

## Perceptions of Sexuality as Related to Sexual Functioning and Sexual Risk in Women With Different Types of Childhood Abuse Histories

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Perceptions of one's sexuality, self-reported sexual functioning, and sexual risk were examined in a community sample of 148 women with histories of either childhood sexual abuse ( $n = 26$ ), both childhood sexual and physical abuse ( $n = 44$ ), and neither form of abuse ( $n = 78$ ). Controlling for depression and anxiety, the groups did not differ on sexual desire, arousal/orgasm, sexual pain, or masturbation. Women with abuse histories reported more negative affect during sexual arousal and reported more lifetime vaginal intercourse partners than nonabused women. In addition, the abuse samples reported more negative perceptions of their sexuality in their worst psychological states using the Structural Analysis of Social Behavior (SASB) method than did women with no abuse history. An interpersonal focus and more precise abuse labeling are recommended, potentially revising our assumptions about symptom clusters and treatment.

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**KEY WORDS:** sexual abuse; physical abuse; sexual behavior; Structural Analysis of Social Behavior (SASB).

Childhood sexual abuse (CSA) has been a focus of clinical and research attention for several decades. While most of the empirical literature examining the impact of CSA on long-term functioning has highlighted an array of psychological symptom correlates, such as depression (Saunders, Villeponteaux, Lipovsky, Kilpatrick, & Veronen, 1992), anxiety (Bryer, Nelson, Miller, & Krol, 1987), posttraumatic stress disorder (PTSD; Orr et al., 1998), borderline personality disorder (Briere & Zaidi, 1989; Shearer, Peters, Quaytman, & Ogden, 1990; Wagner & Linehan, 1997), and self-destructive behavior (Saunders et al., 1992), a growing body of research emphasizes the sexual correlates of CSA. Studies exam-

ining the sexual correlates of CSA can be divided into two categories: sexual satisfaction/functioning and high-risk sexual behaviors.

Research on sexual satisfaction/functioning in CSA victims has utilized diverse samples and yielded a wide range of results. While studies involving college undergraduates have typically found few associations between a history of CSA and subsequent sexual satisfaction, adjustment, and functioning (Fromuth, 1986; Meston, Heiman, & Trapnell, 1999), clinical and community samples have demonstrated disrupted sexual patterns. Specifically, CSA women experienced less frequent orgasm, less sexual responsiveness (Tsai, Feldman-Summers, & Edgar, 1979; Walker et al., 1999), lower levels of sexual satisfaction (Tsai et al., 1979), and higher rates of current and past sexual dysfunction (Sarwar & Durlak, 1996; Saunders et al., 1992) than nonabused samples.

Among high risk sexual behaviors, CSA women report higher rates of multiple sexual partners (Fergusson, Horwood, & Lynskey, 1997; Tsai et al., 1979; Wyatt, Guthrie, & Notgrass, 1992), early onset consensual sexual

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activity, teenage pregnancy, and unprotected intercourse (Fergusson et al., 1997; Walker et al., 1999). CSA has also been linked to low self-efficacy regarding condom use (Brown, Kessel, Lourie, Ford, & Lipsitt, 1997), increased rates of abortion and anal sex (Wingood & DiClemente, 1997), and inadequate safe sex decision-making and HIV prevention communication skills (Brown et al., 1997).

In sum, research indicates that CSA women are not only more likely to experience difficulties in sexual satisfaction/functioning, but are also more likely to engage in a variety of sexual risk taking behaviors. These findings have important implications for women's health as they suggest CSA women may place themselves at greater risk for diseases/disorders that are associated with high-risk sexual behavior, such as sexually transmitted diseases (Fergusson et al., 1997; Walker et al., 1999; Wingood & DiClemente, 1997) and AIDS (Grinstead, Faigeles, Binson, & Eversley, 1993).

Although informative in describing the sexual correlates of CSA, research has been limited by two issues. First, few studies have analyzed groups of women by the type of abuse they experienced, making it unclear if the results reported for sexual abuse survivors in fact better describe individuals with sexual plus physical abuse. This distinction is important as some research (e.g., Chu & Dill, 1990) has suggested that CSA alone puts one at a lower level of psychological and sexual risk than does the combination of sexual and physical abuse. Second, theoretically driven explanations are uncommon (Finkelhor, 1986), particularly regarding why CSA women tend to have more sexual partners (Tsai et al., 1979), yet experience more sexual dysfunction and dissatisfaction (Sarwer & Durlak, 1996; Saunders et al., 1992; Tsai et al., 1979) than nonabused women. One conceptualization (Tsai et al., 1979) suggested that a woman's adjustment following childhood molestation may be mediated by emotional responses at the time of the molestation. Polusny and Follette (1995) proposed a theory of emotional avoidance to explain how the symptoms experienced by CSA victims represent behavioral strategies used to assuage and/or avert negative internal experiences related to the abuse (Polusny & Follette, 1995). Both of these theoretical positions are consistent with the finding that PTSD may act as a moderating variable in the development of sexual problems (Letourneau, Resnick, Kilpatrick, Saunders, & Best, 1996). Young (1992) proposed that CSA disrupts "embodiment," defined as "the realm of the self, experienced in and through the body" (p. 90). Wenninger and Heiman (1998) examined embodiment empirically and found that a history of CSA correlates with a woman's body image which may play a mediating role in the association between the CSA experience and adult symptoms.

