

## **The Influence of Case and Professional Variables on the Identification and Reporting of Child Maltreatment: A Study of Licensed Psychologists and Certified Masters Social Workers**

**David J. Hansen,<sup>1</sup> Kurt M. Bumby,<sup>1</sup> Lori M. Lundquist,<sup>1</sup> Reginald M. Chandler,<sup>1</sup> Peter T. Le,<sup>1</sup> and Kristine T. Futa<sup>1</sup>**

---

*All 50 states have laws requiring mental health and other professionals to report suspected maltreatment. Unfortunately, many professionals who are mandated to report suspicions of child maltreatment often fail to recognize potential maltreatment or fail to report their suspicions. The present study examines several factors that may influence identification and reporting of child maltreatment. Subjects were licensed psychologists in the Midwest and certified Masters social workers in Nebraska. Child maltreatment included neglect, physical abuse, psychological maltreatment, and sexual abuse. Characteristics associated with the family or "case" (race, socioeconomic status of family, age of victim, type of maltreatment) were manipulated and presented in hypothetical case vignettes. Characteristics of the professional (e.g., training and experience with identification and reporting, personal history of maltreatment and violence) were also investigated. Ratings of the severity of the potential maltreatment situation, suspiciousness that maltreatment is occurring, and likelihood of reporting maltreatment were completed after reading each case vignette. The results indicate that a variety of case and professional factors may influence identification and reporting of maltreatment. Implications for training professionals and further research are discussed.*

---

**KEY WORDS:** child maltreatment; identification; reporting; psychologists; social workers.

<sup>1</sup>Department of Psychology, University of Nebraska-Lincoln, Lincoln, Nebraska 68588-0308.

Widespread concern over child abuse and neglect as a significant social problem began as recently as the 1950s and 1960s. Maltreated children have been an increasing focus of protection efforts, which may be partially due to frequent and intense attention from the media, general public, legislators, and health, mental health, and social service professionals (Hansen and Warner, 1992). All 50 states now have laws requiring certain professionals (e.g., psychologists, social workers, physicians, teachers) to report suspected maltreatment. The increasing evidence of the potential short- and long-term negative consequences of child maltreatment further encourages the significant societal and scientific attention to the problem (cf. Browne and Finkelhor, 1986; Conaway and Hansen, 1989; Malinosky-Rummell and Hansen, 1993).

Despite such attention and concern, there is evidence that many professionals who are mandated to report suspicions of child maltreatment often fail to recognize potential maltreatment or fail to report their suspicions (Brosig and Kalichman, 1992; Kalichman, 1993; National Center on Child Abuse and Neglect, 1988; Warner *et al.*, 1996). As few as one-third of cases of abuse suspected by professionals are reported (NCCAN, 1988). The percentage of suspected cases of maltreatment that is reported varies tremendously between groups of mandated reporters. For example, in the NCCAN (1988) national incidence study the percentages of suspected cases that were reported were 12% for child care centers, 30% for social service agencies, 58% for mental health centers, and 69% for medical hospitals. The widespread failure to report suspected abuse is very unfortunate because a major step in protecting children and preventing further maltreatment is identification and intervention with families at risk.

Warner and Hansen (1994) described the identification and reporting of abuse as part of a four-stage process: (a) assessment and evaluation, (b) identification, (c) reporting, and (d) validation. This process is a complex chain of responses where a response at each stage is related to the responses in the preceding stages. In an ideal world, the ratio of responding between identification and reporting would be 1:1 (Warner and Hansen, 1994). Reporting would be cued by identification and controlled by the reporting laws. Unfortunately, as noted previously, a 1:1 ratio between identification and reporting is not what occurs (e.g., NCCAN, 1988).

Investigators have begun to examine factors that influence the identification or reporting of child maltreatment. This research has been conducted with a variety of subjects, including the following: (a) psychologists (e.g., Finlayson and Koocher, 1991; Kalichman and Craig, 1991; Kalichman *et al.*, 1988, 1989); (b) social service providers (e.g., Howe *et al.*, 1988; Zellman, 1990); (c) child protective services personnel (e.g., Kean and Dukes, 1991); (d) medical professionals (Kalichman *et al.*, 1988; Warner *et al.*, 1996;

Zellman, 1990); (e) police personnel (e.g., Kean and Dukes, 1991; Le and Hansen, 1994); (f) school personnel (e.g., Zellman, 1990); (g) Head Start personnel (e.g., Nightingale and Walker, 1986); and (h) child care providers (e.g., Lundquist *et al.*, 1994; Zellman, 1990). Many of the investigations have used heterogeneous groups of professionals (i.e., professionals from multiple disciplines).

The research findings to date are complex and far from conclusive. Overall, these investigations have shown that a variety of variables may affect subjects' ratings of the severity of abuse or likelihood of reporting. Recently, Warner and Hansen (1994) proposed that the variables which influence responding throughout the process can be organized according to their association with one of three major elements or classes: (a) case, (b) professional, or (c) setting variables. Case variables shown to be influential include gender of the child victim (e.g., Howe *et al.*, 1988; Kean and Dukes, 1991), gender of the parent perpetrator (e.g., Howe *et al.*, 1988), and age of the child victim (e.g., Kalichman and Craig, 1991; Kalichman *et al.*, 1988). Additional case variables specifically related to maltreatment have also been shown to affect identification or likelihood of reporting abuse, including the perpetrator's relationship to the victim (e.g., Kalichman and Craig, 1991), the type of maltreatment (e.g., Kalichman and Craig, 1991; Kalichman *et al.*, 1988; Nightingale and Walker, 1986; Zellman, 1990), the severity of maltreatment (e.g., Warner *et al.*, 1996; Zellman, 1990), the perpetrator's admission or denial of maltreatment (e.g., Kalichman *et al.*, 1989), the explanation for the injury (e.g., Warner *et al.*, 1996), and the level of specificity of the symptoms of child sexual abuse (e.g., Finlayson and Koocher, 1991).

