NAVAL HEALTH RESEARCH CENTER

SELF-DEFINITION AS A SURVIVOR OF CHILDHOOD SEXUAL ABUSE AMONG NAVY RECRUITS

V. A. Stander
C. B. Olson
L. L. Merrill

Report No. 00-25

Approved for public release; distribution unlimited.

NAVAL HEALTH RESEARCH CENTER
P. O. BOX 85122
SAN DIEGO, CA 92186-5122

BUREAU OF MEDICINE AND SURGERY (MED-02)
2300 E ST. NW
WASHINGTON , DC 20372-5300

Journal of Consulting and Clinical Psychology
2002, Vol. 70, No. 2, 369–377

DOI: 10.1037//0022-006X.70.2.369

Self-Definition as a Survivor of Childhood Sexual Abuse Among Navy Recruits

Valerie A. Stander, Cheryl B. Olson, and Lex L. Merrill
Naval Health Research Center

This study explored how specific childhood sexual experiences (CSEs) might be related to self-identification as a victim of sexual abuse and to gender differences in self-defined victimization. Hierarchical logistic regression was used to estimate the relationship of demographic and CSE characteristics with self-definitions. The characteristics most strongly associated were threats–force, incest, and younger age at the time of the experience. Men were less likely than were women to acknowledge abuse and to report CSE characteristics indicative of abuse. Women were more likely to identify themselves as victims the more CSEs they reported involving sexual penetration. Finally, in an analysis of familial abuse, men were more likely to define themselves as victims if the perpetrator was also male.

Researchers of child sexual abuse have documented numerous long-term correlates, such as anxiety, depression, hypersexuality, low self-esteem, chronic medical complaints, and high revictimization rates (Browne & Finkelhor, 1986; Meston & Heiman, 2000; Mullen, Martin, Anderson, Romans, & Herbison, 1996; Rosen & Martin, 1996; Trickett & Putnam, 1998; Wood, 1996). However, there are many variations in the way childhood sexual abuse is defined and measured, constraining the comparability and potential validity of research results (Briere, 1992; Haugaarrd, 2000). One concern is that most studies rely on retrospective self-reports to identify victims of abuse (Briere, 1992; Widom & Shepard, 1996). Self-reports are potentially problematic because (a) memories of childhood experiences may be inaccurate, (b) victims may censor themselves because of the sensitive nature of the subject, and (c) adults redefine their childhood experiences in light of subsequent knowledge and events (Widom & Shepard, 1996).

Personal conceptions of childhood sexual experiences (CSEs) may have a greater impact on research outcomes depending on how questions about childhood sexual abuse are asked. For example, some surveys simply ask whether participants have ever been sexually abused. This is the case, for instance, in entrance surveys for military basic training (Carbone, Cigrang, Todd, & Fiedler, 1999; Cigrang, Carbone, Todd, & Fiedler, 1998; Talcott, Haddock, Klesges, Lando, & Fiedler, 1999). These types of surveys depend on participants' self-definitions of their past experiences and may assess different constructs than do studies that use operational definitions. Operational definitions of sexual abuse have tended to focus on specific characteristics, such as the victim's age, the age of the perpetrator, and whether sexual contact occurred (Briere, 1992). Individuals may use different criteria when deciding how to define their own CSEs.

The present study asked male and female Navy recruits whether they personally believed they had been sexually abused prior to age 18. Subsequently, participants were asked to respond to a more lengthy measure assessing specific CSEs participants recalled prior to age 18 with someone at least 5 years older than themselves. The focus was to determine the relationship between self-definitions of abuse and a number of specific experiential characteristics that might define abusive CSEs. This study also explored how demographic characteristics and in particular, gender, might be related to self-definitions of abuse.

The specific characteristics of CSEs we included were chosen because they have been part of operational definitions of abuse in previous studies, and they have been related to long-term abuse outcomes. Trickett and Putnam (1998) reviewed the literature on social, emotional, and behavioral outcomes of childhood sexual abuse across the life span. They concluded that research results regarding the importance of particular CSE characteristics have been contradictory and that most of the literature has focused on female victims. However, some characteristics have frequently been related to poor long-term outcomes. These include sexual penetration, the involvement of a family member (particularly a father figure), the use of force to gain the victim's cooperation, greater frequency or duration of CSEs, and early age at onset.

We hypothesized that the characteristics researchers use to define abuse severity might influence individuals to define their own experiences as abusive. We expected this because researchers share values and conceptions about abuse with the lay public. Furthermore, CSE characteristics related to poor long-term outcomes may be experienced as more traumatic and therefore make it more likely that participants will identify themselves as victims.

Valerie A. Stander, Cheryl B. Olson, and Lex L. Merrill, Naval Health Research Center, San Diego, California.

The views expressed in this article are ours and do not reflect the official policy or position of the Department of the Navy, Department of Defense, or the U.S. Government. Approved for public release; distribution unlimited. This research has been conducted in compliance with all applicable federal regulations governing the protection of human subjects in research.

We acknowledge the contributions of the project sponsor, the Navy Family Advocacy Program, whose support made the study possible. We extend our sincere gratitude to the staff at the Recruit Training Command, Great Lakes, Illinois, and especially to the U.S. Navy recruits who participated in this study.

Correspondence concerning this article should be addressed to Valerie A. Stander, Naval Health Research Center, P.O. Box 85122, San Diego, California 92186-5122. E-mail: stander@nhrc.navy.mil

Accordingly, those who experienced CSEs involving a family member, sexual penetration, or threats–force, and those reporting a higher number of incidents or an early age of onset should be more likely to define themselves as abuse victims in comparison with those who report CSEs without these characteristics. We also hypothesized a positive relationship between identification as a victim and the number of relationships in which CSEs occurred.

