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Prediction of Numbing and Effortful Avoidance in Female Rape Survivors With Chronic PTSD

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Abstract

The purpose of the present study was to investigate the relationships among numbing, arousal, intrusion, and avoidance in a sample of 272 female rape survivors. Multiple regression analyses were conducted to test a theoretical model, which posits that hyperarousal and numbing are functionally related mechanisms and intrusions and avoidance are functionally related. Results supported the hypothesis that arousal explained the majority of the variance in numbing beyond that explained by avoidance and intrusion. In addition, intrusive symptoms explained the majority of the variance in effortful avoidance beyond that explained by numbing and arousal. The findings suggest that numbing and effortful avoidance may be separate mechanisms associated with symptoms of arousal and intrusion, respectively.

The symptom criteria and the organization of the posttraumatic stress disorder (PTSD) diagnosis have changed substantially since the introduction of the disorder in the *Diagnostic and Statistical Manual of Mental Disorders*, third edition (DSM-III) (APA, 1980). In the DSM-IV (APA, 1994) the diagnostic category includes three clusters: reexperiencing, avoidance, and arousal. In recent years there has been some debate over whether or not these clusters accurately represent the dimensions underlying the disorder (Foa, Riggs, & Gershuny, 1995; Litz et al., 1997; Taylor, Koch, Kuch, Crockett, & Passey, 1998). Previous studies of the structure of PTSD have generally focused on veteran populations. The majority predated the publication of the DSM-IV and generally did not focus exclusively on the 17 items now included as PTSD criteria in the DSM-IV (Keane, Caddell, & Taylor, 1988; King & King, 1994; McFall, Smith, McKay, & Tarver, 1990; Silver & Iacono, 1984; Watson et al., 1991). Older factor analytic studies of PTSD have not supported the current DSM-IV organization of the clusters. These studies have found factors representing reexperiencing or intrusion, withdrawal, numbing or impoverished interpersonal relationships, and guilt or “self-persecution” (Keane et al., 1988; King & King, 1994; Silver & Iacono, 1984; Watson et al., 1991).

Although there is wide variation in the number and types of factors identified in these studies, they have all included a factor representing intrusion or arousal and a separate numbing, withdrawal, or avoidance factor. A 1998 confirmatory factor analysis study by King, Leskin, King, and Weathers (1998) tested a variety of nested models of PTSD in a sample of 524 treatment-seeking male veterans. They included a four-factor first-order solution, a two-factor higher-order solution, a single-factor higher-order solution, and a single-factor first-order solution. King and associates (1998) found the best fit to be the four-factor first-order solution containing moderately to highly correlated yet distinct first-order factors corresponding to reexperiencing, effortful avoidance, emotional numbing, and hyperarousal aspects of PTSD.

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Fewer studies of the factor structure of PTSD have assessed civilian samples. Among them are one of the most rigorous factor-analytic studies to date (Taylor et al., 1998) and a replication of this study (Buckley, Blanchard, & Hickling, 1998), which both support a two-factor model of PTSD.

The Taylor and colleagues (1998) empirical study focused on the 17 symptom criteria of the current PTSD diagnosis in samples of motor vehicle accident victims and United Nations peacekeepers. The results suggest an alternative symptom configuration that may more accurately reflect the factor structure of PTSD in civilian populations than does the current DSM-IV configuration. The analyses revealed two factors loading on a single, higher-order factor. The higher-order factor, encompassing the majority of the 17 PTSD symptoms, supports the view of PTSD as a unified construct. The authors interpret their two lower-order factors—intrusion/avoidance and hyperarousal/numbing—as signifying pairs of functionally related mechanisms. According to Taylor and coworkers (1998), numbing is an automatic consequence of uncontrollable physiological arousal, whereas avoidance is an active means of coping with trauma-related intrusion. The Taylor and associates (1998) study was replicated in a confirmatory factor analysis of a sample of 217 motor vehicle accident survivors (Buckley et al., 1998). The results of the Taylor and colleagues study lend empirical support to the hypothesis of Foa, Zinbarg, and Rothbaum (1992) that avoidance and numbing involve two separate mechanisms. Foa and coworkers (1992) view avoidance as regulated by strategic (or effortful) processes, and numbing as mediated by more automatic mechanisms. A more recent study found hyperarousal to be a stronger predictor of numbing symptoms in Vietnam combat veterans than active avoidance, comorbid depression, or substance abuse (Litz et al., 1997).