Professional variables shown to be influential are gender of the mandated professional (i.e., subject) (e.g., Finlayson and Koocher, 1991; Howe *et al.*, 1988; Kean and Dukes, 1991), the subjects' own personal history of maltreatment (e.g., Howe *et al.*, 1988), the subjects' prior training in maltreatment (e.g., Finlayson and Koocher, 1991; Nightingale and Walker, 1986), and the subjects' expectations of the consequences of reporting on continued therapy (Kalichman *et al.*, 1989). Few setting variables have been examined. The type of practice (e.g., private practice, hospital) and size of the community may be influential (Badger, 1989; Ten Binsel and Wilcox, 1986).

The present study adds to existing research through an examination of several factors that may influence the identification and reporting of child maltreatment in a sample of licensed psychologists in the Midwest and certified Masters social workers in Nebraska. The types of maltreatment of interest in the present study are child physical abuse, neglect, psychological maltreatment, and sexual abuse. The variables that are examined as factors that might influence identification and reporting include the fol-

lowing: (a) characteristics associated with the case of potential maltreatment (i.e., race and socioeconomic status of the family, age of child victim, and type of maltreatment); and (b) characteristics of the professional (i.e., gender, training and experience with identification and reporting, personal history of maltreatment and violence). The characteristics associated with potential maltreatment are manipulated and presented in hypothetical case vignettes. Ratings are completed after reading each case vignette, including severity of the potential maltreatment situation, suspiciousness that maltreatment is occurring, and likelihood of reporting maltreatment. This specific combination of variables has not previously been examined with any sample of professionals.

Prior research has successfully used similar vignette formats to manipulate variables of interest (e.g., Finlayson and Koocher, 1991; Howe *et al.*, 1988; Kalichman and Craig, 1991; Kalichman *et al.*, 1988, 1989; DeRoma, Hansen, D'Amico, and Tishelman, 1997; Warner *et al.*, 1996; Zellman, 1990). The analog vignette methodology is more indirect than examination of actual clinical records, but it allows much greater opportunity for systematic and controlled manipulation of variables.

## METHOD

### Subjects

#### *Licensed Psychologists*

Mailing lists of currently licensed psychologists were purchased from the state licensing boards in Nebraska, Iowa, Kansas, and Missouri. Seventy five names were randomly selected from each list, for a total of 300. Selections alternated between males and females so that half of the names selected were male and half were female. Twelve uncompleted surveys were returned for various reasons (e.g., no longer engaged in clinical practice due to retirement or other reasons). A total of 125 completed surveys were returned. The return rate of 43.4% is consistent with that found in similar studies (e.g., Conte *et al.*, 1991; Finlayson and Koocher, 1991; Kalichman and Brosig, 1992; Wilson and Gettinger, 1989).

Sixty nine of the psychologist subjects (55.2%) were female. The mean age was 46.2 years ( $SD = 9.4$ ). Most were White non-Hispanic (95.2%), with the remainder being Native American (1.6%), African American (.8%), Asian American (.8%), Hispanic (.8%), and "Other" ethnic background (.8%). Most of the subjects had doctoral degrees (88%) and were currently involved in direct service provision (96.8%). Most (86.1%) had

reported at least one case of maltreatment during their career (mean number of reports = 9.02,  $SD = 13.76$ ).

### *Certified Master Social Workers*

A mailing list of Certified Master Social Workers (CMSWs) was purchased from the Nebraska state licensing board. Surveys were sent to 220 persons randomly selected from the list. Half of the names selected were female CMSWs. Ten uncompleted surveys were returned for various reasons (e.g., no longer in practice). A total of 85 completed surveys were returned (40.5%).

Forty five of the social worker subjects (52.9%) were female. The mean age was 46.6 years ( $SD = 10.4$ ). Most were White (91.8%), with the remainder being African American (3.5%), Native American (2.35%), and Hispanic (2.35%). The majority of the subjects had Masters degrees (94.1%) and were currently involved in direct service provision (88.2%). Most (89.3%) had reported at least one case of maltreatment (mean number of reports = 16.82,  $SD = 27.37$ ).

### **Questionnaire**

The survey had seven sections. The first section requested demographic and other descriptive information. The second section presented five case vignettes. The first vignette was included as an opportunity for subjects to practice before rating the vignettes of interest. The four remaining vignettes presented four types of potential child maltreatment: neglect, sexual abuse, physical abuse, and psychological maltreatment. Three variables were manipulated within these vignettes in a between-subjects design. The variables were: (a) age of the child (4, 5 years or 9, 10 years); (b) race (African American or White); and (c) an indicator of socioeconomic status (lower-class or middle-class neighborhood). Individual subjects received the same combination of these three variables for all four maltreatment vignettes. Other details such as gender and age of the parent were the same across all subjects. Sample vignettes for each of the four types of maltreatment are listed below.

A. Diane, the mother, is 28 years old and her daughter, Lori, is 9 years old. The mother and daughter are African American and live in a middle-class neighborhood. Diane reported that Lori has not taken her daily asthma medication for the past week because the prescription ran out. Diane said that she has been very busy and hasn't had time to buy more. Lori is wheezing and coughing heavily.

