SELF-REPORTED HISTORY OF SEXUAL COERCION AND RAPE NEGATIVELY IMPACTS RESILIENCE TO SUICIDE AMONG WOMEN STUDENTS

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A substantial literature has documented that sexual abuse relates to suicidal behaviors but relatively less is known about resilience to suicide, especially cognitive deterrents to suicide. The present study investigated the effects of a history of sexual victimization on reasons for living. Female participants (N = 138; M age = 24.4 years; SD = 7.3 years; range = 18 to 53 years; 79% Caucasian) completed the Sexual Experiences Survey (SES) and the Reasons for Living (RFL) Inventory. According to SES responses, participants were classified into 5 mutually exclusive groups: no victimization, sexual contact, sexual coercion, attempted rape, and rape. Analyses of variance showed that degree of sexual victimization had a significant effect on the RFL Total scale and 2 subscales (Survival and Coping Beliefs; Moral Objections). The general pattern was that mean RFL scores in the no victimization group were significantly higher than the mean scores in the sexual coercion and rape groups. An implication is that having a history of sexual victimization, especially sexual coercion and rape, limits one's later reasons for not committing suicide. Bolstering these modifiable deterrents to suicide should be part of suicide prevention efforts among at-risk women.

A wealth of research has established a robust link between childhood sexual abuse and numerous adverse outcomes, including increased risk for suicidal behavior in adulthood. For example, Nelson et al. (2002) used survival analysis to examine risk for adverse outcomes subsequent to childhood sexual abuse, finding significantly increased hazard ratios among women and men for

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a host of negative outcomes, with suicide attempt among the highest risks. Dube et al. (2005) reported that men and women who experienced sexual abuse as a child were more than twice as likely to have a history of suicide attempt compared to those reporting no such history. Ystgaard, Hestetun, Loeb, and Mehlum (2004) further found that physical and sexual abuse were independently associated with chronic suicide attempts, even after controlling for the effects of other adverse factors from childhood. Finally, in a large retrospective cross-sectional study, Joiner et al. (2007) found that childhood physical and violent sexual abuse had strong impacts on lifetime suicide attempts, effects that were stronger than those caused by molestation and verbal abuse.

However, although many individuals who experienced sexual abuse as children never attempt suicide, despite being at elevated risk, little research has examined preventative factors for suicide among this group. In one such study, Peters and Range (1995) found that adults who experienced childhood sexual abuse had less cognitive deterrents to suicide than those who had not. Specifically, the abused adults perceived having lower levels of beliefs in their ability to cope with stress and also perceived less responsibility for their families than non-abused adults. Similarly, Bryant and Range (1997) found that adults who had been severely physically and sexually abused had fewer overall reasons for living and fewer social concerns as a reason for not committing suicide than either exploited or non-abused adults. In addition, those who were severely sexually abused had fewer survival and coping beliefs than those who were moderately sexually abused. Bryant and Range hypothesized that sexual and physical abuse may hinder the development of cognitive suicide inhibitions, that cognitive deterrents to suicide may hinder remembering sexual and/or physical abuse or, alternatively, that people who remember abuse may be poor at producing cognitive deterrents to suicide.

The present study sought to further explore coping and resilience to suicide among women who report a history of sexual victimization, happening at any age, not just in childhood and to extend the literature by examining the effects of varying degrees of sexual victimization. It was predicted that women with a selfreported history of more severe forms of sexual victimization would report lower cognitive deterrents to suicide compared to women without a self-reported history of sexual victimization.

Method

Participants and Procedure

Undergraduate women (N=138; M age = 24.4 years, SD=7.3 years; range = 18 to 53 years; 79% Caucasian) recruited from psychology classes completed anonymously a questionnaire packet at home and then returned it. In our pilot study, it was found that 94% of male students reported no history of sexual victimization so men were not recruited or included in the full study.