Although these conceptualizations propose mechanisms which may mediate the effects of CSA, a more interpersonal theory that could accommodate these specific mechanisms seems important to consider. Alexander (1992) proposed that attachment theory provided a way to conceptualize the familial/relational antecedents and consequences of CSA. Alexander focused on Bowlby's ideas (Bowlby, 1969) that internal working models develop out of early experiences with caretakers, are encoded into the concept of the self (Alexander, 1992, p. 186), and are at the root of attachment patterns as described by Ainsworth, Blehar, Waters, and Wall (1978).

Drawing from Alexander's and Benjamin's work (Alexander, 1992; Benjamin, 1993), we used an interpersonal conceptualization of the long-term sexual correlates of CSA to focus the present study. Our conceptual framework recognizes that sexuality is a component of the self-concept that develops from an individual's biological condition interacting with the social world. A person therefore develops a sense of a sexual self, with more fixed and flexible aspects that continue to modify over a lifetime (Laumann, Gagnon, Michael, & Michaels, 1994). The concept of introjection (Sullivan, 1953) suggests that people treat themselves like important others treated them. A CSA victim has the developmental "task" of reconciling the abuse with her sense of sexuality and integrating what the experience taught her about how others treat her body.

It theoretically follows that a woman may treat her sexuality in adulthood as important others did during its early development (Alexander, 1992; Benjamin, 1993). Thus, if the internalized/introjected message about her sexuality centers on hostile control, her adult perception of her sexuality will likely mimic this, leading to problematic and/or risky sexual behavior. Alternatively, if the internalized/introjected message centers on friendly autonomy, her adult perception of her sexuality will likely reflect this, resulting in satisfying and healthy sexual behavior.

### *The Structural Analysis of Social Behavior (SASB) Model*

Interpersonal and object relational concepts, have been difficult to quantify and measure. However, the Structural Analysis of Social Behavior (SASB) Intrex Questionnaires developed by Benjamin (1988) can effectively operationalize such concepts. SASB is a circumplex model of inter- and intrapersonal behavior that dissects interactions in terms of two dimensions: affiliation and interdependence, across three foci: other, self, and introject (Benjamin, 1974, 1984). *Affiliation*, represented on the

horizontal axis of the SASB model, refers to whether the interaction is friendly or hostile. *Interdependence* is represented on the vertical axis of the SASB model and varies according to focus. *Focus* is determined from the perspective of the speaker and refers to the person on whom the interaction is centered. *Focus on Other* represents the speaker acting toward another (transitive). *Focus on Self* represents the speaker reacting to another (intransitive). The *Introject Focus* represents transitive action turned inward on the self (introjection). Thus, the SASB Intrex questionnaires allow for a dimensional exploration of one's working models of interpersonal relationships and the intrapersonal relationship, including one's sexuality. Although the SASB questionnaires do not specifically measure sexuality, the methodology is generic and can be used to examine the relationship between any two referents (Benjamin, 1974, 1984, 1988).

The goals of the present study were to (a) determine whether sexual functioning and sexual risk differ among women with two types of CSA, and (b) examine women's perceptions of their sexuality using the SASB model. Such perceptions may be key influences maintaining the broader sexual behaviors/patterns described earlier. We hypothesized that women with a history of both sexual and physical abuse would report more difficulties with sexual functioning, more sexual risk-taking, and more hostile perceptions of their sexuality than women without a history of such abuse. Women with a history of sexual abuse only were hypothesized to fall between the nonabused and combined abuse samples on the key variables. We expected that when physical abuse was involved, the subsequent differences would be more pronounced and sexuality experienced as more hostile than friendly because of early experiences with both sexuality and violence.