B. Rhonda, the daughter is 5 years old and her father, George, is 31 years old. The father and daughter are White and live in a middle-class neighborhood. Rhonda reports that when she sits on her father's lap he rubs her back and his penis gets hard in his pants. Rhonda has grabbed boys' genitals at school several times. George reports that it is just a phase she is going through and he is sure that there is nothing wrong.

C. Sherry, the mother, is 32 years old and her daughter, Rachel, is 10 years old. The mother and daughter are White and live in a lower-class neighborhood. Rachel reports that her mother spanks and shakes her, and pulls her hair when angry. Rachel has a bruise around her upper left arm which she said was caused by her mother grabbing her. Sherry reports that she spanks her daughter but denies the other behaviors.

D. Theresa, the daughter, is 4 years old and Denise, the mother, is 29 years old. The mother and daughter are African American and live in a lower-class neighborhood. Theresa reports that her mother frequently calls her names like "idiot" and "stupid" and that her mother says that she is going to leave and never come back. Denise reports that she has said such things but that she does not really mean it.

Fifty percent of those surveyed received the vignettes in the above order and the other half received them in the reverse order. After reading each vignette, subjects were asked to rate three questions. The first was "Based on the information provided, how severe is this situation?" This was rated on a four-point scale, where 1 = *not at all severe*, 2 = *somewhat severe*, 3 = *very severe*, and 4 = *extremely severe*. The second question was "How suspicious are you that child abuse or neglect is occurring?" This was rated on a four-point scale, where 1 = *not at all suspicious*, 2 = *somewhat suspicious*, 3 = *very suspicious*, and 4 = *extremely suspicious*. The third question was "How likely would you be to report this as a case of child abuse or neglect?" This was rated on a four-point scale, where 1 = *definitely would not report*, 2 = *probably would not report*, 3 = *probably would report*, and 4 = *definitely would report*.

The third section of the survey asked subjects to rate several factors that they would consider when making a decision to report child maltreatment (i.e., positive and negative impact on the child and parent, concern about relationship with the family, lack of confidence in the authorities to handle the situation, fear of prosecution for failure to report, fear of malpractice suit). These were rated on a five-point scale, where 0 = *not at all considered*, 1 = *not much consideration*, 2 = *some consideration*, 3 = *a lot of consideration*, and 4 = *primary consideration*.

The next section addressed training (i.e., number of hours of abuse and neglect training) and reporting experience (i.e., total number of reports made during career, number of reports made past year). Satisfaction with

the authority's response to their reports was also rated on a four-point scale, where 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *satisfied*, and 4 = *very satisfied*.

The final section asked questions about the subjects' personal history with family (parental) violence, physical abuse of self or sibling, sex abuse, and spousal/dating violence. These were rated on a four-point scale where, 1 = *never*, 2 = *rarely*, 3 = *sometimes*, and 4 = *often*.

### Procedure

Eight different survey forms were needed to counter balance the three 2-level variables manipulated in the vignettes (age, race, socioeconomic status). The randomly selected subjects were sent a randomly selected form of the questionnaire. Subjects were asked in a cover letter to mail the questionnaire (completed or not) to the investigators within three weeks of receiving it. An addressed business-reply envelope was provided for return mailing. To facilitate confidential responding, subjects were instructed not to mail the Informed Consent Form back to the investigators; they were instead instructed that responding and returning the enclosed questionnaire certifies informed consent. No specific identifying information (e.g., name, address) was requested on the survey.

### RESULTS

The licensed psychologist and certified Masters social worker groups were not compared directly on any of the measures because the groups differ in multiple dimensions (e.g., field of training, highest degree, type of employment). Thus, the analyses present the results for the individual samples. Because examination of the findings in a more heterogenous sample of professionals can also be informative, results of analyses for the total (combined) sample are presented as well.

Responses to the severity question (i.e., "how severe is the situation?") correlated strongly and significantly (average  $r = .79$ ,  $p < .0001$ ) with responses to the suspicion question ("how suspicious are you that child abuse or neglect is occurring?"). Given the similarity of these questions and responses, the severity ratings were not used in the following analyses to avoid redundancy and conserve space.

Ratings for the different maltreatment vignettes were not compared directly because these may differ in multiple dimensions other than form of maltreatment (e.g., severity, perpetrator, implied duration). For some

analyses, suspicion and reporting ratings for each of the four types of maltreatment were summed to create total suspicion and total reporting ratings. In many cases, analyses for the specific forms of maltreatment as well as for the total scores are presented. However, for conciseness and space limitations, only analyses for total suspicion and reporting ratings are presented in some cases.

### **Influence of Child's Age, Race, and Socioeconomic Status on Suspicion and Reporting Ratings**

Three-factor ( $2 \times 2 \times 2$ ) analyses of variance (ANOVAs) were used to evaluate effects of case variables systematically manipulated in the vignettes (age, race, and socioeconomic status) on the suspicion and reporting ratings.

#### *Licensed Psychologists*

Table I presents the significant main effects for the psychologists. The race factor was significant for suspicion ratings for sexual abuse and psychological maltreatment vignettes as well as the total rating. The race factor was also significant for reporting ratings for psychological maltreatment and the total rating. In each case, vignettes with White persons received significantly higher ratings than vignettes with African American persons.

Vignettes with younger children received significantly higher suspicion ratings than older children for psychological maltreatment vignettes. No significant interactions among the variables were found.