Demographic characteristics may also influence personal definitions of abuse. We focused on gender and self-definitions of CSEs, because studies have consistently noted higher rates of sexual abuse among girls than among boys (Urquiza & Keating, 1990). There is also evidence that women evaluate their CSEs more negatively than do men (Bauserman & Rind, 1997). Self-definitions of abuse may play a role in these differences. First, boys may be less likely to report abuse and seek help, so that estimates of sexual abuse rates among male children are unreliable (Briere, Evans, Runtz, & Wall, 1988; Feiring, Taska, & Lewis, 1999). This may be the case because the role of victim is inconsistent with a masculine self-concept, making it less likely boys will publicly assume this identity (Briere et al., 1988; Finkelhor, 1984; Urquiza & Keating, 1990). Furthermore, because most perpetrators are male, negative societal attitudes regarding homosexuality may deter male victims from disclosure. We hypothesized that fewer men than women would acknowledge themselves to be victims of abuse among individuals reporting CSEs that met broad criteria for childhood sexual abuse.

Men may also be less likely to report abuse than are women if their CSEs involve fewer characteristics indicative of severe abuse. Few studies have explored this issue, with mixed results. For instance, Briere et al. (1988) found that men and women reported about the same age of onset for CSEs and about the same percentage of CSEs involving incest. However, women tended to report abuse later into adolescence and to report more instances involving sexual penetration. In contrast, Fischer (1991) found no gender differences in reports of childhood sexual abuse along a continuum from noncontact exhibitionism to intercourse. However, more women than men reported incestuous CSEs. In the present study, we evaluated this issue again, hypothesizing that women would report more characteristics associated with abuse severity.

Finally, Urquiza and Keating (1990) suggested that the definition of sexual abuse is more ambiguous for boys than for girls because of gender biases in attitudes and values regarding appropriate sexual behavior. If sexual behavior is socially more acceptable among boys than among girls, and indeed is more expected of them, they may be more likely to interpret their CSEs benignly or to assume responsibility for initiating them (Bauserman & Rind, 1997). Boys may particularly interpret their CSEs as voluntary when those experiences are in harmony with stereotypes for male sexual behavior. On the other hand, they may be more sensitive to sexual experiences that violate social norms, such as CSEs with a male perpetrator, CSEs with a perpetrator who is a relative, and CSEs involving threats–force. We hypothesized that we would find significant interactions between gender and CSEs that violate social norms for male behavior. These factors should be significantly more important among men, whereas women should interpret their experiences as abusive with less deference to these factors.

In summary, we identified four hypotheses for this study. First, we expected those who had CSEs (a) with family members, (b) involving sexual penetration, or (c) by threat or force, and those reporting (d) a greater number of CSEs, (e) more relationships in which CSEs occurred, and (f) a younger age at onset, to be more likely to define themselves as abuse victims. Second, among individuals who have all had CSEs meeting broad criteria for childhood sexual abuse, fewer men than women would self-define themselves as abuse victims. Third, fewer men than women would report CSE characteristics indicative of abusive experiences. Finally, a male perpetrator, a perpetrator who is a relative, and the use of threats–force would be stronger predictors of self-defined childhood abuse among men than they would be among women.

Method

Participants

Participants were 5,226 female and 5,969 male Navy recruits. Most were high school graduates (83%), 18 to 20 years old (70%), and single with no children (84%). Sixty-one percent were White, 19% were Black, 11% were Hispanic, and 9% reported other races or ethnicities. For this study, we identified two groups of participants. Group 1 (n = 2,010) included all those who reported CSEs prior to age 18 with any individual at least 5 years older than themselves (women = 47%; men = 23%), $\chi^2(1, n = 10{,}053) = 643.42$, $p < .01$. Participants who did not provide complete data for the analyses involving this group were excluded. Whereas Group 1 included participants reporting CSEs with either family or nonfamily members, Group 2 (n = 663) included only those reporting CSEs prior to age 18 with an immediate or extended family member at least 5 years older than themselves (women = 18%; men = 3%), $\chi^2(1, n = 9{,}772) = 585.14$, $p < .01$. Again, those with incomplete data for the analyses involving this group were excluded.

Instruments

Demographic and Family History Questionnaire (DFHQ). The DFHQ asked questions about participants' age, race, marital status, children, and education level. It also asked about family background, including parental income and marital status.

Self-defined childhood sexual abuse. Classification of respondents as self-defined victims of childhood sexual abuse was based on their responses to a single yes–no item in the DFHQ: *Before the age of 18, were you ever sexually abused?*

Childhood Sexual Experience Checklist (CSE Checklist). After filling out the DFHQ, participants completed the CSE Checklist. The checklist asked whether participants had experienced sexual touching–kissing or any degree of sexual penetration (oral, anal, or vaginal intercourse) prior to age 18 with someone at least 5 years older than themselves. The CSE Checklist included a list of persons with whom participants might have had CSEs (i.e., parents, stepparents, siblings, grandparents, teachers, or employers). For each person with whom participants had a CSE, they were to indicate their age when the event first occurred, the perpetrator's age when it first happened, the number of times the experience occurred, and whether that person used threats–force during the incident. On the basis of this information, the analyses for this report included (a) participants' age at the time of their first CSE, (b) the number of different relationships in which participants had CSEs, (c) the number of CSEs involving sexual penetration, (d) the number of CSEs involving only sexual touching–kissing, (e) whether participants had CSEs with family members, and (f) whether threats–force were used to gain their compliance. For participants reporting CSEs with family members (Group 2), we also included a variable indicating the gender of the family member with whom the experiences occurred. This variable excluded those who did not specifically identify the relationship they had with the family member(s) involved (i.e., reported the relationship as *other*), as well as those who reported CSEs with both male and female family members.