## Method

### Participants

Participants were 148 women who formed three nonoverlapping groups: (1) childhood sexual abuse only (SA,  $n = 26$ , 17.6%), (2) both childhood sexual and physical abuse (SPA,  $n = 44$ , 29.7%), and (3) neither childhood sexual nor physical abuse (Nonabused,  $n = 78$ , 52.7%). Participants ranged in age from 21 to 40 years ( $M = 27.8$ ,  $SD = 5.8$ ). The sample included European Americans (70.7%), Asian Americans (8.8%), and African Americans (7.5%). Most participants were single (49.3%), involved in an unmarried intimate relationship (26.4%), or married (14.9%), and characterized their

sexual experiences as entirely (74.3%) or mostly (17.6%) heterosexual. Participants had completed some college ( $M$  years = 15.8,  $SD = 2.3$ ). No significant differences were found between groups with respect to age,  $F(2, 145) = 2.80$ ,  $p = .06$ ; ethnicity,  $\chi^2(8, N = 147) = 8.61$ ,  $ns$ ; marital status,  $\chi^2(8, N = 148) = 9.97$ ,  $ns$ ; sexual orientation,  $\chi^2(8, N = 148) = 8.94$ ,  $ns$ , or education,  $F(2, 143) = 1.69$ ,  $ns$ . Eighty-six percent of SPA participants and 69.2% of SA participants had been involved in psychotherapy, compared to 52.7% of Nonabused participants,  $\chi^2(2, N = 148) = 13.43$ ,  $p < .01$ .

### Procedure

Participants were recruited by community advertisements, requesting participation of women with or without histories of childhood sexual and/or physical abuse. Participants received \$15.00 for completing the study.

Potential participants phoned the investigators, who determined study eligibility. Exclusion criteria were, age (less than 21 or over 40 to avoid postmenopausal participants and decrease the sample heterogeneity), and difficulty reading English. Eligible participants came to the university and completed a university-approved Human Participants Consent and a 1.5-hr battery of questionnaires. Group categorization (e.g., SA, SPA, or Nonabused) was verified upon completion of the self-report questionnaires, and discrepancies with original screening categorization were resolved.

### Assessment Instruments

*Background Information and Abuse History* (modified from Carlin et al., 1994; Carlin & Ward, 1992, and Wenniger & Heiman, 1998)

This questionnaire included demographic data, sexual orientation, physical and sexual assault history in childhood and adulthood, and psychotherapy history.

*Structural Analysis of Social Behavior (SASB) Intrex Questionnaires* (Benjamin, 1988)

Although these questionnaires assess intra- and interpersonal relationships, the attention in this study was on participants' intrapersonal relationships with their sexuality. The Intrex questionnaires cross two dimensions (affiliation and interdependence) with three foci (other or transitive, self or intransitive, and introject), and translates

them into a series of 8 or 16 questions (depending on the relationship rated) that respondents answer on a 0 (*never/not at all*) to 100 (*always/perfectly true*) scale. Intrex questionnaires have good psychometric properties, showing high test-retest reliability ( $r = .87$ ; Benjamin, 1984), and content and construct validity (Benjamin, 1988). Because sexuality represents an aspect of the self, rather than a separate entity, participants were asked to rate their sexuality on the intrapersonal (e.g., introject) focus of the Intrex questionnaires rather than the interpersonal (e.g., transitive, intransitive) foci. Standardized Intrex instructions were to rate “your sexuality at best” and “your sexuality at worst”: “Rate yourself twice: at your best, and at your worst. First try to remember a specific time a few days/weeks/months ago when you were at your best, and while thinking of that time, rate the best version. Then think of a specific time a few days/weeks/months ago when you were at your worst, and rate the worst version. Please do not go back in time further than one year” (Benjamin, 1988).

*Sexual Functioning Form (SFF)* (modified from Wenninger & Heiman, 1998)

This 21-item questionnaire provides a measure of sexual behavior and functioning over the past year. Most items are rated on a 5-point scale ranging from 1 (*not at all or never*) to 5 (*daily/several times a week or always*). Areas assessed included number of lifetime sexual partners, contraception use, and safe sex practices, as well as possible difficulties with sexual desire, arousal, orgasm, and pain. Factor scores (see results) were used in the present study. Cronbach’s alpha for an earlier version of this scale was .79 (Wenninger & Heiman, 1998).

*Beck Depression Inventory (BDI)* (Beck, Ward, Mendelsohn, & Erbaugh, 1961)

This 21-item questionnaire assesses the severity of depressive symptomatology on a 4-point scale. Total scores (range 0–63) were used in analyses. The BDI has been widely used and has satisfactory psychometric properties. Cronbach’s alpha for the total score was .87 in our sample.