#### *Certified Masters Social Workers*

Table I also presents the significant main effects for the social worker sample. The socioeconomic status factor was only significant for reporting ratings for the sexual abuse vignettes. Sexual abuse vignettes indicating low socioeconomic status received significantly higher reporting ratings than vignettes indicating middle socioeconomic status.

Younger children received significantly higher suspicion ratings than older children for neglect vignettes and the total ratings. They also received significantly higher reporting ratings for neglect vignettes. No significant interactions were found.

**Table I.** Significant Main Effects of Case Variables for Psychologist and Social Worker Samples: Means, Standard Deviations, and Analyses of Variance for Suspicion and Reporting Ratings

	Suspicion			Reporting		
	<i>F</i>	<i>p</i>	Mean/ <i>SD</i>	<i>F</i>	<i>p</i>	Mean/ <i>SD</i>
<b>Psychologists<sup>a</sup></b>						
Sexual abuse						
Race						
White	4.89	.03	3.32/.71			
African American			3.03/.70			
Psychological maltreatment						
Child Age						
4-5	4.06	.05	2.55/.67			
9-10			2.32/.65			
Race						
White	7.59	.007	2.60/.63	4.45	.04	2.20/.70
African American						1.92/.73
Total ratings						
Race						
White	6.80	.01	11.9/1.9	4.27	.05	11.6/1.9
African American			11.0/1.8			10.8/2.3
<b>Social workers<sup>b</sup></b>						
Sexual abuse						
SES						
Low				4.62	.04	3.63/.62
Middle						3.31/.84
Neglect						
Child age						
4-5	4.68	.04	3.03/.76	5.42	.03	3.08/.80
9-10			2.65/.86			2.69/.80
Total ratings						
Child age						
4-5	4.36	.04	12.1/2.4			
9-10			11.1/2.2			

<sup>a</sup>*df* = 1, 113.

<sup>b</sup>*df* = 1, 77.

*Total Sample*

Table II presents the significant main effects for the total (combined) sample. Three analyses are included where the *p*-level was slightly greater than the traditional significance level of .05 (i.e., .052, .054, and .059). These are included because they approached significance and are consistent with other analyses.

The socioeconomic status factor only evidenced differences for the sexual abuse vignettes. Sexual abuse vignettes indicating low socioeconomic status received higher suspicion and reporting ratings than vignettes indicating middle socioeconomic status.

**Table II.** Significant Main Effects of Case Variables for Total Sample: Means, Standard Deviations, and Analyses of Variance for Suspicion and Reporting Ratings

	Suspicion			Reporting		
	<i>F</i> <sup>a</sup>	<i>p</i>	Mean/ <i>SD</i>	<i>F</i> <sup>a</sup>	<i>p</i>	Mean/ <i>SD</i>
Sexual abuse						
SES						
Low	4.66	.04	3.33/.69	3.61	.059	3.43/.72
Middle			3.13/.77			3.24/.81
Race						
White	3.81	.052	3.33/.71			
African American			3.14/.75			
Physical abuse						
Child age						
4-5	6.38	.02	3.25/.63			
9-10			3.04/.66			
Race						
White				4.47	.04	3.46/.62
African American						3.27/.69
Neglect						
Race						
White	3.75	.054	2.78/.75			
African American			2.67/.74			
Psychological maltreatment						
Child age						
4-5	5.24	.03	2.48/.78			
9-10			2.26/.63			
Race						
White	7.74	.006	2.51/.65	6.44	.02	2.32/.73
African American			2.25/.74			2.04/.80
Total ratings						
Child age						
4-5	7.06	.009	11.8/2.1			
9-10			11.1/2.0			
Race						
White	8.36	.004	11.9/2.0	7.72	.006	12.0/1.9
African American			11.1/2.1			11.2/2.3

<sup>a</sup>*df* = 1, 198.

The race factor demonstrated differences across all forms of maltreatment. Vignettes with White persons received higher suspicion ratings than vignettes with African American persons for sexual abuse, neglect, psychological maltreatment, and the total (summed) rating. Vignettes with White persons also received significantly higher reporting ratings for physical abuse, psychological maltreatment, and the total rating.

Younger children received significantly higher suspicion ratings than older children for physical abuse and psychological maltreatment vignettes, and the total rating. No significant interactions were found.

### Evaluation of Gender Differences in Suspicion and Reporting Ratings

The suspicion and reporting ratings of the female and male subjects were compared using *t*-tests. Analyses were conducted for the total sample and both individual samples. The suspicion and reporting ratings for each form of maltreatment and the total suspicion and reporting ratings were examined. Of these analyses there were two significant differences for sex abuse vignettes, with females providing significantly higher ratings: suspicion ratings for the psychologists,  $t(122) = 2.32, p < .04$ , and reporting ratings for the total sample,  $t(206) = 2.38, p < .03$ . There were no other significant differences.

### Professional Training and Experience

The means and standard deviations for the professional training and experience variables are presented in the top half of Table III. The number of hours of training in abuse and neglect ranged from a mean of 19.9 hr for the psychologists to a mean of 36.18 hr for the social workers. Both samples had considerable experience reporting child maltreatment and reported that they were, on the average, less than satisfied with the authority's response when they reported maltreatment.

Table IV presents the significant Pearson product-moment correlations of total suspicion and reporting ratings with the training and experience variables. Hours of abuse and neglect training, total number of reports made, reports from the past year, and satisfaction with the authority's response to past reports had small to moderate positive correlations with suspicion and reporting ratings. More of these correlations of suspicion and reporting ratings with professional experience variables were significant for psychologists than for social workers.