Procedure

A survey was administered to all gender-integrated units during the first week of basic training at Recruit Training Command, Great Lakes, Illinois. In a classroom setting, a research assistant read a description of the study and told participants that they did not have to answer any portion of the survey if they were not comfortable doing so. Participants were also offered professional counseling in the event that their participation was upsetting. Those who agreed to participate then signed a privacy act statement and an informed consent form describing the study and the procedures to protect their confidentiality. Half the respondents participated anonymously. The other half were asked for social security numbers so their military records could be matched to their responses and so they could participate in a longitudinal study. In our analyses, we combined participants from both the anonymous and the confidential conditions and included an indicator for participation condition as a control variable.

Because there were a number of participants with missing data, we evaluated whether their exclusion would bias our results. Only 1% of the 11,195 respondents did not respond to the DFHQ item asking whether they had ever been sexually abused. However, 23% were missing CSE checklist data for this study. Participants may have been uncomfortable giving the specific details of abusive CSEs, they may have had difficulty recalling these details, or they may simply have omitted subquestions regarding their CSEs. In comparison with those who completed the checklist, 15% more of the participants with missing data self-defined themselves as sexual abuse victims ($p < .01$). However, this difference may be accounted for because participants who had CSEs were required to answer more questions on the CSE checklist than were those who had no CSEs. Those with CSEs had a higher likelihood of leaving at least one item blank simply because they had more questions to answer. Considering only participants who could be categorized as having had a CSE, we found no difference between those with complete versus incomplete data in the percentages who self-reported abuse.

Among participants identified as having CSEs, 13% fewer in Group 1 and 14% fewer in Group 2 reported that their CSEs occurred in multiple relationships ($p < .01$) in comparison to those with missing data. This difference again may be because those with more CSEs to report had a greater likelihood of leaving items blank. This was the only significant difference in CSE characteristics for Group 1. Participants in Group 2 were also 0.75 years older on average when their CSEs first began ($p < .05$), and 12% fewer reported the use of threats–force during their CSEs ($p < .01$). We further evaluated the influence these differences in CSE characteristics might have on our analyses by creating a dummy variable identifying participants with complete versus incomplete data. We then computed a series of logistic analyses to see if this new variable might interact with any CSE characteristics in predicting self-defined abuse. Out of twelve possible interactions, only two were significant. First, there was a difference in the relationship between self-defined abuse and the number of relationships in which participants had CSEs for Group 1 (Kendall's $\tau_b = .20$, $p < .01$; participants with missing data: $\tau_b = .13$, $p < .01$). Second, the number of times sexual abuse involved intercourse was a somewhat stronger predictor of sexual abuse for those in Group 2 ($\tau_b = .33$, $p < .01$; participants with missing data: $\tau_b = .30$, $p < .01$). These differences were quite small, and it seemed unlikely that these findings would meaningfully bias our analyses; however, our results may somewhat overstate the strength of the relationships between these two CSE characteristics and self-defined abuse in these groups.

Results

Group 1

Although all of the participants in Group 1 reported CSEs that could be operationally defined as abuse, only 39% identified themselves as victims of childhood sexual abuse. One third (33%) of the participants reported that someone had used threats–force to gain their compliance and that a family member was involved (32%; see Table 1). Distributions were skewed, but the participants' mean age at the time of their first CSE was 11.91 years (*Mdn* = 13.00). The average number of experiences involving only touching was 14.40 (*Mdn* = 3.00), whereas the average number of times CSEs involved sexual penetration was 12.37 (*Mdn* = 2.00). Few participants reported CSEs in more than one relationship (*M* = 1.49; *Mdn* = 1.00).

As we hypothesized, women (49%) identified themselves as sexual abuse victims more often than did men (15%), $\chi^2(1, N = 2{,}010) = 214.07$, $p < .01$. In three out of six instances, Group 1 women also reported more experiences that might be important in self-definitions of sexual abuse (see Table 1). The largest difference was between the percentages of men and women who reported that they had been sexually coerced by threats–force (29%). The next largest was a 24% difference in the percentages reporting that their CSEs involved a family member. Finally, women were younger on average at the time of their first CSE. Forty-nine percent of the women, but only 37% of the men, reported that their CSEs began before the median age of 13.

Generally, we did not find differences in participants' reports regarding their CSEs on the basis of their research participation condition. Three percent more of the participants in the anonymous (40%) as opposed to the identified (37%) condition acknowledged that they were sexual abuse victims; however, this difference was not statistically significant. These two participation groups were also statistically equivalent for all but one of the six CSE characteristics we examined. There was a small difference ($p < .05$) of less than half a year in the average age participants reported for their first CSE when comparing the anonymous (11.69 years) and identified (12.12 years) groups.

Table 2 lists the CSE characteristics of participants from Group 1 who did versus did not define themselves as child abuse victims. Participants who defined themselves as victims were more likely to report CSEs involving threats–force and CSEs with immediate or extended family members, and they were about 6 years younger on average when their CSEs first began than were

Table 1
Characteristics of Participants' Childhood Sexual Experiences (CSEs)

Experience	Women	Men	Total
% reporting CSEs involving threats–force**	42	13	33
% reporting CSEs with immediate or extended family**	39	15	32
Mean age (years) at which CSEs first occurred**	11.49	12.86	11.91
Mean no. of CSEs involving only touching–kissing	14.81	13.45	14.40
Mean no. of CSEs involving sexual penetration	12.99	10.99	12.37
Mean no. of relationships in which CSEs occurred	1.49	1.50	1.49

Note. Group 1: women, n = 1,395; men, n = 615. Asterisks indicate significant gender differences in prevalence rates.
** $p < .01$.