*Beck Anxiety Inventory (BAI)* (Beck, Epstein, Brown, & Steer, 1988)

This 21-item inventory provides a measure of anxious symptomatology on a 4-point scale ranging from 0 (*not at all*) to 4 (*severely*). Total scores (range 0–84) were used in analyses. The BAI has been used in a variety of studies

and has satisfactory reliability and validity. Cronbach’s alpha for the total score was .85 in our sample.

*Impression Management Scale (IMS)* (Paulus, 1989)

This 20-item scale is taken from the Balanced Inventory of Desirable Responding, and is rated on a 1 (*not at all*) to 7 (*very true*) scale. It assesses socially desirable responding, and has adequate reliability and validity. Cronbach’s alpha for the total score was .80 in our sample.

### *Definition and Description of Abuse*

The assessment of CSA was divided into three categories: genital touching, oral-genital contact, and sexual intercourse. Participants indicated the frequency (e.g., 0 = *never*, 1 = *once*, 2 = *2–10 times*, 3 = *11–20 times*, 4 = *more than 21 times*) with which they experienced each of the “unwanted” or “forced” behaviors that occurred during the abuse experience(s) prior to the age of 18 with someone who was at least 5 years older. A sexual abuse composite score was calculated for each of the three categories. The category of Genital Touching included the questions, “Casually touched, pinched, or fondled in a sexual manner,” “Touched or fondled in a sexual manner for a long period of time,” “Undressed and breasts/genitals touched,” “Forced to touch another’s genitals/breasts,” whereas the category of Oral-Genital Contact included the question “Forced to engage in oral-genital sexual relations,” and the category of Sexual Intercourse included the question “Forced to have sexual intercourse.” A participant was included in the childhood sexual abuse category if her Genital Touching composite score was greater than or equal to 3 or her Oral-Genital Contact or Sexual Intercourse composite scores were greater than or equal to 1. In most cases, participants endorsed experiences across a variety of variables, exceeding the definitional guidelines. Our intent was to include individuals in the CSA groups with a significant level of sexual contact. Women in the Nonabused group endorsed no sexual abuse.

Physical abuse (based on Carlin et al., 1994) was subdivided into three categories: minimal, moderate, and severe. Participants indicated on a 6-point Likert scale (e.g., 0 = *never* to 5 = *very frequently*) the frequency with which they experienced each behavior. Behaviors in the minimal category included “I was pinched as punishment,” “I was hit or spanked with a board, stick, or wire,” “I was hit or spanked with a belt,” “My hair was snatched or pulled out,” and “I was shaken.” Behaviors in the moderate category included “I was tied up as punishment,” and “I was thrown against objects, walls, or down stairs.”

Behaviors in the severe category included “I have received black eyes from being hit,” “I was injured seriously enough by a parent or guardian to require medical care,” “I was purposefully burned with a cigarette, lighter, iron, etc.,” “I was bitten so hard that marks were left on my skin was broken,” “I have had teeth loosened or knocked out,” and “I was strangled or choked.” To assure that a significant level of physical abuse had occurred, participants were not categorized as physically abused if they had a composite score of less than or equal to 3 on the minimal abuse scale unless one of the items within that scale was endorsed at a level greater than 3 (sometimes). Participants were considered physically abused if their minimal abuse composite score was 5 or more and/or they experienced any level of behavior defined as moderately or severely physically abusive.

## Results

### *Abuse Characteristics*

The mean age at first sexual contact with the primary perpetrator was 7.8 years ( $SD = 4.8$ ) for SA victims and 6.9 years ( $SD = 4.2$ ) for SPA victims,  $F(1, 61) = .51, ns$ , while the mean age at last sexual contact was 11.1 years ( $SD = 4.6$ ) for SA victims and 11.6 years ( $SD = 4.3$ ) for SPA victims,  $F(1, 62) = .15, ns$ . Forty-three percent of the CSA groups reported having had more than one perpetrator (24.0% of SAs and 54.0% of SPAs). Primary perpetrators were typically parents or stepparents (41.5% total, 34.6% SA, 45.4% SPA), with the secondary category being that of “other male relative (e.g., grandfather, uncle, cousin)” (20.0% total, 23.1% SA, 18.2% SPA). Genital touching occurred in all of the SA and SPA cases, with oral-genital contact occurring in 33.3% of SA and 55.6% of SPA participants, and completed intercourse occurring in 19.1% of SA and 47.4% of SPA participants.

All physical abuse was perpetrated by a parent or guardian. Although all SPA participants met the criteria for abuse and 72.7% endorsed minimal abuse behaviors, 56.8% reported moderate abuse behaviors, and 61.4% endorsed severe abuse behaviors. Most participants (75.0%) reported physical abuse that involved three or more separate behaviors.