Measures

Sexual Experiences Survey (SES; Koss & Gidycz, 1985; Koss, Gidycz, & Wisniewski, 1987) is a 10-item self-report survey that identifies various degrees of sexual victimization. Each item taps a specific kind of unwanted sexual experience (e.g., fondling, kissing, or petting because of continual pressure from the perpetrator; sexual intercourse because of threats or physical force from the perpetrator) answered on a 6-point scale ranging from 0 (*never experienced the event the statement described*) to 3 (*experienced this event three times*) to 5 (*experienced this event five or more times*). The SES is psychometrically sound for research purposes and is designed for use in non-clinical populations such as college students. Internal consistency (Cronbach's alpha) of the SES in the present sample was .72, which is similar to the alpha for women (.74) reported in the initial validation study (Koss & Gidycz, 1985) and suggests that experiences of sexual victimization are quite varied.

Reasons for Living Inventory (RFL; Linehan, Goodstein, Nielsen, & Chiles, 1983) is a 48-item self-report measure that assesses potential reasons for not committing suicide should the thought arise. The RFL is based on a cognitive-behavioral view of suicidal behavior, which posits that cognitive patterns, whether they are beliefs, expectations, or capabilities, mediate suicidal behaviors. Respondents answer using a 6-point scale ranging from (1) *extremely unimportant* to (6) *extremely important*, with higher scores indicating higher reasons for living. The RFL includes six subscales: Survival and Coping Beliefs, Responsibility to Family, Child-Related Concerns, Fear of Suicide, Fear of Social Disapproval, and Moral Objections (Linehan et al., 1983). The number of items for each subscale ranges from 3 to 24. Subscale and total scores are divided by the number of items, therefore scores range from 1 to 6. The RFL has a solid theoretical base, is widely used in clinical research, and has ample evidence of reliability and validity (Osman et al., 1993; Range, 2005; Range & Knott, 1997). In this study, Cronbach's alpha for the RFL Total score was high (.91). Alphas for the subscales were also high ranging from .82 (Responsibility to Family) to .93 (Survival and Coping Beliefs) with an average alpha of .86.

Results

The scoring procedure for the SES outlined by Koss et al. (1987) was used to classify respondents into five mutually exclusive groups according to the most severe sexual victimization they experienced, including no victimization (n=50, 36%); sexual contact (n=22, 16%); included sexual behavior such as fondling that did not involve attempted penetration subsequent to the use of verbal pressure, misuse of authority, threats, or physical force); sexual coercion (n=30, 22%); included sexual intercourse subsequent to the use of verbal pressure or the misuse of authority but no threats of force or direct physical force); attempted rape (n=6, 4%); included an attempt at unwanted sexual intercourse by threats, direct physical force, or use of alcohol or drugs but no intercourse); and rape (n=30, 22%); included unwanted sexual intercourse by threats, direct physical force, or use of alcohol or drugs).

A series of one-factor ANOVAs were used to examine group differences on the RFL Total scale and the 6 subscales (see Table 1). Results showed that degree of sexual victimization had a significant effect on the RFL Total scale, F(4, 126) = 3.22, p < .05, and two subscales: Survival and Coping Beliefs, F(4, 129) = 2.82, p < .05, and Moral Objections, F(4, 132) = 4.09, p < .01. Post hoc tests (Fisher's LSD, $\alpha = .05$) revealed that the mean RFL Total score in the no victimization group (4.30) was significantly higher than the mean scores in the sexual coercion (3.93) and rape (3.83) groups, which did not differ from each other. Also, the mean RFL Total score in the sexual contact group (4.22) was significantly higher than the mean score in the rape group. On Survival and Coping Beliefs, the mean score in the no victimization group (4.77) was significantly higher than the mean scores in the sexual

			M and SD				
RFL Scales	No victimization	Sexual contact	No victimization Sexual contact Sexual coercion Attempted rape	Attempted rape	Rape	${F}$	d
Total Score	$4.30^{a,b} (0.71)$	$4.22^{e} (0.58)$	3.93^a (0.64)	$4.28 \ (0.59)$	$3.83^{b,c} (0.54)$	3.220	.015
Survival and Coping Beliefs	$4.77^{a,b} (0.82)$	$4.79^{e} (0.67)$	$4.24^{a,c} (0.89)$	4.69(0.82)	4.34^{b} (0.87)	2.820	.028
Responsibility to Family	4.85 (0.73)		4.94 (0.81)	$5.24 \ (0.63)$	~	0.873	.482
Child-Related Concerns	4.38 (1.86)	3.48(2.03)	4.26 (1.95)	3.61(2.34)	3.81 (2.25)	1.010	.407
Fear of Suicide	2.97 (1.26)	2.76(1.14)	2.59 (1.19)	3.00(0.89)	2.51 (1.14)	0.908	.462
Fear of Social Disapproval	3.01 (1.50)	2.74 (1.19)	3.31 (1.59)	3.61 (1.61)	2.52 (1.34)	1.540	.193
Moral Objections	$3.85^{a,b}$ (1.55)	3.64^{e} (1.79)	$2.52^{a,c}$ (1.58)	3.42(2.15)	\sim	4.090	.004
Note. In each row, means sharing the same superscript are significantly different from each other.	ing the same superscrij	pt are significantly c	lifferent from each ot	her.			