Table 2
Childhood Sexual Experience (CSE) Characteristics Reported by Participants Who Did Versus Did Not Self-Define Themselves as Abuse Victims

Characteristic	Self-defined group	
	Nonvictims	Victims
% reporting CSEs involving threats–force		
Women** (OR = 9.67, CI = 7.53–12.42)	18	68
Men** (OR = 9.27, CI = 5.47–15.71)	8	43
% reporting CSEs with immediate or extended family		
Women** (OR = 9.02, CI = 7.00–11.63)	16	63
Men** (OR = 17.05, CI = 10.03–28.98)	7	58
Mean no. of relationships in which CSEs occurred		
Women** (OR[a] = 1.78, CI = 1.54–2.07)	1.30	1.68
Men (OR[a] = 1.06, CI = 0.88–1.29)	1.49	1.57
Mean no. of CSEs involving only touching–kissing		
Women (OR[a] = 1.00, CI = 1.00–1.01)	13.54	16.13
Men (OR[a] = 0.99, CI = 0.98–1.00)	14.12	9.54
Mean no. of CSEs involving sexual penetration		
Women** (OR[a] = 1.01, CI = 1.00–1.01)	10.20	15.88
Men (OR[a] = 0.99, CI = 0.98–1.01)	11.40	8.57
Mean age (years) at which CSEs first occurred		
Women** (OR[a] = 0.72, CI = 0.70–0.75)	14.14	8.74
Men** (OR[a] = 0.68, CI = 0.63–0.73)	13.74	7.72

Note. Group 1: female nonvictims, $n = 710$; female victims, $n = 685$; male nonvictims, $n = 525$; male victims, $n = 90$. OR = odds ratio; CI = confidence interval ($p < .05$).
[a] The logistic change in the odds of self-defined abuse is based on a one-unit change in value.
** $p < .01$.

those who did not consider themselves victims. Female, but not male, self-defined victims were also more likely to report they had experienced CSEs in multiple relationships and to report more CSEs involving sexual penetration. Thus, in 8 of 12 comparisons, we found support for our hypotheses. Participants who defined themselves as victims of abuse were more likely to report CSE characteristics commonly included in operational definitions of abuse or previously related to poor long-term outcomes.

Table 2 further lists odds ratios (ORs) estimating the size of the relationship between each CSE characteristic and self-defined abuse. We had hypothesized that CSE characteristics atypical of social norms for male sexual behavior would be more strongly related to self-definitions of abuse for men than they would be for women. We did not find evidence to support this hypothesis among the bivariate comparisons in Table 2. We did find that men who reported CSEs with family members were 17.05 times more likely to believe they were sexual abuse victims than were men whose CSEs were all with unrelated persons. This was nearly twice the OR for women (9.02). However, the 95% confidence intervals (CIs) for these ratios overlapped, indicating that they were not statistically different. The only significant gender difference in the size of the relationships between CSE characteristics and self-defined abuse was for the number of relationships in which participants reported CSEs. In this case, the relationship was significantly stronger for women than for men.

The analyses in Tables 1 and 2 were all bivariate comparisons. Table 3 presents the results of a hierarchical logistic regression estimating the unique contribution of demographic and CSE characteristics in accounting for self-definitions of abuse among participants from Group 1. In this regression, we entered gender, age, race or ethnicity, marital status, educational level, parental marital status, parental income, and research participation condition simultaneously in Block 1. Block 2 included the characteristics of participants' CSEs (whether CSEs ever involved threats–force, the number of CSEs involving sexual penetration, the number involving only touching–kissing, the number of relationships in which CSEs occurred, and whether CSEs ever involved an immediate or extended family member). Finally, we entered a block of interaction terms between gender, race or ethnicity, research participation condition, and each of the six CSE characteristics. All terms in Block 3 were entered in a stepwise fashion.

Five demographic variables contributed significantly to the logistic equation in Block 1 (see Table 3). Gender was again related to the likelihood that participants defined themselves as victims, with women being 5.88 times more likely to acknowledge sexual abuse than were men. Those whose race or ethnicity was White were almost twice as likely (1.85 times) to say they were victims of abuse as were participants who were Black. Participants who were older at the time of the recruit survey tended to define their CSEs as abusive more often than did younger participants, with the odds increasing by a factor of 1.07 per year of age. Comparing the oldest (34 years) with the youngest (17 years) participants, the odds changed by a factor of 3.07. Finally, in Block 1, those whose parents had never married and those reporting lower family income levels were more likely to identify themselves as victims. After Block 3, however, the only demographic variables that remained significant in the final equation were gender and race or ethnicity.

Three of the six variables entered in Block 2 contributed significantly in predicting self-defined abuse, and these variables contributed substantially in the equation. Whereas the total logistic model explained 60% of the variability in self-definitions of victimization, Block 2 alone accounted for 42%. The largest ORs in Table 3 were for participants who experienced threats–force or whose CSEs occurred with family members. Participants who reported either of these CSE characteristics were almost five times as likely to identify themselves as victims as were those who did not report such experiences. However, because logistic ORs are based on a one-unit change in each independent variable, estimates could potentially be affected most by the age at which participants experienced their first CSE. With each 5-year decrease in age at first CSE, the estimated odds of self-defined abuse increased by a factor of 3.13. Comparing the earliest (1 year) to the latest (17 years) age reported, the estimated odds changed by a factor of 39.