### *Preliminary Analyses*

Pearson-product moment correlations examined the interrelations among study variables. Abuse groups differed significantly on the BDI,  $F(2, 143) = 22.83, p < .01$ , and BAI,  $F(2, 144) = 20.33, p < .01$ , and partici-

pants responses on these questionnaires were significantly correlated with responses on the SASB Intrex (e.g.,  $r$ s were  $-.16$ – $.49, .17$ – $.44$ ) and the SFF (e.g.,  $r$ s were  $.31$ – $.49$ ). There was a trend toward significance on the IMS,  $F(2, 130) = 2.82, p = .06$ , though IMS responses were generally not significantly correlated with the major measurement domains. On the basis of these analyses, total BDI and BAI scores were included as covariates in subsequent analyses, while IMS scores were not.

### *Exploratory Analyses*

The SA and SPA groups unexpectedly differed on two sexual abuse variables, namely “number of perpetrators” and “completed intercourse,” previously found to be important measures of the severity of sexual abuse. Two exploratory analyses were conducted to estimate the effect of these variables. First, SPA participants who had experienced sexual intercourse during the abuse ( $n = 23$ ) were compared with those who had not ( $n = 21$ ) across the dependent variables. No significant differences were found. Second, sexually abused participants (SA and SPA) with 1 perpetrator ( $n = 36$ ) were compared to those with more than 1 perpetrator ( $n = 34$ ) across the dependent variables. Again, no significant differences emerged. This suggested that the current variables were not differentially affected by the fact that the sexual abuse content was somewhat different for the SA and SPA groups.

### *Sexual Functioning*

To reduce the number of sexual functioning variables, a principal components factor analysis (PCA) with varimax rotation was performed on the 14 items from the SFF for the subsample ( $n = 117$ ) of participants who were currently involved in a sexual relationship. The PCA produced five factors with eigenvalues above 1.0 in 7 iterations, explaining 71.5% of the variance. Using a cutoff of .45 for inclusion of an item in the interpretation of a factor, all items loaded on at least one of the five factors, and four items, “fear with sexual activity,” “subjective arousal,” “sexual activity being associated with pleasurable excitement,” and “sexual activity being associated with unpleasurable excitement” loaded on two factors. The five factors (Table 1) can be labeled: I. Negative Affect during Sexual Arousal; II. Sexual Pain/Fears; III. Sexual Arousal/Orgasm; IV. Sexual Interest; and V. Masturbation (items available from the authors upon request).

Using the five factor scores derived from the PCA for each participant as dependent measures, group

**Table 1.** Principal Components Analysis of Sexual Functioning Form,  $N = 117$ 

Variables	Negative affect during arousal	Sexual fears/pain	Sexual arousal/orgasm	Sexual interest	Masturbation	$h^2$
Sexual desire	-.29	-.04	.07	.84	.22	.84
Sexual thoughts	.05	-.08	.21	.90	.05	.86
Masturbation	.01	.22	.00	.38	.79	.81
Orgasm with masturbation	.03	-.16	.16	-.01	.84	.76
Fear/disgust with sex activity	.60	.57	-.17	-.08	.09	.72
Orgasm with sex activity	.15	-.07	.72	.13	-.09	.57
Physiological signs of arousal	-.23	-.05	.61	.20	.32	.57
Subjective arousal	-.46	-.16	.71	.01	.21	.78
Pain with sexual activity	.10	.72	-.30	-.03	-.06	.62
Pleasurable excitement	-.56	-.37	.45	.10	.08	.67
Unpleasurable excitement	.65	.46	-.04	-.07	-.07	.64
Anger with sex arousal	.78	.16	.13	-.03	-.08	.67
Closeness w/sex arousal	-.70	.11	.30	.14	-.20	.65
Fear w/sex arousal	.16	.90	.08	-.03	.02	.84
Percent of variance	31.3	15.6	8.7	8.5	7.4	

Note. Numbers reflect the loading of each of the 14 SFF items on each of the factors in the rotated factor matrix.

categorization (e.g., SA, SPA, or Nonabused) as the independent variable, and BDI and BAI total scores as covariates, a multivariate analysis of covariance (MANCOVA) was performed. After adjusting for depression and anxiety, Wilks' criterion revealed that the combined factor scores were significantly affected by group categorization,  $F(10, 210) = 2.27, p < .05$ . To investigate the impact of group categorization on dependent variables, a series of Univariate  $F$  tests were completed. After controlling for the Type I error using the Bonferroni correction ( $\alpha = .05/5 = .01$ ), the univariate analyses significantly differentiated groups on Factor I: Negative Affect during Sexual Arousal,  $F(2, 109) = 9.21, p < .001$ , with both SA and SPA participants experiencing significantly higher levels of negative affect during sexual arousal than Nonabused participants (Table 2).

