity indicated by all questions on the HAPI being considered at least a moderate threat by individuals involved in accident prevention research, safety commissions, and pediatric departments. The HAPI was also reported to be useful in the identification of home safety problems.

3.2.2. Checklist for Living Environments to Assess Neglect (Watson-Perczel, Lutzker, Greene, & McGimpsey, 1988)

CLEAN was designed to assess home cleanliness and permits an examination of cleanliness in targeted rooms within the home of maltreated youth, according to three dimensions (Watson-Perczel et al., 1988). The three dimensions are presence of dirt or organic matter, the number of clothes or linens in within the area, and the number of nonclothing items or other nonorganic matter in contact within the area. The CLEAN produces a composite percentage score reflecting the condition of the home along the aforementioned dimensions. Scores for all item areas in a particular room are added together and then divided by the number of item areas, yielding a mean score for all item areas in that room, and the resulting number is divided by 20 (highest possible scores) and multiplied by 100 to yield a percentage score. Scores range from 0 to 100 with higher scores indicating more cleanliness. Watson-Perczel et al. (1988) reported that CLEAN has been shown to have adequate interrater agreement and is useful for evaluating the effects of home cleanliness training. The CLEAN requires a substantial period of time to complete but has been reported to be well suited for the objective quantification of unhealthy or inadequate environments (Hansen & MacMillan, 1990). The CLEAN has good face validity, although other types of validity have yet to be determined.

3.2.3. Home Safety and Beautification Tour (Donohue et al., 1997)

The Home Safety and Beautification Tour involves a tour of the home. Fifteen-item categories are examined within each major room in the home. The 15 items include toxins, electrical hazards, sharp objects, heavy objects, small objects, weapons, home access, adequate temperature control, adequate food, cleanliness, household items, adequate toys, adequate children books, adequate clothing, and adequate décor. The Home Safety and Beautification Tour is intended to identify current or potential hazards and to assist the family in rectifying

potential hazards that can lead to accidents and or injury. Prompts are provided for professionals to utilize in assisting family members in identifying each hazard. A tally is kept for each hazard that is identified within each of the household rooms (i.e., kitchen, bathroom, dining room, closet(s), bedrooms). The psychometric properties of this instrument have yet to be examined, although scores may be derived by adding the tally marks within each hazardous category, and the instrument appears to have good clinical utility and face validity.

3.3. Parent self-report measures

Parent self-report measures provide an easy to administer and cost-efficient method of assessing child neglect (Howing, Wodarski, Gaudin, & Kurtz, 1989). Self-report measures however have the potential limitation of respondents answering in a socially desirable manner and thus underreporting neglectful or dangerous behavior (Howing et al., 1989). Parent self-report measures, such as the Child Abuse Potential Inventory (CAPI) and Conflict Tactics Scale Parent to Child Version (CTSPC), do not focus specifically on child neglect but have subscales or items that relate specifically to child neglect.

3.3.1. Child Abuse Potential Inventory (Milner, 1986)

The original version of the Child Abuse Potential Inventory (CAPI; Milner, 1980) was generated using an extensive review of child abuse and neglect literature, and revisions have occurred based on concurrent validation research. Milner and Wimberly (1980) found that 77 of the 160 items of the original Child Abuse Potential Inventory (CAP) significantly discriminated between a group of matched abusers and nonabusers. Although the CAPI focuses on child physical abuse, there are some items that pertain to child neglect (i.e., I always try to check on my child when it's crying). The CAPI includes an Abuse Potential Scale and three validity scales (Random Responding, Inconsistency, and Lie), Distortion Indexes of Fake-Good, Fake-Bad, and Random Responding, which are derived from the validity scales (Milner, 1986). Upon extensive evaluation, Milner (1986) found the CAPI to have sound psychometric properties (i.e., internal consistency, temporal stability, normative information, convergent, discriminant, and predicative validity; see also Kaufman & Walker, 1986). Milner, Gold, Ayoub and Jacewitz (1984) administered the CAP to 200 parents at risk for problems in parenting and found a significant correlation between abuse scores on the CAP and confirmed neglect reports. Kaufman and Walker (1986) reported the CAPI had great promise for screening but should not be used in isolation as a predictor of child abuse or neglect because of the possibility of misclassification. Moreover, the CAPI has yet to be extensively examined within child neglecting caregivers, thus examination of its psychometric properties within this population is warranted. Neglect specific CAPI subscales would be useful and could certainly be evaluated.