In Block 3, only two small but significant effects entered. The first was an interaction between gender and CSEs involving sexual penetration. The means in Table 2 for this CSE characteristic illustrate that female self-defined victims reported a higher average number of CSEs involving sexual penetration than did nonvictims. Although the trend was not significant, self-defined male victims actually reported fewer experiences involving intercourse. The second interaction was between research participation condition and reports of CSEs with family members. Among those who specifically reported CSEs with family members, 8% more of the participants in the anonymous (80%) condition acknowledged they

Table 3
Hierarchical Logistic Regression of the Likelihood That Participants Self-Defined Themselves as Victims of Childhood Sexual Abuse

Variable	Block 1 (R^2 = .18)[a]		Block 2 (R^2 = .60)[a]		Block 3 (R^2 = .60)[a]	
	B	OR	B	OR	B	OR
Block 1: Demographic variables						
Gender (female)[b]	−1.75**	0.17	−1.47**	0.23	−1.31**	0.27
Age	0.07**	1.07	0.04	1.04	0.04	1.04
Race or ethnicity (White)[b]						
Black	−0.62**	0.54	−0.65**	0.52	−0.63**	0.53
Hispanic	−0.03	0.97	−0.32	0.73	−0.33	0.72
Other	−0.18	0.83	−0.53*	0.59	−0.58*	0.56
Parental status (married or widowed)[b]						
Divorced or separated	0.20	1.22	−0.02	0.98	−0.03	0.97
Never married	0.71**	2.03	0.40	1.49	0.34	1.40
Parental income	−0.09**	0.92	−0.02	0.98	−0.02	0.98
Participation (anonymous)[b]	−0.11	0.89	−0.07	0.93	0.22	1.25
Block 2: Sexual abuse variables						
CSEs involving threats or force			1.56**	4.74	1.56**	4.75
CSEs involving immediate or extended family			1.18**	3.24	1.57**	4.79
No. of CSEs involving sexual penetration			0.00	1.00	0.01*	1.01
Age at which CSEs first began			−0.23**	0.80	−0.23**	0.80
Block 3: Interactions between variables						
Gender by no. of CSEs involving sexual penetration					−0.02*	0.98
Research condition by CSEs with immediate or extended family					−0.80**	0.45

Note. Only variables that contributed significantly in the equation are listed in the table. Final classification was 84% accurate overall: 88% among self-defined nonvictims (Group 1: n = 1,235) and 76% among self-defined victims (Group 1: n = 775). B = standardized coefficients; OR = odds ratio; CSEs = childhood sexual experiences.
[a] Nagelkirke's R^2 (Statistical Products and Service Solutions, Inc., 1997). [b] Reference group.
* $p < .05$. ** $p < .01$.

had been abused than did those asked to provide identifying information (72%) $\chi^2(1, N = 663) = 5.81, p < .05$.

Group 2

To explore these results and to further explore our research hypotheses, we repeated this logistic analysis with participants from Group 2, all of whom had CSEs with an immediate or extended family member. The CSE checklist did not ask for the gender of nonfamily members involved in participants' CSEs. It did identify the gender of family members with whom participants had CSEs, so in this final analysis, family member gender was added as an independent variable. Experiences of threats or force, the number of CSEs involving only sexual touching, the number involving intercourse, and the age familial CSEs began were included as before. Because only 3% of the men in Group 2 (n = 3; women: 12%, n = 67) reported CSEs in multiple family relationships, we did not include this last characteristic.

The results of the analysis with Group 2 were similar to those for Group 1 (see Table 4). In Block 1, female gender, White race or ethnicity, and lower parental income were related to self-defined abuse. For Group 2, research condition also significantly contributed in this block. In Block 2, we found that four of the five CSE characteristics contributed significantly. Participants in Group 2 were more likely to say they had been sexually abused if threats–force were involved, if their CSEs were with a male family member, if they were younger at the onset of their CSEs, and if they reported multiple experiences involving sexual penetration.

As was the case for Group 1, in Block 3 we found a significant interaction between gender and the number of CSEs involving sexual intercourse. Men in Group 1 who defined themselves as victims actually reported more instances of CSEs involving intercourse than did men who were self-defined nonvictims. This was not the case for Group 2. Among all participants, self-defined victims tended to report more CSEs involving intercourse than did nonvictims (see Table 5). However, this tendency was more pronounced and was significant only for women.

In this analysis, there was also an interaction between participant gender and the gender of the family members with whom CSEs occurred. A higher percentage of participants believed they had been sexually abused among those whose CSEs were with

Table 4
Hierarchical Logistic Regression of Self-Defined Abuse Among Participants Whose Childhood Sexual Experiences (CSEs) Involved Immediate or Extended Family Members

Variable	Block 1 (R^2 = .15)[a]		Block 2 (R^2 = .38)[a]		Block 3 (R^2 = .42)[a]	
	B	OR	B	OR	B	OR
Block 1: Demographic variables						
Gender (female)[b]	−1.48**	0.23	−0.62	0.54	−2.20**	0.11
Race or ethnicity (White)[b]						
Black	−1.06**	0.35	−0.86**	0.42	−0.92**	0.40
Hispanic	−0.77**	0.46	−0.56	0.57	−0.53	0.59
Other	−0.69*	0.50	−0.83*	0.44	−0.87*	0.42
Parental income	−0.12*	0.89	−0.12	0.89	−0.11	0.90
Participation (anonymous)[b]	−0.41*	0.67	−0.47*	0.63	−0.66**	0.52
Block 2: Sexual abuse variables						
Familial CSEs involving threats–force			0.78**	2.19	0.76**	2.14
Gender of family member involved (female)[b]			1.35**	3.84	0.24	1.27
No. of familial CSEs involving sexual penetration			0.12**	1.13	0.29**	1.33
Age at which familial CSEs first began			−0.12**	0.89	−0.10**	0.90
Block 3: Interactions between variables						
Gender by gender of family member involved in CSEs					2.21**	9.09
Gender by no. of CSEs involving sexual penetration					−0.26**	0.77
Gender by research condition					1.23*	3.43

Note. Only variables that contributed significantly in the equation are listed in the table. Final classification was 81% accurate overall: 44% among self-defined nonvictims (Group 2: n = 161) and 93% among self-defined victims (Group 2: n = 502). B = standardized coefficients; OR = odds ratio.
[a] Nagelkirke's R^2 (Statistical Products and Service Solutions, Inc., 1997). [b] Reference group.
* $p < .05$. ** $p < .01$.

male (men = 86%; women = 80%) rather than female (men = 28%; women = 67%) family members. However, the relationship between self-defined abuse and perpetrator gender was markedly stronger and was only significant for men (see Table 5). This supports the hypothesis that men tend to identify themselves as abuse victims if the characteristics of their CSEs are atypical of social norms for male sexual behavior. Caution should be used in interpreting this finding, however, because of the 562 women included in this regression, only 21 (4%) reported experiences with female family members. Among men, 43% (43) reported CSEs with male family members and 57% (58) reported them with female family members.