To examine predicted group membership (SA, SPA, or Nonabused), a hierarchical discriminant function analysis was conducted using the five factor scores derived

from the PCA. One discriminant function was significant,  $\chi^2(14, N = 120) = 54.57, p < .001$ , accounting for 99.08% of the between-group variability, and the groups correlated .63 with the function. The function maximally separated the SPA and Nonabused groups, with the SA group falling in between. The primary predictors of this function were Negative Affect during Sexual Arousal, depression, and anxiety ( $r = .73, .70$ , and  $.66$ , respectively).

Using sample sizes to estimate prior probabilities of group membership, 70.2% of the participants were classified correctly. Although 95.1% of the Nonabused group and 66.7% of the SPA group were correctly classified, none of the SA participants were correctly classified. In fact, 70% of the SA and 33.3% of SPA participants were predicted to be members of the Nonabused group. Thus, higher levels of Negative Affect during Sexual Arousal, depression, and anxiety differentiated SPA from Nonabused participants, but failed to differentiate SA from Nonabused participants.

**Table 2.** Observed and Adjusted Mean SFF Factor Scores by Group With results of MANCOVA Univariate  $F$ s and Pairwise Comparisons

Factor name	Sexual abuse ( $n = 20$ )		Sexual and physical abuse ( $n = 33$ )		Nonabuse ( $n = 61$ )		Univ. $F(2, 109)$
	Observed	Adjusted	Observed	Adjusted	Observed	Adjusted	
Negative affect during arousal <sub>a, b</sub>	.25 <sub>a</sub>	.21 <sub>a</sub>	.70 <sub>b</sub>	.52 <sub>b</sub>	-.44 <sub>a, b</sub>	-.33 <sub>a, b</sub>	9.21*
Sexual fears/pain	.03	.04	.36	.14	-.21	-.07	.41
Sexual arousal/orgasm	-.12	-.10	-.15	-.13	.16	.15	.84
Sexual interest	-.02	-.05	.08	.01	-.03	.02	.04
Masturbation	-.11	-.11	-.05	-.01	.07	.05	.16

Note. Samples sizes within each group are reduced from their original sizes as participants without current sexual partners were excluded from these analyses. Pairwise comparisons with different subscripts are significant at  $p < .05$  with the Bonferroni correction for multiple comparisons. Total BDI and BAI scores were used as covariates.

\* $p = .001$ .

### Perceptions of Sexuality

Participants rated their perceptions of their sexuality in their best (“at best”) and worst (“at worst”) psychological states on the SASB Intrex Questionnaires. Using SASB cluster scores as the dependent measures, group categorization (e.g., SA, SPA, Nonabused) as the independent variable, and total BDI and BAI scores as covariates, MANCOVAs were performed for Sexuality at Best and Sexuality at Worst. Wilk’s criterion revealed that the combined cluster scores were significantly affected by group categorization for Sexuality at Worst,  $F(16, 264) = 2.38$ ,  $p < .01$ , but not Sexuality at Best,  $F(16, 266) = 1.44$ ,  $ns$ .

### Sexuality at Worst

Within the Sexuality at Worst domain, a series of Roy-Bargman stepdown  $F$  tests were conducted. Utilizing the Bonferroni correction to control for Type 1 error, the groups differed significantly with respect to their perceptions of their sexuality at worst as SELF-AFFIRMing (Table 3). Nonabused participants perceived their sexuality at worst in more friendly than hostile terms, whereas SA and SPA participants viewed their sexuality at worst in more hostile than friendly terms. Both SA and SPA participants perceived their sexuality at worst as significantly less SELF-AFFIRMing than Nonabused participants. No significant differences were observed between SA and SPA participants on any of the variables.

### Sexual Risk

Five variables were identified as possible markers of sexual risk taking: condom use, number of lifetime vaginal intercourse partners, having a sexual partner who had other sexual partners within the past 6 months, use of alcohol or recreational drugs before sexual activity, and perceptions

of sexuality at worst as lacking SELF-AFFIRMation. The behavioral variables were chosen on the basis of the sexual risk literature. The SASB Intrex result was selected on the basis of the previous analysis and the conceptualization that perceptions influence behavior. Using these five risk items as the dependent variables, group categorization as the independent variable, and total BDI and BAI scores as covariates, a MANCOVA was performed. Wilks’ criterion revealed that the combined sexual risk variables were significantly affected by group categorization,  $F(10, 222) = 4.43$ ,  $p < .001$ . Because the risk variables were intercorrelated, Roy–Bargman stepdown  $F$  tests were used to investigate the impact of group categorization on individual risk variables. After controlling for the Type I error rate (Bonferroni,  $\alpha = .05/5 = .01$ ), the stepdown analyses revealed that the groups differed significantly with respect to their number of lifetime vaginal intercourse partners and perceptions of sexuality at worst as SELF-AFFIRMing (Table 4). SA and SPA women had a similar number of lifetime partners (20–21), which was 2.5 times that of the Nonabused women (8), and perceived their sexuality to be much less SELF-AFFIRMing at worst.