3.3.2. Conflict Tactics Scale, Parent to Child version (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998)

The CTSPC is an improved version of the Conflict Tactics Scale (CTS) as specifically applicable to child maltreatment. The CTS was designed for use with partners in a marital,

cohabitating, or dating relationship. The CTSPC changed the referent person from "your partner" to a specific child and modified some items that were not appropriate in the examination of parent–child relationships. The CTSPC is intended to be used as a clinical screening tool that measures the extent to which a parent has carried out specific acts of physical aggression, regardless if acts resulted in injury to the child. Administration time is brief, requiring only six to eight minutes to administer the core scales. The CTSPC has a supplemental scale for child neglect that is intended to measure failure to engage in behavior that is necessary to meet the developmental needs of a child. Neglect is scored for failing to meet these needs regardless of whether the child is actually harmed by the neglect. The CTSPC also has a feature that many child neglect measures lack, statements preceding each scale and subscale that draw attention to factors that may increase the likelihood of child neglect, such as financial deficits or personal problems. Straus et al. (1998) reported low internal constancy reliability for the Neglect scale (α=0.22), but noted that this does not necessarily mean the Neglect scale lacks validity. However, further examination of the Neglect scale is needed to determine its utility in the measurement of child neglect. Overall, the CTSPC has been found to be a better measure of child maltreatment than the CTS (Straus et al., 1998).

3.4. Additional measures and techniques

Observation and clinical interviews may also be used to examine the presence of child neglect, but these measures are often used in conjunction with other assessment measures. In the assessment of child neglect, specific observation techniques may be used. Clinical interviewing allows a variety of information to be gathered in the assessment of child neglect and a widely used interview is the Child Abuse and Neglect Interview Schedule (CANIS). Service workers who are in close contact with a family suspected of child neglect can provide valuable information. The Childhood Level of Living Scale is an example of an assessment tool that may be utilized by service providers who know the family fairly well.

3.4.1. Observation

Observation allows data to be gathered on what parents and children are actually doing in homes where child neglect is suspected (Burgess & Conger, 1977). Observation should occur in the home when possible, especially during periods of likely conflict, such as mealtime, bedtime, and getting ready for school (Ammerman, 1989). During these periods, more conflict may be present in the parent–child interaction, but it is also important to consider interactions may not be natural under the observation of a clinician. Burgess and Conger (1977) indicated that special attention should be made when observing the patterns of interaction between parents and children, between parents, and between the child and siblings paying close attention to the reciprocal character of the interaction.

Burgess and Conger (1977) found observation by caseworkers revealed distinct differences between neglectful and control families. Families in which neglect was found

showed less directed positive contact to each other, mothers responded positively at a significantly lower rate, mothers directed negative comments to other family members more often, and children directed fewer verbal responses to parent. Burgess and Conger (1977) identified important patterns that can be revealed through observation, but the method itself is time consuming and expensive and did not yield information that alone could be used to determine the presence of, or potential for, child neglect. Rather, it was shown to reveal behavior patterns in families where neglect has already been identified. Others have also indicated their concerns with the cost and sensitivity of observational measures (Caldwell, Bogat, & Davidson, 1988).

3.4.2. Child Abuse and Neglect Interview Schedule (Ammerman, Hersen, & Van Hasselt, 1988)

Interviewing is a common procedure for identifying circumstances around child maltreatment (Hansen & MacMillan, 1990). CANIS is a semistructured interview that asses child care, child behavior problems, disciplinary practices, past history of family violence, sexual abuse, and drug and alcohol abuse (Ammerman, 1989). The CANIS takes approximately 45 minutes to administer, but a portion of it can be used separately to obtain information that is specific to the detection of child maltreatment. It is important to note that the CANIS was designed for families of disabled children, but the interview may also be used with nondisabled populations (Ammerman et al., 1988). The psychometric properties of the CANIS have yet to be evaluated.