If the model suggested by Taylor and associates (1998) generalizes to PTSD populations other than motor vehicle accident survivors and United Nations peacekeepers, it may provide a comprehensive and useful framework for interpreting PTSD symptoms. The aim of the present article, therefore, was to test the construct validity of the two-factor model in a separate and different sample of treatment-seeking female rape survivors. Specifically, the goal was to assess the relationships among numbing, arousal, avoidance, and intrusion by using four regression analyses. The following hypotheses were postulated

1. Numbing will be predicted by arousal.
2. Numbing will not be predicted by intrusion.
3. Active avoidance will be predicted by intrusion.
4. Active avoidance will not be predicted by arousal.

Method

Participants

The participants were 272 treatment-seeking rape victims who took part in a diagnostic interview. Of the 272 participants, 221 (81%) met PTSD criteria according to the Clinician-Administered PTSD Scale (CAPS; Blake et al., 1990), and 51 (19%) did not. Participants endorsed a wide range of frequency and intensity of PTSD symptoms. Total CAPS frequency scores for the 17 items combined ranged from 1 to 64 ($M = 33.65$; $SD = 12.52$), and total CAPS intensity scores ranged from 2 to 59 ($M = 33.68$; $SD = 12.55$). The correlations between the frequency and intensity items for clusters B, C, and D were .78 ($p < .01$), .90 ($p < .01$), and .85 ($p < .01$), respectively. A relatively small portion of the sample did not meet criteria for PTSD, primarily because this study was part of a larger treatment study that drew a sample of treatment-seeking rape survivors. For a detailed description of the sample and the exclusionary criteria, please refer to Resick, Nishith, Weaver, Astin, and Feuer (2002).

The average age of the participants was 32.71 years ($SD = 10.5$; range = 18–72 years). The average time between the rape and seeking of treatment was 8.92 years ($SD = 9.13$, range = 0.25 to 47 years). Participants had received an average of 13.95 years of education ($SD = 3.19$, range = 0–24). The participants reported relatively low household income: 21% less than \$5,000 per year; 12% between \$5,000 and \$10,000 per year; 24% between \$10,001 and \$20,000 per year; 15% between \$20,001 and \$30,000 per year; 13% between \$30,001 and \$50,000 per year; and 15% above \$50,001 per year. Of the 272 participants, 50% were single or widowed, 23% were married or cohabiting, and 27% were separated or divorced. The racial distribution was 72% Caucasians and 28% African Americans.

Measures

Clinician-Administered PTSD Scale—The Clinician-Administered PTSD Scale (CAPS; Blake et al., 1990) is a 30-item structured diagnostic interview, which contains separate 5-point frequency and intensity rating scales (0–4) for symptoms identified with PTSD in the DSM-III-R. For the purpose of these analyses, the CAPS were rescored to reflect the three main subscales of intrusion, avoidance, and arousal of the DSM-IV diagnosis of PTSD. The scale has three main subscales of intrusion, avoidance, and arousal. Interrater reliability for each of the three subscales (frequency and severity) is reported to be better than .92, and high convergent validity with other PTSD measures has been reported. Please refer to Resick and coworkers (2002) for a detailed description of interrater reliabilities for the PTSD diagnosis in the current sample.

Procedure and Statistical Analyses

Participants who gave informed consent were administered the CAPS by a trained clinical interviewer. Four multiple regression analyses were conducted to examine the predictive relationships among the CAPS subscales of arousal, intrusion, avoidance, and numbing. Given the high correlation between the frequency and intensity items for all of the CAPS clusters B, C, and D, item scores were computed as a sum of the frequency and intensity scores. CAPS subscales of arousal, intrusion, avoidance, and numbing were constructed from the 17 items by using the item loadings suggested by the Taylor and colleagues (1998) factor analysis. In the original Taylor and colleagues (1998) factor structure, the item “inability to recall aspects of the trauma” did not load significantly on any factor and was therefore not included in these analyses. The item composition of the variables included in this study is presented in Table 1.