### Personal History of Maltreatment and Violence

The percentage of psychologists reporting a personal history of various forms of maltreatment or violence is as follows: parental violence—27.2%, physical abuse—56.0%, physical abuse of siblings—59.0%, sexual abuse—16.8%, victim of marital or dating violence—26.6%. The percentages for social workers are as follows: parental violence—28.6%, physical abuse—54.8%, physical abuse of siblings—59.8%, sexual abuse—22.6%, victim of marital or dating violence—32.1%. The means and standard de-

**Table III.** Professional and Personal History with Maltreatment and Violence: Means and Standard Deviations

	Psychologists		Social Workers	
	Mean/SD		Mean/SD	
Professional History with Maltreatment				
Hours of abuse and neglect training	19.90/26.27		36.18/34.92	
Total reports	9.02/13.76		16.82/27.37	
Reports past year	1.75/4.45		2.24/4.36	
Satisfaction with authority's response <sup>a</sup>	2.33/1.05		2.27/1.01	
Personal history of maltreatment <sup>b</sup>				
Parental violence	1.37/.68		1.48/.86	
Physical abuse-self	1.70/.74		1.79/.87	
Physical abuse-siblings	1.78/.80		1.82/.82	
Sex abuse	1.22/.57		1.36/.72	
Victim of marital or dating violence	1.31/.54		1.46/.78	

<sup>a</sup>For satisfaction variable, 1 = *very dissatisfied*, 2 = *dissatisfied*, 3 = *satisfied*, 4 = *very satisfied*.

<sup>b</sup>For maltreatment variables, 1 = *never*, 2 = *rarely*, 3 = *sometimes*, 4 = *often*.

viations for each of the maltreatment variables are presented in the bottom half of Table III.

Table IV also presents the significant Pearson product-moment correlations of total suspicion and reporting ratings with personal history of maltreatment or violence. Several of significant relationships were found. Occurrence of domestic violence between parents was positively related to suspicion and

**Table IV.** Pearson Product-Moment Correlations of Total Suspicion and Reporting Ratings with Professional and Personal History with Maltreatment and Violence

	Psychologists		Social Workers		Total Sample	
	Susp.	Report.	Susp.	Report.	Susp.	Report.
Professional history with maltreatment						
Hours of abuse and neglect training	.077	.093	.210*	.263*	.150*	.208**
Total reports	.197*	.280***	-.126	-.027	.010	.137*
Reports past year	.191*	.300***	-.037	-.049	.092	.208**
Satisfaction with authority's response	.153	.243**	.017	.047	.092	.156*
Personal history of maltreatment						
Parental violence	.127	.143	.143	.074	.137*	.120*
Physical abuse-self	-.131	.011	.363***	.190*	.122*	.103
Physical abuse-siblings	-.178*	-.031	.400***	.294**	.103	.117*
Sex abuse	.076	.086	-.005	.130	.123*	.037
Victim of marital or dating violence	.016	-.030	.330***	.312**	.192**	.161*

\* $p < .05$ .

\*\* $p < .01$ .

\*\*\* $p < .001$ .

**Table V.** Factors Considered When Making a Decision about Reporting: Means and Standard Deviations<sup>a</sup>

	Psychologists	Social Workers
	Mean/ <i>SD</i>	Mean/ <i>SD</i>
Lack of confidence in authorities	1.31/1.16	1.21/1.10
Concern about relationship	1.42/1.07	1.05/0.94
Fear of prosecution for failure to report	1.92/1.27	1.90/1.40
Fear of malpractice	1.59/1.22	1.48/1.26
Positive impact on child	3.39/0.95	3.48/0.91
Negative impact on child	2.82/1.24	2.76/1.21
Positive impact on parent	2.62/1.19	2.77/1.13
Negative impact on parent	1.94/1.21	2.01/1.19

<sup>a</sup>0 = not at all considered, 1 = not much consideration, 2 = some consideration, 3 = a lot of consideration, 4 = primary consideration.

reporting ratings for the total sample. Physical abuse as a child was positively related to suspicion ratings for the total sample and the social workers, and to reporting ratings for the social workers. Physical abuse of siblings was positively related to reporting for the total sample and social workers, positively related to suspicion ratings for social workers, and negatively related to suspicion ratings for psychologists. Sexual abuse as a child was positively related to reporting ratings for the total sample. The experience of being a victim of marital or dating violence was positively related to suspicion and reporting ratings for the total sample and for the social workers. More of these correlations of suspicion and reporting ratings with personal experience variables were significant for social workers than psychologists.

#### Factors Considered when Making a Decision about Reporting Maltreatment

The means and standard deviations for the ratings of the factors considered when making a decision about reporting maltreatment are presented in Table V. The possibility of positive or negative impact on the child and positive impact on the parent received the most consideration for both of the samples.