To examine predicted group membership (SA, SPA, and Nonabused), a hierarchical discriminant function analysis was conducted using the five risk items. One discriminant function was significant,  $\chi^2(10, N = 145) = 69.01$ ,  $p < .001$ , accounting for 92.2% of the between-group variability, and the groups correlated .65 with the function. The function maximally separated the SPA and Nonabused groups, with the SA group falling in between. The primary predictors of the function were Sexually at Worst lacking SELF-AFFIRMation, anxiety, depression, and number of lifetime vaginal intercourse partners ( $r = -.71, .68, .61, .50$ ). Using sample sizes to estimate prior probabilities of group membership, 65.0% of the participants were classified correctly. Even though 88.5% of the Nonabused group and 66.7% of the SPA group were

**Table 3.** Observed and Adjusted Mean Cluster Scores by Sexual Abuse Group for Sexuality at Worst

	Sexual abuse ( $n = 26$ )		Sexual and physical abuse ( $n = 43$ )		Nonabuse ( $n = 76$ )		Stepdown	
	Observed	Adjusted	Observed	Adjusted	Observed	Adjusted	$df$	$F$
Self-emancipate	33.1	33.0	49.3	49.1	29.9	30.0	2,139	3.98
Self-affirm <sub>a, b</sub>	32.7 <sub>a</sub>	35.2 <sub>a</sub>	25.1 <sub>b</sub>	29.2 <sub>b</sub>	60.3 <sub>a, b</sub>	57.0 <sub>a, b</sub>	2,138	11.91*
Active self-love	29.6	34.0	22.3	29.4	53.6	48.0	2,137	0.59
Self-protect	31.5	34.9	22.1	27.6	50.3	45.9	2,136	0.33
Self-control	32.7	33.6	30.5	31.9	25.9	24.7	2,135	0.27
Self-blame	48.1	43.9	51.6	44.8	20.3	25.6	2,134	0.38
Self-attack	40.4	37.4	44.2	39.2	15.9	19.8	2,133	0.56
Self-neglect	23.8	22.8	40.0	38.2	22.3	23.6	2,132	1.56

*Note.* Mean scores adjusted for total BDI and BAI scores. Means with different subscripts are significant at  $p < .05$  with Bonferroni correction for multiple comparisons.

\* $p < .001$ .

**Table 4.** Observed and Adjusted Means for Risk Variables by Sexual Abuse Group

Risk Variable	Sexual abuse ( <i>n</i> = 22)		Sexual and physical abuse ( <i>n</i> = 37)		Nonabuse ( <i>n</i> = 61)		<i>df</i>	Stepdown <i>F</i>
	Observed	Adjusted	Observed	Adjusted	Observed	Adjusted		
Condom use	1.36	1.39	1.65	1.65	1.23	1.22	2,115	0.98
Number of lifetime vaginal intercourse partners	20.70	20.58	21.25	20.91	7.51	7.96	2,114	7.00 <sup>a</sup>
Sex partner had other sex partner in last 6 months	1.22	1.21	2.31	2.29	2.00	2.02	2,113	3.04
Used alcohol or drugs prior to sexual activity in last 6 months	2.00	1.97	1.83	1.74	1.74	1.87	2,112	0.76
Sexuality at worst "self-affirm"	32.61	33.50	23.06	25.61	59.34	55.90	2,111	9.98 <sup>a</sup>

<sup>a</sup>Stepdown *F* test significant with Bonferroni correction for multiple comparisons (.05/5), *p* < .01.

correctly classified, none of the SA participants were classified correctly, with 56.5% predicted to be members of the SPA group and 43.5% predicted to be members of the Nonabused group. Sexuality that lacks self-affirmation in one's worst psychological state, anxiety, depression, and the number of lifetime vaginal intercourse partners differentiated SPA and C participants, but failed to differentiate SA participants from both SPA and C groups members.

## Discussion

The primary purpose of this study was to extend our understanding of how sexual functioning, perceptions of sexuality, and self-reported sexual risk might vary among samples of women with different childhood abuse patterns. We identified three groups of women, SA, SPA, and Nonabused. Our results suggest that the broad construct of sexuality did indeed vary for this volunteer sample of women, that group membership could be predicted with a moderate degree of accuracy for SPA and Nonabused, but not SA women, and that the pattern of results was quite consistent across variables. Specifically, the results showed the following patterns.