Results

Two hundred and seventy-two cases were used in the regression analyses. This sample size resulted in a ratio of 90 cases to each independent variable, which exceeds the recommended standard of 5 cases per independent variable (Tabachnick & Fidell, 1996). There was no evidence of skewness or kurtosis in the distributions of the independent or dependent variables. Examination of residual scatter plots did not reveal failure of normality, linearity, or homoscedasticity for any of the variables included in the analysis. No cases had missing data and no suppressor variables were found. No outliers among the cases were found when using the $p < .001$ criterion for Mahalanobis distance. The highest correlation between variables in the analyses was .64 between intrusion and avoidance, and examination of conditioning index scores and variance proportions revealed no problems with multicollinearity or singularity (Belsely, Kuh, & Welsch, 1980). Comparison of the simple correlations between dependent and independent variables and the beta weights of each independent variable were not suggestive of suppressor variables. Pearson product-moment correlations were computed for all predictor and criterion variables (refer to Table 2 for the correlations).

Partial correlations were computed between (1) intrusion and numbing while controlling for avoidance and arousal to test the second hypothesis that numbing will not be predicted by intrusion ($r = -.03, ns$) and (2) arousal and avoidance while controlling for intrusion and numbing to test the fourth hypothesis, that active avoidance will not be predicted by arousal ($r = .07, ns$). Power analyses showed that the total power available to detect a small effect size ($r_{\text{small}} = .10$) at a two-tailed $p = .05$ for the present sample was .38. When the two-tailed α was changed to .10, the total power available to detect a significant trend for $r_{\text{small}} = .10$ in the sample increased to .50 (Erdfelder, Faul, & Buchner, 1996).

Four regression analyses, using the blocked entry method, were run in order to examine the hypotheses that arousal symptoms contribute specifically to the prediction of numbing, while intrusive symptoms contribute specifically to the prediction of avoidance. In the first regression equation, avoidance and intrusion were entered on the first step and arousal on the second step as predictors of numbing. Because of the moderate correlations between all clusters of PTSD symptoms, avoidance and intrusion were entered on the first step to rule out overlapping variance between arousal and other symptom clusters in predicting numbing. Avoidance and intrusion scores entered on the first step were significantly predictive of numbing. After removal of variance due to avoidance and intrusion, arousal contributed significantly to the prediction of numbing on step 2 (Table 3).

A second regression equation was conducted to illustrate that intrusion is not a significant predictor of numbing. With numbing as the dependent variable, avoidance and arousal were entered on the first step and intrusion on the second step. Numbing was significantly predicted by avoidance and arousal. On the second step, intrusion did not contribute uniquely to the prediction of numbing (Table 4).

The third regression equation tested the hypothesis that intrusion is a significant predictor of avoidance. With avoidance as the dependent variable, numbing and arousal were entered on the first step and intrusion on the second step. Numbing and arousal were significantly predictive of avoidance. On the second step, intrusion contributed significant unique variance to the prediction of avoidance. After removal of variance due to numbing and arousal, intrusion contributed significant unique variance to the prediction of avoidance on step 2 (Table 5). The fourth regression equation was conducted to illustrate that arousal is not a significant predictor of avoidance. Numbing and intrusion were entered on the first step and arousal on the second step as predictors of avoidance. Numbing and intrusion scores entered on the first step were significantly predictive of avoidance. After removal of variance due to numbing and intrusion, arousal did not contribute any significant unique variance to the prediction of avoidance on step 2 (Table 6).

Discussion

The finding that all four factors were significantly correlated in this sample may lend some support to the Taylor and coworkers (1998) suggestion of the existence of a single higher-order PTSD factor. However, as the CAPS interview was used to assess all symptoms of PTSD, it is important to note the possible role of shared method variance in the correlations between clusters. The patterns revealed in the regression analyses do seem to support the more specific hypothesis that numbing/arousal and avoidance/intrusion may be related mechanisms within PTSD (Foa et al., 1992; Litz et al., 1997; Taylor et al., 1998). Equally importantly, the power analyses for testing the null hypotheses suggest that numbing/intrusion, and avoidance/arousal are not significantly related to each other. Effortful avoidance may represent a more strategic and active mechanism by which people cope with intrusive symptoms, and numbing may serve to decrease the more automatic arousal symptoms.