TABLE 1	I Means (and Standard Deviations) of Women with Varying Degrees of Sexual Victimization on the Reasons for Living
Inventory	

coercion (4.24) and rape (4.34) groups, which did not differ from each other. Also, the mean score in the sexual contact group (4.79) was significantly higher than the mean score in the sexual coercion group. Finally, on Moral Objections, the mean score in the no victimization group (3.85) was significantly higher than the mean scores in the sexual coercion (2.52) and rape (2.73)groups, which did not differ from each other. Also, the mean score in the sexual contact group (3.64) was significantly higher than the mean score in the sexual coercion group.

Discussion

Our analyses provide further evidence that college women who were sexually victimized seem to have fewer reasons for living than do those who have not been victimized, with experiences of sexual coercion and rape being the most deleterious forms of sexual victimization. The present study extends the results from Peters and Range (1995) by finding that different degrees of sexual victimization relate differentially to reasons for living rather than an examination of the data from the dichotomous perspective of whether childhood sexual abuse had occurred or not. In the present study, two types of cognitive deterrents were specifically identified as being lower among those with a history of unwanted sexual intercourse subsequent to the use of menacing verbal pressure or the misuse of authority and among those who had been raped. The Survival and Coping Beliefs subscale measures the conviction that one can find solutions to ones problems and have the courage to face life. Our finding is consistent with literature suggesting that sexual victimization negatively impacts the proper development of adaptive coping skills (e.g., Gall, 2006; Steel, Sanna, Hammond, Whipple, & Cross, 2004). The Moral Objections subscale measures religious prohibitions against suicidal behavior. It is possible that some women who are victims of sexual coercion or rape perceive the violation as evidence of an unjust or immoral world, thereby diminishing to some degree moral reasoning as a basis for their behavior. An alternative explanation, however, to both of these hypotheses is that women with lower coping skills and lower moral beliefs are perhaps more vulnerable to sexual victimization, although under no circumstances are victims of sexual assault responsible for the event.

Limitations of this study are that data were not collected about when the abuse occurred and who the perpetrators were. This type of data should be included in future studies so that patterns of re-victimization and the effects of the nature of the relationship between perpetrator and victim could be examined. Also, this study focused solely on experiences of sexual victimization and not other types of adverse experiences. In many cases, sexual abuse and physical abuse often co-occur (Ystgaard et al., 2004), and therefore future research is needed to examine the impact of physical abuse on cognitive deterrents to suicide and the potential interaction between a history of both sexual and physical abuse on deterrents to suicide. Other potentially important avenues for study might be to explore whether similar effects apply to sexually victimized men and to students in other disciplines besides psychology, to include ethnically and culturally diverse individuals into the sample to examine generalizability, and to examine family and community assumptions about reasons for living among those at risk for sexual victimization.

Finally, studies of this type should be extended to older adults, who have the highest suicide rate of any age group, to add to the burgeoning literature on risk factors, protective factors, and resilience to suicide among those in later life (e.g., Heisel & Flett, 2008; Miller, Segal, & Coolidge, 2001; Segal, Lebenson, & Coolidge, 2008; Segal, Mincic, Coolidge, & O'Riley, 2004; Segal & Needham, 2007). One could make the argument based on this study that having a history of sexual victimization, especially being coerced into intercourse or being forcibly raped, limits one's reasons for not committing suicide among women. Because reasons for living are potentially modifiable aspects of coping, clinicians might consider attempts to bolster or enhance these deterrents to suicide as part of suicide prevention efforts among at-risk women.

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