The last significant effect was an interaction between gender and research participation condition. Ten percent more women acknowledged they were victims of abuse in CSEs with family members among anonymous participants (85%) than among those asked for identifying information (75%). For men, the trend was actually in the opposite direction, but there were no significant differences (anonymous = 51%; identified = 54%).

We looked at the size of the ORs for those CSE characteristics that contributed in the logistic equations for Groups 1 and 2. Overall, the relationships in the second equation (Group 2) appeared smaller, with the exception of the interactions, which made a greater contribution in the second analysis than they did in the first. We used 95% CIs for the ORs listed in Tables 3 and 4 to evaluate whether any of them were significantly different. For those experiencing CSEs with family members (Group 2), the estimated odds of self-defined abuse changed by a factor of only 2.14 given the experience of threats–force (CI = 1.35–3.38). The odds changed by a factor of 4.75 (CI = 3.61–6.25) for participants reporting CSEs with anyone 5 years older than themselves (Group 1). The CIs for these ORs did not overlap, suggesting they were statistically distinct. We also found a significant difference for the age at which participants' CSEs began. In the analysis for Group 1, the odds decreased by approximately 20% per year of age (OR = 0.80; CI = 0.77–0.82). For Group 2, they decreased by 10% per year of age (OR = 0.90; CI = 0.85–0.96).

Both the effect and the interaction for the number of CSEs involving sexual intercourse were significantly larger in the second logistic analysis than in the first. The OR for the overall effect among participants in Group 1 was 1.01 (CI = 1.00–1.02), whereas it was 1.33 (CI = 1.15–1.54) for Group 2. The ORs for the interaction between this CSE characteristic and participant gender were 0.98 (CI = 0.97–1.00) in the first analysis and 0.77 (CI = 0.66–0.91) in the second. Table 5 lists the bivariate relationships between self-defined abuse and CSE characteristics for men and women in Group 2. As can be seen in the table, the relationship between self-defined abuse and CSEs involving inter-

Table 5
Characteristics of Familial Childhood Sexual Experiences (CSEs) Among Participants Who Did Versus Did Not Identify Themselves as Abuse Victims

Characteristic	Self-defined group	
	Nonvictims	Victims
% reporting familial CSEs involving threats or force		
Women** (OR = 3.00, CI = 1.96–4.59)	38	65
Men** (OR = 6.74, CI = 2.45–18.52)	13	49
% reporting CSEs with male family members		
Women (OR = 0.49, CI = 0.19–1.24)	94	97
Men** (OR = 0.06, CI = 0.02–0.17)	13	70
Mean no. of familial CSEs involving only touching–kissing		
Women** (OR^a = 1.03, CI = 1.01–1.04)	5.54	14.82
Men (OR^a = 1.01, CI = 0.98–1.05)	4.60	6.36
Mean no. of familial CSEs involving sexual penetration		
Women** (OR^a = 1.41, CI = 1.22–1.63)	0.56	14.70
Men (OR^a = 1.05, CI = 0.99–1.11)	2.63	6.49
Mean age (years) at which familial CSEs first occurred		
Women** (OR^a = 0.85, CI = 0.80–0.90)	10.57	8.19
Men* (OR^a = 0.88, CI = 0.78–0.99)	9.44	7.87

Note. Group 2: female nonvictims, n = 113; female victims, n = 449; male nonvictims, n = 48; male victims, n = 53. OR = odds ratio; CI = confidence interval ($p < .05$).
[a] The logistic change in the odds of self-defined abuse is based on a one-unit change in value.
* $p < .05$. ** $p < .01$.

course for women in Group 2 was significantly larger than it was for women in Group 1 (see Table 1). By contrast, there were no significant differences across groups for men, creating a larger interaction.

Discussion

The results of this study clearly demonstrate the influence exerted by methodology on self-reports of childhood sexual abuse. All 2,010 participants in Group 1 reported at least one sexual experience before age 18 with a person at least 5 years older, criteria meeting an a priori operational definition for childhood sexual abuse. However, only 39% said "yes" when specifically asked whether they believed they had been sexually abused.

In support of our first hypothesis, many of the characteristics that have been used in research as markers of abuse severity were related to self-defined abuse. These included reports of threats–force, incest, younger age at onset, and multiple CSEs involving sexual penetration. In support of our second and third hypotheses, several factors contributed to the low rates of childhood sexual abuse reported by men. Of all those surveyed, fewer men than women reported CSEs prior to age 18 with someone at least 5 years older than themselves. Additionally, among participants who reported such CSEs, fewer men than women reported CSE characteristics that might be indicative of abuse. For instance, a higher percentage of women than men experienced threats–force, CSEs with family members, and CSEs at a young age. In multivariate analysis, these three CSE characteristics contributed most in explaining self-definitions of abuse.

We found only partial support for our last research hypothesis. Only one CSE characteristic had a stronger relationship with self-defined abuse for men than for women. This was the gender of the family members with whom participants reported CSEs. Specifically, men were more likely to define a CSE as abusive if the perpetrator was also male. Given strong cultural taboos against male homosexuality, this characteristic may be most salient for men as they evaluate their childhood experiences. Men may regard opposite sex experiences as expected, and perhaps self-initiated, even if they are younger than the age of legal consent. These results must be taken tentatively, though, because we were able to identify only the gender of the perpetrators for intrafamilial CSEs and because so few women reported same-sex CSEs. This finding should be explored more thoroughly in future research that includes CSEs with both family and nonfamily members and that oversamples women who have had same-sex CSEs.