Table VI presents the significant Pearson product-moment correlations of total suspicion and reporting ratings with factors subjects consider when making a decision about reporting. A variety of correlations were small but statistically significant. The belief that reporting may have a positive impact on the child was positively related to suspicion and reporting ratings. Factors that were negatively related to suspicion and/or reporting ratings were lack of confidence in the ability of the relevant authorities to handle the situation, positive past experiences with the fam-

**Table VI.** Pearson Product-Moment Correlations of Total Suspicion and Reporting Ratings with Factors Considered When Making a Decision About Reporting

	Psychologists		Social Workers		Total Sample	
	Susp.	Report.	Susp.	Report.	Susp.	Report.
Lack of confidence in authorities	-.021	-.059	-.238*	-.294**	-.094	-.155*
Concern about relationship	.002	-.156*	-.121	-.225*	-.050	-.207***
Fear of prosecution for failure to report	-.030	-.042	-.081	-.179*	-.057	-.100
Fear of malpractice	.151*	.109	-.158	-.204*	.007	-.023
Positive impact on child	.233**	.099	.114	.135	.179**	.120*
Negative impact on child	.027	-.173*	-.181*	-.180*	-.067	-.175**
Positive impact on parent	.063	-.018	-.195*	-.216*	-.051	-.084
Negative impact on parent	-.125	-.187*	-.261**	-.258**	-.185**	-.206**

\* $p < .05$ .\*\* $p < .01$ .\*\*\* $p < .001$ .

ily, concern about the impact of reporting on the relationship with the family, fear of prosecution for failure to report, and the belief that reporting may have a negative impact on the child or the parent (i.e., the less these factor were considered, the higher the suspicion or reporting rating). Interestingly, the belief that reporting would have a positive impact on the parent was negatively related to suspicion and reporting ratings for the social workers. Another unusual finding was that self-reported fear of malpractice was positively related to suspicion ratings for psychologists and negatively related to reporting ratings for social workers. Psychologists and social workers may have considered this item differently. For example, psychologists may have thought of being sued for malpractice for not identifying maltreatment, while social workers thought of being sued because of reporting maltreatment (e.g., claims that reporting was unwarranted, malicious, etc.).

#### Professional Variables as Predictors of Total Suspicion and Reporting Ratings

Stepwise multiple regression analyses were used to examine the factors considered when making a report, professional experience with maltreatment, and personal history of maltreatment or violence as predictors of total suspicion and reporting ratings. Table VII presents results of the regression analyses. Small to moderate amounts of variance (from 11.1 to 25.9 percent) were accounted for by the multiple regression equations. A wide variety of factors were included in the final equations. For the psy-

**Table VII.** Multiple Regression Analyses: Factors Considered when Making a Report and Personal History with Maltreatment or Violence as Predictors of Total Suspicion and Reporting Ratings

Psychologists			
	<i>B</i>	<i>SE B</i>	<i>Beta</i>
Total suspicion $R^2 = .111, p < .0001$			
Positive impact on child	.547	.171	.278**
Reports past year	.104	.037	.245**
Total reporting $R^2 = .214, p < .0001$			
Reports past year	.147	.040	.308***
Satisfaction with authority's response	.426	.174	.201*
Positive impact on child	.477	.189	.215*
Negative impact on parent	-.304	.146	-.174*
Victim of marital/dating violence	.504	.254	.162*
Social workers			
	<i>B</i>	<i>SE B</i>	<i>Beta</i>
Total suspicion* $R^2 = .259, p < .0001$			
Physical abuse-siblings	.878	.294	.301**
Victim of marital/dating violence	.790	.303	.262*
Lack of confidence in authorities	-.490	.208	-.228*
Total reporting $R^2 = .197, p < .0001$			
Victim of marital/dating violence	.953	.280	.338***
Lack of confidence in authorities	-.636	.199	-.317**
Total sample			
	<i>B</i>	<i>SE B</i>	<i>Beta</i>
Total suspicion $R^2 = .111, p < .0001$			
Victim of marital/dating violence	.581	.209	.183**
Negative impact on parent	-.373	.116	-.215**
Positive impact on child	.477	.149	.214**
Total reporting $R^2 = .140, p < .0001$			
Reports past year	.114	.033	.227***
Positive impact on child	.434	.155	.185**
Negative impact on parent	-.421	.120	-.231***
Victim of marital/dating violence	.533	.217	.159*

\* $p < .05$ .  
 \*\* $p < .01$ .  
 \*\*\* $p < .001$ .

chologists, positive impact on the child, reports made past year, satisfaction with the authority's response, and being a victim of marital/dating violence appeared with positive beta weights, while negative impact on the parent appeared with a negative beta. Different variables emerged as significant predictors for social workers, including physical abuse of siblings and being a victim of marital/dating violence with positive betas, and lack of confidence in the authorities with a negative beta. For the total sample, positive impact on the child, reports made past year, and being a victim of marital/dating violence appeared with positive beta weights, while negative impact on the parent appeared with a negative beta.

## DISCUSSION

It has been increasingly recognized that many professionals who are mandated to report suspicions of child maltreatment often fail to recognize potential maltreatment or fail to report their suspicions (Brosig and Kalichman, 1992; Kalichman, 1993; National Center on Child Abuse and Neglect, 1988; Warner *et al.*, 1996). Investigators have begun to examine factors that influence the identification or reporting of child maltreatment in a variety of professional samples (e.g., Finlayson and Koocher, 1991; Howe *et al.*, 1988; Kalichman *et al.*, 1988, 1989; Warner and Hansen, 1997; Zellman, 1990). The research has yielded complex findings that are far from conclusive. The present study adds to our understanding of the factors that may influence identification and reporting of maltreatment by examining numerous possible contributing factors, multiple forms of maltreatment, and two samples of professionals.

The possible influence of a child's age, race, and socioeconomic status were manipulated in case vignettes. As expected, some evidence for differing judgments based on child's age was found, with vignettes of younger children more likely to receive higher suspicion and reporting ratings than older children. This occurred even though the forms of possible maltreatment presented should generally receive the same consideration across ages. This is consistent with prior research which has suggested that younger children are more likely to be reported for physical abuse or neglect (e.g., Hampton and Newberger, 1985; Howe *et al.*, 1988).