Sexual functioning differed according to abuse status. CSA individuals experienced more negative affect (e.g., fear, anger, disgust) during sexual arousal than did Nonabused individuals. Negative Affect during Sexual Arousal was greatest for SPA women and least for Nonabused women, with the SA women's scores falling in between. Although there were no differences between groups on the factors labeled Sexual Interest (desire), Sexual Arousal/Orgasm (orgasm) or Sexual Fears/Pain (pain), our assessment differed from that based on clinical interview or specific DSM-IV criteria (American Psychiatric Association, 1994), and these methodological differences may explain discrepancies in findings. Alternately,

negative affect associated with arousal may be a precursor to sexual dissatisfaction and DSM-IV sexual dysfunctions.

The predictive accuracy of sexual functioning was excellent for Nonabused women, good for SPA women, and very poor for SA women, suggesting that SA alone may not predict sexual problems, at least in samples comparable to those reported here.

Perceptions of sexuality at worst differed according to abuse status. Individuals with a history of CSA, alone or in combination with physical abuse, perceived their sexuality as involving less friendliness and more hostility than individuals without a history of CSA. Finding differences for "Sexuality at Worst" but not at "Best" suggests that participants were able to distinguish between their best and worst psychological states, a potentially useful finding in itself. The SELF-AFFIRM cluster differentiated participants' perceptions of their sexuality in their worst psychological states (lowest for SPA, highest for Nonabused). Because this is the first time, to our knowledge, that CSA women used SASB to rate their perceptions of their sexuality, we cannot be certain of the stability of these results, though they are consistent with already cited findings that women with CSA histories have sexual difficulties (Jackson, Calhoun, Amick, Maddever, & Habif, 1990; Sarwer & Durlak, 1996; Saunders et al., 1992; Tsai et al., 1979; Wenniger & Heiman, 1998). One could hypothesize that women who do not find their sexuality to be self-affirming may be at heightened risk for sexual dysfunctions.

Sexual risk taking differed according to abuse status. Individuals with a history of CSA (with or without physical abuse) reported more sexual risk than did Nonabused individuals. Important variables were the number of lifetime vaginal intercourse partners, and perceptions of sexuality at worst lacking self-affirmation. The results suggest that sexual risk taking may be better differentiated across

abuse history if a woman's perception of her sexuality is taken into account.

This study is unique in its attempt to explore sexuality by incorporating reports of behavior and self-perceptions. The findings that CSA women reported higher levels of negative affect during sexual arousal and had nearly three times more sexual partners than Nonabused women are consistent with previous findings (e.g., Jackson et al., 1990; Tsai et al., 1979). Why might women with a history of sexual abuse report more partners but also experience more negative affect with sexual arousal than Nonabused controls? One interpretation given the SASB results is that this pattern represents more negativity toward the self, reflected in the perception of one's sexuality lacking SELF-AFFIRMation at worst. An alternative clinical interpretation is that CSA women are searching for new experiences to modify their perceptions of their sexuality from less to more self-affirming. The extent to which these experiences are sought (in multiple partners), but not found (in the experience of negative affect with arousal), increases the chances that CSA women will look for it again, in other partners.

Several limitations of the present data deserve comment. First, the present sample is drawn from community volunteers and may not generalize to the larger population of sexually and physically abused women. Past psychotherapy rates were rather high, suggesting that women might be more likely to volunteer for a study on this topic if they had some prior experience discussing it. Second, the sample size is limited, especially for the SA group and this reduced the power to possibly detect other differences. Third, the abuse information, based solely on self-report, could be questioned on the basis of reliability and validity, though abuse status consistency was cross-checked by a phone interview and published self-report measures. Categorical mistakes based on distortion or poor recall would more likely obscure group differences and result in conservative findings. A related limitation is that we excluded similar age peer sexual contact from abuse definitions. Finally, like most other studies of childhood abuse, the data are correlational, and causal interpretations cannot be made.

In conclusion, comparing "pure" and "combined" types of abuse, particularly SA and SPA, may be crucial if we are to form precise conclusions regarding the difficulties experienced by those with an abuse history. Although different abuse categories have been recognized, most research has failed to assess for the presence of physical abuse in sexual abuse survivors (Rind, Tromovich, & Bauserman, 1998). Increased clarification of abuse status combined with a more precise understanding of abuse survivors' perceptions of their sexuality may be useful for

conceptualizing sexual risk and the broad range of sexual difficulties experienced.

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