We had not anticipated finding stronger relationships for women than men between any of the CSE characteristics and self-defined abuse. However, in bivariate comparisons, experiences with multiple perpetrators had a stronger relationship with self-defined abuse for women, and in our multivariate analyses, we again found this pattern for experiences involving sexual intercourse. We had hypothesized that CSE characteristics atypical of social norms for male behavior would be more important to men in defining abuse. It may be that characteristics stereotypical for men are less important. Having multiple sexual partners and frequent sexual intercourse may be viewed as sexual prowess for men but as promiscuity among women. In a study of male college students, for example, Risin and Koss (1987) found that a number of participants who reported sexual penetration were proud of their experiences, whereas pride was atypical among those who reported CSEs involving exhibition or fondling.

Alternatively, women may be more likely to experience sexual penetration as something that is done to them, whereas men may consider it something they have done. Bauserman and Rind (1997) noted that boys may have a greater sense of self-initiation in response to intercourse with older women as opposed to being penetrated anally or orally. In this study, we could not distinguish

between these types of experiences. Future research should explore whether gender differences disappear when the type of sexual penetration is controlled.

In addition to the support we found for our hypotheses, several of the demographic characteristics we included in the first block of our logistic model were related to self-defined abuse. Respondents who were older, who reported White rather than Black or other race or ethnicities, who had lower family incomes, and whose parents were never married, were more likely to define themselves as victims. It is not clear why these characteristics were related to self-definitions of sexual abuse. However, all but one of these demographic variables were no longer significant in the equation after the characteristics of participants' CSEs were entered. Variables such as low parental income and single parenthood may simply be risk factors for more abusive or severe CSE characteristics, which in turn predict self-defined abuse.

Besides gender, race or ethnicity was the only demographic related to self-definitions after including CSE characteristics in the model. It is likely that race or ethnicity is important in cultural beliefs and attitudes regarding CSEs. For example, in some subcultures, early sexual experiences may be more acceptable, whereas in others, an emphasis on female virginity might shape self-definitions and heighten the impact of CSEs (Mennen, 1995). It is likely that there are also cultural differences in reactions to abuse. Among reported cases of child abuse, Pierce and Pierce (1984) found that Black children tended to be younger than White children; however, for White children, the abuse tended to have had a somewhat longer duration before it was reported. Pierce and Pierce also found that Black children were more confident their mothers would believe them if they told them about the abuse. Meston, Heiman, Trapnell, and Carlin (1999) found that Asians were more likely to acknowledge physical or emotional abuse, but that fewer Asian women than women of European ancestry reported childhood sexual abuse. Although it was not the primary focus of this study, our results suggest that race or ethnicity and self-definitions of abuse should be explored more thoroughly in the future.

It is interesting that there were so few differences in this study based on research participation condition. There were no significant differences in the willingness of male participants to acknowledge that they were victims of childhood sexual abuse, regardless of whether they were asked to provide identifying information or whether they participated anonymously. Among women, there was only a significant difference for Group 2, among those who reported CSEs with family members. It may be that women are more protective and unwilling to report a family member in cases of sexual abuse. However, this isolated finding may also be idiosyncratic to this particular group of respondents.

As noted earlier, this study was limited because we were unable to identify the gender of nonfamilial perpetrators, and we did not have information on the specific nature of CSEs involving sexual penetration. It would also have been helpful to ask participants whether they voluntarily participated in or initiated their CSEs. Additionally, as in all retrospective self-report research, it is impossible to know whether participants accurately recall and report their experiences. This problem may increase as incidents become more troubling, numerous, or distant in time. Finally, although we can specify that factors such as race or ethnicity and sexual penetration are related to self-defined abuse, it is unclear what mediates these relationships.

This study did assess childhood sexual abuse in a nonclinical sample. Such studies are important in evaluating the long-term impact of abuse, because they take into account a wider range of responses. Clinical samples are likely to overrepresent individuals who have relatively serious outcomes as a result of abuse. They are therefore of limited use in designing models to predict the long-term outcomes of CSEs in the general population. This study also demonstrates important relationships between operational definitions and self-definitions of abuse that should be considered in assessing the impact childhood sexual abuse has on long-term health and well-being. It also reinforces the need to take gender, ethnic background, and CSE characteristics into account in understanding the way individuals define potentially abusive experiences.

References

Bauserman, R., & Rind, B. (1997). Psychological correlates of male child and adolescent sexual experiences with adults: A review of the nonclinical literature. *Archives of Sexual Behavior, 26,* 105–141.

Briere, J. (1992). Methodological issues in the study of sexual abuse effects. *Journal of Consulting and Clinical Psychology, 60,* 196–203.

Briere, J., Evans, D., Runtz, M., & Wall, T. (1988). Symptomatology in men who were molested as children: A comparison study. *American Orthopsychiatric Association, 58,* 457–461.

Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin, 99,* 66–77.

Carbone, E. G., Cigrang, J. A., Todd, S. L., & Fiedler, E. R. (1999). Predicting outcome of military basic training for individuals referred for psychological evaluation. *Journal of Personality Assessment, 72,* 256–265.

Cigrang, J. A., Carbone, E. G., Todd, S., & Fiedler, E. (1998). Mental health attrition from Air Force basic military training. *Military Medicine, 163,* 834–838.

Feiring, C., Taska, L., & Lewis, M. (1999). Age and gender differences in children's and adolescents' adaptation to sexual abuse. *Child Abuse & Neglect, 23,* 115–128.

Finkelhor, D. (1984). *Child sexual abuse: New theory and research.* New York: Free Press.

Fischer, G. J. (1991). Is lesser severity of child sexual abuse a reason more males report having liked it? *Annals of Sex Research, 4,* 131–139.