The effect of socioeconomic status was limited to the sexual abuse vignettes. The difference was as expected, with lower socioeconomic status being associated with higher ratings of suspicion and reporting. There is no major reason to believe that the socioeconomic status of the persons described in the vignette is relevant. However, given the incidence and prevalence literature which shows that persons with lower income are at greater risk for all forms of maltreatment (e.g., NCCAN, 1988), it is surprising that socioeconomic status did not have a significant effect for the other forms of maltreatment. Research has shown that lower income families have a higher probability of being reported by hospital staff than families with incomes over \$25,000 (Hampton and Newberger, 1985).

The factor that had the most impact on ratings was race of the parent and child described in the vignette. Vignettes with an African American family were often rated as being significantly less severe and less likely to be reported than identical vignettes with a White family. One hypothesis is that a racial bias existed and that the subjects saw the possible maltreatment described as more extreme or non-normative when presented with a White family but less extreme and more normative when presented with

an African American family. Another possible reason for this is that the predominantly White samples hypothesized that race was a factor being evaluated and overcompensated by rating vignettes with African American persons significantly lower. Unfortunately, there is no way to determine exactly why the racial differences were found. It is interesting to note that identical questionnaires used in other recent studies with teachers and day care providers (Lundquist *et al.*, 1994) and law enforcement personnel (Le and Hansen, 1994) have yielded a similar response pattern for race. Although many variables have been examined in prior research, race has received little attention. Prior research of hospital settings has shown that African American and Hispanic families have a higher probability of being reported than White families (Hampton and Newberger, 1985).

Analyses examining the influence of the gender of the professional were mostly nonsignificant. The only significant differences were for sex abuse vignettes. Consistent with prior research (e.g., Howe *et al.*, 1988), female professionals provided significantly higher ratings of suspicion (for the psychologist sample) and likelihood of reporting (for the total sample).

Overall, the samples reported that they had received some training on child abuse and neglect, that they had considerable experience reporting maltreatment, and that they tended to be less than satisfied with the authority's response when they reported. Over half of the subjects in both samples reported experience with physical abuse—of themselves or siblings, nearly a third were a victim of dating or marital violence, approximately a fourth witnessed parental violence, and less than a fourth experienced sexual abuse.

Subject ratings indicated that they consider factors such as impact on the child or parent, their lack of confidence in the authorities, and fear of prosecution or malpractice when they are considering making a report. Impact on the child or parent were the factors that received the most consideration. Legally these factors are irrelevant. A suspicion is a suspicion, and professionals are mandated to report suspicions no matter how they feel about reporting (Kalichman, 1993; Warner and Hansen, 1994).

A number of the variables on professional training and experience with maltreatment, personal history with maltreatment or violence, and factors considered when making a report had small but significant relationships with suspicion and reporting ratings. A variety of previous studies have examined some of these variables (see Kalichman, 1993; Kalichman and Craig, 1991; Warner and Hansen, 1994 for reviews), but this is the first study to examine so many of them simultaneously. Overall, small to moderate amounts of variance were accounted for by the multiple regression equations. A wide variety of the professional variables contributed significantly in the equations. Consideration of positive impact on the child, number of reports made past year, satisfaction with the authority's response in prior experiences, occurrence of

physical abuse of siblings, and being a victim of marital/dating violence appeared with positive relationship, while negative impact on the parent and lack of confidence in the authorities had a negative relationship with suspicion and reporting ratings. These regression analyses were exploratory to examine how much variance could be accounted for by the variety of professional variables assessed in this study. Given the complexity of the phenomena of suspecting and reporting maltreatment, the relatively small amounts of variance explained is not surprising.

Unique features of this study were that multiple forms of maltreatment and two distinct samples were examined. Although the study was not intended to directly contrast the different forms of maltreatment, the overall pattern of results suggests that different factors may have different levels of influence for the various types of maltreatment. Similarly, results suggest different types of influences may be operating for different professionals. Interestingly, professional history variables (e.g., total reports made, reports past year) were more related to suspicion and reporting ratings for psychologists, while personal history with maltreatment or violence (e.g., physical abuse, marital/dating violence) were more influential for social workers.

The present study used vignette and self-report methodology. Real-life situations contain many additional facts and ambiguities that affect personal judgments about suspicion and reporting of child maltreatment. Much of the previous research, however, has successfully used similar vignette formats and self-report items (e.g., Finlayson and Koocher, 1991; Howe *et al.*, 1988; Kalichman and Craig, 1991; Kalichman *et al.*, 1988, 1989; DeRoma *et al.*, 1997; Warner *et al.*, 1996; Zellman, 1990). The analog vignette methodology is more indirect than examination of actual clinical cases but it allows for more systematic manipulation of variables.

The samples were randomly chosen from lists of licensed professionals and the return rates, although lower than we hoped, were comparable to what was found in previous studies (e.g., Conte *et al.*, 1991; Finlayson and Koocher, 1991; Kalichman and Brosig, 1992; Wilson and Gettinger, 1989). Additional research, possibly with even larger samples representing different states or even a nationally representative sample, would be useful to cross validate the present findings.