3.4.3. Childhood Level of Living Scale (Polansky, Chalmers, Buttenwieser, & Williams, 1981)

The Childhood Level of Living Scale was developed as a measure for scaling essential elements of child care and neglect. It is intended to capture child neglect and does not assess physical or sexual abuse. The Childhood Level of Living Scale was designed for parents of children between 4 and 7 years of age, although the authors suggest it may be appropriate for a wider age range (Polansky et al., 1981). The first version developed was intended for rural populations, and the second version was developed for urban populations. The urban version has 99 items that assess nine factors, five of which are descriptive of physical care and four that are descriptive of emotional and psychological care. Physical and psychological care correlate highly (Polansky et al.). Items include meal planning, sleeping arrangements, clothing, cleanliness, supervision, safekeeping of medicines, and similar domains. Service workers, who are in close contact with the family and know them well, rate the items on a scale ranging from "should be reported to legal authorities" to "excellent care." Total scores can be derived with a range from "severely neglectful" to "good child care." The Childhood Level of Living Scale scores have been shown to have construct and concomitant validity in several large studies (Polansky et al., 1981). Some, however, have questioned the relevance of some items in measuring child neglect (i.e., child has been taken by parents to a parade; Gaudin & Polanksy, 1992). Although additional psychometric evaluation is needed, the Childhood Level of Living Scale is recommended as a measure that might reduce professional biases and errors in detecting neglect (Hansen & MacMillan, 1990).

3.5. General critique of current assessment measures

The nature of child neglect limits the effectiveness of assessment measures, in general. Most children who suffer from child neglect experience multiple types of neglect, and child neglect is typically chronic or not traceable to a single incident. Therefore, it is hard for one measure to encompass the various types of child neglect (Cowen, 1999). Cowen suggested that child neglect assessment measures should consider frequency, duration, and type of child neglect, age of the child, potential consequences to child's development, and degree of danger to the child. Child neglect assessment measures are rarely used to assess child neglect in all age ranges, as these measures typically focus on limited specific age ranges, or include general content that could be considered neglect in all age ranges but exclude important items that are specific to certain ages. Some incidents alone do not constitute child neglect, which makes severity an important component to examine (National Clearinghouse on Child Abuse and Neglect Information, 2001). As many parents engage in some kind of neglectful behavior on at least one occasion, the issue of severity is critical in the assessment of child neglect (Cowen, 1999). Current child neglect assessment measures often do not address severity of child neglect, in general, or of specific incidents of child neglect. Severity should be based on the estimation of the degree of harm involved (Dubowitz et al., 1993). However, presence of actual harm meets the definitions of child neglect in most states, although most states do not include the risk of harm in their definitions (Dubowitz et al.). Severity and frequency of child neglect is often overlooked by current child neglect assessment measures, and future measures should address this limitation.

Self-report instruments and other assessment measures that rely on information that is partly obtained from parents may be affected by social desirability bias. Social desirability responding is the tendency to give answers to make the respondent look good and has been found to affect measurements of personality variables, attitudes, and self-reported behaviors (Bardwell & Dimsdale, 2001; Fisher & Katz, 2000). When individuals are asked to report feelings, attitudes, or behaviors, many respond in socially desirably ways that do not accurately reflect their true experiences, particularly individuals who are being scrutinized (i.e., child neglect perpetrators). The effects of these self-reports may attenuate, inflate, or moderate variable relationships (Fisher & Katz, 2000). Paulhus (1992) suggested that social desirability bias can be portioned into the factor of self-deceptive positivity, which is an honest but overly favorable self presentation, and impression management, which is associated with the desire to present oneself in a socially conventional way. The degree of response bias will vary according to the degree that the value is strongly prescribed within the social system (Fisher & Katz, 2000). No one mode of measurement has been shown to demonstrate a clear advantage in addressing this issue (Slack et al., 2003). Sensitive questions that a respondent may feel uncomfortable answering directly are especially susceptible to this bias, and the nature of child neglect assessment makes this a problem inherent in all child abuse and child neglect assessment procedures. Accuracy of maltreating parents' self reports may be influenced by unrealistic expectations, misattributions, or the desire to give socially desirable responses (Hansen & MacMillan, 1990). The CAPI has a lie scale incorporated into it to reduce the number of false negative classifications that were being found with the abuse scale alone (Robertson & Milner,

1985). Robertson and Milner (1985) found the lie scale to successfully discriminate between subjects in the honest and faking good conditions of their study.

Questions and items of child neglect assessment measures often imply parental blame and attach a stigma to families found to neglect their children, which makes social desirability response bias problematic for assessment procedures. However, this issue has not been adequately addressed in the literature. Most states and CPS systems use narrow definitions to define child neglect, and these definitions are focused on parental omissions in care (Dubowitz et al., 1993). Parental responsibility and blame are at least implicit in the definitions of child neglect and most often are found in child neglect assessment measures (Dubowitz et al., 1993). Dubowitz et al. (1993) suggested there is a tendency to categorize families as either "good" or "bad," or "neglecting" or "nonneglecting," and these categories are arbitrary and simplistic. Due to the stigma and bias in many child neglect assessment tools, maltreating parents may be hypersensitive to negative evaluation and prone to make inaccurate interpretations of assessment procedures if they are not explained thoroughly (Hansen & MacMillan, 1990).