Haugaarrd, J. J. (2000). The challenge of defining child sexual abuse. *American Psychologist, 55,* 1036–1039.

Mennen, F. E. (1995). The relationship of race/ethnicity to symptoms in childhood sexual abuse. *Child Abuse & Neglect, 19,* 115–124.

Meston, C. M., & Heiman, J. R. (2000). Sexual abuse and sexual function: An examination of sexually relevant cognitive processes. *Journal of Consulting and Clinical Psychology, 68,* 399–406.

Meston, C. M., Heiman, J. R., Trapnell, P. D., & Carlin, A. S. (1999). Ethnicity, desirable responding, and self-reports of abuse: A comparison of European- and Asian-ancestry undergraduates. *Journal of Consulting and Clinical Psychology, 67,* 139–144.

Mullen, P. E., Martin, J. L., Anderson, J. C., Romans, S. E., & Herbison, G. P. (1996). The long term impact of the physical, emotional, and sexual abuse of children: A community study. *Child Abuse & Neglect, 20,* 7–21.

Pierce, L. H., & Pierce, R. L. (1984). Race as a factor in the sexual abuse of children. *Social Work, 20,* 9–14.

Risin, L. I., & Koss, M. P. (1987). The sexual abuse of boys: Prevalence and descriptive characteristics of childhood victimizations. *Journal of Interpersonal Violence, 2,* 309–323.

Rosen, L. N., & Martin, L. (1996). Impact of childhood abuse history on psychological symptoms among male and female soldiers in the U.S. Army. *Child Abuse & Neglect, 20,* 1149–1160.

Statistical Products and Service Solutions, Inc. (1997). *SPSS Professional Statistics [Version 7.5].* Chicago, IL: Author.

Talcott, W., Haddock, K., Klesges, R. C., Lando, H., & Fiedler, E. (1999). Prevalence and predictors of discharge in United States Air Force basic military training. *Military Medicine, 164,* 269–274.

Trickett, P. K., & Putnam, F. W. (1998). Developmental consequences of child sexual abuse. In P. K. Trickett & C. J. Schellenbach (Eds.), *Violence against children in the family and the community* (pp. 39–57). Washington, DC: American Psychological Association.

Urquiza, A. J., & Keating, L. M. (1990). The prevalence of sexual victimization of males. In M. Hunter (Ed.), *The sexually abused male: Prevalence, impact, and treatment* (Vol. 1, pp. 89–103). Lexington, MA: Lexington Books.

Widom, C. S., & Shepard, R. L. (1996). Accuracy of adult recollections of childhood victimization: Part 1. Childhood physical abuse. *Psychological Assessment, 8,* 412–421.

Wood, D. P. (1996). Sexual abuse during childhood and adolescence and its effects on the physical and emotional quality of life of the survivor. *Military Medicine, 161,* 582–587.

Received December 19, 2000
Revision received August 7, 2001
Accepted August 14, 2001 ■

REPORT DOCUMENTATION PAGE

1. Report Date (DD MM YY)	2. Report Type	3. DATES COVERED (from - to)
Jun 2000	Interim	Jun 96 to Feb 00

4. TITLE AND SUBTITLE **Self-Definition as a Survivor of Childhood Sexual Abuse Among Navy Recruits**

6. AUTHORS
Valerie A. Stander, Cheryl B. Olson, & Lex L. Merrill

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
Naval Health Research Center
P.O. Box 85122
San Diego, CA 92186-5122

5a. Contract Number:
5b. Grant Number:
5c. Program Element: BUPERS
5d. Project Number: Reimbursable
5e. Task Number:
5f. Work Unit Number: 6309
5g. IRB Protocol Number: NA

8. PERFORMING ORGANIZATION REPORT NUMBER
Report No. 00-25

8. SPONSORING/MONITORING AGENCY NAMES(S) AND ADDRESS(ES)

Chief, Bureau of Medicine and Surgery
Code M2
2300 E St NW
Washington DC 20372-5300

Commanding Officer
Navy Personnel Command
5720 Integrity Dr.
Millington, TN 38055-0500

10. Sponsor/Monitor's Acronyms(s)
BuMed

11. Sponsor/Monitor's Report Number(s)

12 DISTRIBUTION/AVAILABILITY STATEMENT
Approved for public release; distribution unlimited.

13. SUPPLEMENTARY NOTES
Published in Journal of Consulting & Clinical Psychology, 2002; 70(2) 369-377

14. ABSTRACT (maximum 200 words)

The purpose of the present research was to identify how specific characteristics of childhood sexual experiences might relate to self-identification as a victim of sexual abuse. In particular, this study explored the role that self-definitions might play in explaining differential rates of self-reported childhood sexual abuse between men and women. Hierarchical logistic regression analyses were performed to estimate the unique contribution of demographic as well as childhood sexual experience (CSE) characteristics in accounting for variability in the likelihood that participants defined themselves as victims of childhood abuse. Approximately 39% of those who reported CSEs prior to age 14 with someone at least five years older than themselves believed those CSEs were abusive. Proportionally more women than men were self-defined victims (50% versus 14%). Recruits who were older at the time of the survey, who were White, whose parents had not married, and who had a lower family income were more likely to define themselves as abused. Abuse characteristics most strongly associated with self-defined sexual abuse were the use of threats or force, incest, and younger age at the time of the experience. An analysis of within-family abuse also suggested that men were more likely to define themselves as abuse victims if the perpetrator was also male.

14. SUBJECT TERMS
child sexual abuse; research methodology

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGE	18a. NAME OF RESPONSIBLE PERSON
a. REPORT	b.ABSTRACT	C. THIS PAGE			Commanding Officer
UNCL	UNCL	UNCL	UNCL	9	18b. TELEPHONE NUMBER (INCLUDING AREA CODE) COMM/DSN: (619) 553-8429