The identification and reporting process is a complex series of responses that may be influenced at any point by a variety of factors (Kalichman, 1993; Warner and Hansen, 1994). The results of the study have implications for psychologists and social workers in that factors that may influence identification and reporting of child maltreatment are identified and professionals can be made more aware of these factors that may lead to biased or problem responding. Ultimately, we need more active efforts to address these factors through improvements in the child protective services system (e.g., to in-

crease confidence and satisfaction of mandated reporters) and through improved training of professionals so that they are aware of potential biases or inappropriate influences. Facilitation of more accurate identification and reporting of child maltreatment will facilitate prevention of maltreatment and increase positive outcomes for families and professionals.

## REFERENCES

- Badger, L. W. (1989). Reporting of child abuse: Influence of characteristics of physician, practice, and community. *Southern Med. J.* 82: 281-286.
- Brosig, C. L., and Kalichman, S. C. (1992). Clinicians' reporting of suspected child abuse: A review of the empirical literature. *Clin. Psych. Rev.* 12: 155-168.
- Browne, A., and Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psych. Bull.* 99: 66-77.
- Conaway, L. P., and Hansen, D. J. (1989). Social behavior of physically abused and neglected children: A critical review. *Clin. Psych. Rev.* 9: 627-652.
- Conte, J. R., Fogarty, L., and Collins, M. E. (1991). National survey of professional practice in child sexual abuse. *J. Fam. Viol.* 6: 149-166.
- DeRoma, V. M., Hansen, D. J., D'Amico, P., and Tishelman, A. C. (1997). Influence of information related to child physical abuse on professional ratings of adjustment and prognosis. *Child Abuse Negl.* 21: 295-308.
- Finlayson, L. M., and Koocher, G. P. (1991). Professional judgment and child abuse reporting in sexual abuse cases. *Professional Psychol. Res. Pract.* 22: 464-472.
- Hampton, R. L., and Newberger, E. (1985). Child abuse incidence and reporting by hospitals: Significance of severity, class and race. *Am. J. Pub. Health* 75: 56-68.
- Hansen, D. J., and Warner, J. E. (1992). Assessment of child physical abuse and neglect. In Ammerman, R. T., and Hersen, M. (eds.), *Assessment of Family Violence: A Clinical and Legal Sourcebook*, John Wiley and Sons, New York, pp. 123-147.
- Hansen, D. J., and Warner, J. E. (1994). Treatment adherence of maltreating families: A survey of professionals regarding prevalence and enhancement strategies. *J. Fam. Viol.* 9: 1-19.
- Howe, A. C., Herzberger, S., and Tennen, H. (1988). The influence of personal history of abuse and gender on clinicians' judgments of child abuse. *J. Fam. Viol.* 3: 105-119.
- Kalichman, S. C. (1993). *Mandated Reporting of Suspected Child Abuse: Ethics, Law, and Policy*, American Psychological Association, Washington, DC.
- Kalichman, S. C., and Brosig, C. L. (1992). The effects of statutory requirements on child maltreatment reporting: A comparison of two state laws. *Amer. J. Orthopsychiat.* 62: 284-296.
- Kalichman, S. C., and Craig, M. E. (1991). Professional psychologists' decisions to report suspected child abuse: Clinician and situation influences. *Professional Psychol. Res. Pract.* 22: 84-89.
- Kalichman, S. C., Craig, M. E., and Follingstad, D. R. (1988). Mental health professionals and suspected cases of child abuse: An investigation of factors influencing reporting. *Comm. Ment. Health J.* 24: 43-51.
- Kalichman, S. C., Craig, M. E., and Follingstad, D. R. (1989). Factors influencing the reporting of father-child sexual abuse: Study of licensed practicing psychologists. *Professional Psychol. Res. Pract.* 20: 84-89.
- Kean, R. B., and Dukes, R. L. (1991). Effects of witness characteristics on the perception and reportage of child abuse. *Child Abuse Negl.* 15: 423-435.
- Le, P. T., and Hansen, D. J. (1994, March). Patterns of identifying and reporting child maltreatment among law enforcement personnel. Presented at the American Psychology-Law Society Conference, Santa Fe, NM.

- Lundquist, L. M., Bumby, K. M., and Hansen, D. J. (1994, July). Factors that influence child care providers' and teachers' identification and reporting of child maltreatment. Presented at the National Conference on Family Violence: Research and Practice, Omaha, NE.
- Malinosky-Rummell, R., and Hansen, D. J. (1993). Long-term consequences of childhood physical abuse. *Psych. Bull.* 114: 68-79.
- National Center on Child Abuse and Neglect. (1988). *Study of National Incidence and Prevalence of Child Abuse and Neglect: 1988*. U.S. Department of Health and Human Services, Washington, DC.
- Nightingale, N. N., and Walker, E. F. (1986). Identification and reporting of child maltreatment by Head Start personnel: Attitudes and experiences. *Child Abuse Negl.* 10: 191-199.
- Ten Benschel, R. W., and Wilcox, M. (1986). Facilitating physician reporting of child abuse. *Minnesota Med.* 69: 651-653.
- Warner, J. E., and Hansen, D. J. (1997). Identification and reporting of child abuse by medical professionals: A critical review. *Child Abuse Negl.* 18: 11-25.
- Warner-Rogers, J. E., Hansen, D. J., and Spieth, L. E. (1996). The influence of case and professional variables on identification and reporting of physical abuse: A study with medical students. *Child Abuse Negl.* 20: 851-866.
- Wilson, C. A., and Gettinger, M. (1989). Determinants of child-abuse reporting among Wisconsin school psychologists. *Prof. School Psych.* 4: 91-102.
- Zellman, G. L. (1990). Report decision-making patterns among mandated child abuse reporters. *Child Abuse Negl.* 14: 325-336.