3.6. Summary of assessment efforts in child neglect and future directions

Child Protective Services agencies are increasingly utilizing risk assessment tools to determine the likelihood a child will be maltreated at some future time. However, decision-making procedures in many states are based on unstandardized processes, as some states require the use of structured assessment measures while others do not. There is also no consensus among state agents that employ such measures as to which assessment instruments are optimum.

Effectiveness of child neglect assessment measures is limited due to the nature of child neglect itself. For instance, child neglect is generally chronic and not traceable to a single incident, multiple types of child neglect are often present, and what constitutes neglect may vary by the age of the child. Thus, it is hard for one measure to encompass all facets of child neglect, suggesting multiple measures should be utilized when assessing a neglected child or neglecting caretaker. Social desirability bias also limits measures of child neglect that rely on information from self-report. The sensitive nature of the questions involved in the assessment of child neglect makes self-report measures of this nature particularly susceptible to this bias.

Recent research has strongly supported utilization of child neglect assessment measures that exclude questions that infer parental responsibility and blame (Dubowitz et al., 1993; Slack et al., 2003). Some measures, such as the Child Abuse Potential Inventory, incorporate a lie scale to reduce the number of false negative classifications. While these types of scales may alert a clinician to social desirability responding (attempts to present oneself in a favorable light, i.e., deny child neglecting behaviors), questions are not worded to reduce social desirability responding. Therefore, it may be possible to identify a caregiver as denying neglect-relevant questions. However, the clinician is left to guesstimate which areas are worthy of treatment. The use of blame reduction statements (e.g., "Many caregivers have a tough time feeding their kids healthy foods due to not

having much money or other reasons. I've also had a tough time making sure my kids have two or three healthy meals each day.") is one method of increasing the likelihood that the informant will answer candidly. Indeed, such statements assist in reassuring respondents that there is no underlying assumption of blame in responding to questions that assess behaviors associated with child neglect. The CTSPC employs such a statement prior to its neglect supplementary questions. The statement describes barriers that might make it difficult to properly care for a child (Straus et al., 1998). While the CTSPC uses these types of statements, it still focuses on the parent's responsibility, as the parent is asked how often in the past year particular behaviors have been performed (Straus et al.). Slack et al. (2003) have developed a measure that is currently being used in The Illinois Families Study that relies heavily on self-report items to identify risk for child neglect while attempting to use questions that are not threatening to respondents. The scale that Slack et al. developed avoids probes for poor parenting and has potential qualifiers for sensitive questions to reassure respondents there is no underlying assumption of blame (e.g., Some children are much more active than others, which can make it difficult to "keep an eye" on them much of the time. Overall, how active would you say your child is compared to other children his/her age?). Certainly, blame reduction statements are potentially useful in reducing social desirability bias, making it easier to obtain useful neglect-relevant information that may incorporated into treatment planning.

The ecological model of child neglect is supported by research and implies that the victim–perpetrator framework should be replaced by consideration of individual, family, community, and societal factors contributing to neglect (Dubowitz et al., 1993). Brassard and Hardy (1997) attempted to address the inherent stigma of verbal abuse by asking parents to report the number of incidents they had witnessed in their family during the last year, as opposed to how many times they personally had done something. Slack et al. (2003) also suggests setting parental responsibility temporarily aside, as it is an issue for intervention, not assessment. Research suggests that moving from a focus on the neglect perpetrator as the target of measurement toward one that is focused on the child in terms of risk exposure would be more useful (Dubowitz et al., 1993; Slack et al., 2003).

Future child neglect assessment measures should address limitations of current measures, including severity, frequency, social desirability bias, and inherent stigma and blame of items. Measures also need to focus on frequently encountered behavioral problems and disorders (e.g., substance abuse, conduct disorders) within the context of child neglect situations (e.g., using mind-altering substances while supervising infants or toddlers, stealing in front of children). Effective measures should take into consideration the type of child neglect, chronicity of neglect, potential consequences to the child's development, and age of the child. For instance, it is surprising that there are currently no measures of child neglect that tailor questions to specific age groups. Indeed, what is judged to be neglectful for one age group may not be for another (e.g., leaving small objects on the floor next to an infant is neglectful, whereas it is not for an 8-year-old). Given the increasing prevalence of child neglect, it is important that assessment measures continue to address these limitations in an effort to obtain more accurate predictions of the problem.

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