The finding that numbing and avoidance were significantly correlated in this sample is not surprising. It is generally agreed that numbing and effortful avoidance are related and that both serve to decrease distress caused by positive symptoms of PTSD (Foa et al., 1995; Litz et al., 1997; Taylor et al., 1998). Similarly, effortful avoidance and numbing symptoms are both considered aspects of the avoidance cluster of the DSM-IV PTSD criteria. The finding that the arousal/numbing and intrusion/avoidance relationships are evident even after removing variance due to the relationship between avoidance and numbing was even more enlightening. This result supports the application of the model suggested by Taylor and associates (1998) to chronic PTSD symptoms in rape survivors.

There is theoretical support for the pairing both of intrusion with effortful avoidance and of arousal with numbing in the PTSD literature. Several authors have suggested that as PTSD develops, trauma survivors may begin to recognize that certain situations, people, activities, or memories evoke distressing thoughts and emotions related to the trauma (Foa et al., 1992). In response, they actively organize their life around avoiding those reminders. Teaching clients to approach these avoided situations or trauma memories is the basis for the inclusion of behavioral and imaginal exposure in some treatments of PTSD (Foa & Rothbaum, 1998; Marks, Lovell, Noshirvani, Livanou, & Thrasher, 1998).

Much of the theoretical support for the relationship between numbing and hyperarousal is in the literature on the biological explanations of PTSD. In part because numbing was not included as a separate cluster of PTSD symptoms in the DSM, its role in PTSD has been largely overlooked. This oversight is potentially important because several studies have found both numbing and avoidance to be predictive of PTSD development (McFarlane, 1992; Perry, Difede, Musngi, Frances, & Jacobsberg, 1992). Although numbing cannot be measured in the same way in animals as in humans, it has been viewed as analogous to the conditioned analgesia response in animals.

Theorists have proposed that there may be a biological basis for conditioned analgesia reactions in animals. Several authors have suggested that conditioned analgesia may be related to automatic freezing reactions in animals exposed to stress-provoking stimuli (Foa et al., 1992; Maier et al., 1982). Others have hypothesized a link in both animals and humans between arousal and numbing responses to stressful situations and a variety of physiological changes, including changes in endogenous opioid peptide levels (Ironsides, 1980; Pitman, van der Kolk, Orr, & Greenberg, 1990; van der Kolk, Greenberg, Orr, & Pitman, 1989), glucocorticoid levels (Yehuda et al., 1995), hippocampal function (Sapolsky, Hideo, Rebert, & Finch, 1990), and serotonin levels (Gerson & Baldessarini, 1980).

Both arousal and numbing can be viewed as dysregulated remnants of fight/flight reactions. Arousal symptoms activating the sympathetic nervous system may have served to assist in escaping or fighting off an opponent; numbing and stress-induced analgesia prevent response to the pain of wounds until the organism is in a safe situation. There are practical implications of the link between more biologically based symptoms of arousal and numbing, on the one hand, and intrusive symptoms and active avoidance on the other. These pairings call into question whether the DSM-IV clusters provide an accurate representation of PTSD. In addition, the findings from the Taylor and associates (1998) study suggest that the amnesia item, "inability to recall aspects of the trauma," might not be a key feature of PTSD. It is plausible that the existing DSM criteria for PTSD might need to be revised and recast to form two coherent factors/clusters, rather than the current three. Identifying and replicating the factors underlying PTSD and their interactions will facilitate a better understanding of its cause and maintenance, which in turn will lead to an improved assessment of the disorder.

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References

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 3. Washington, DC: Author; 1980.
- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 4. Washington, DC: Author; 1994.
- Belsely, DA.; Kuh, E.; Welsch, RE. Regression diagnostics: Identifying influential data and sources of collinearity. New York: Wiley; 1980.
- Blake DD, Weathers FW, Nagy LM, Kaloupek DG, Klauminzer D, Charney DS, et al. The development of a Clinician-Administered PTSD Scale. *Journal of Traumatic Stress* 1990;8:75–90. [PubMed: 7712061]
- Buckley TC, Blanchard EB, Hickling EJ. A confirmatory factor analysis of posttraumatic stress symptoms. *Behaviour Research and Therapy* 1998;36:1091–1099. [PubMed: 9737061]
- Erdelfer E, Faul F, Buchner A. A general power analysis program. *Behaviour Research Methods, Instruments, and Computers* 1996;28:1–11.
- Foa EB, Riggs DS, Gershuny B. Arousal, numbing, and intrusion: Symptom structure of PTSD following assault. *American Journal of Psychiatry* 1995;152:116–120. [PubMed: 7802101]
- Foa, EB.; Rothbaum, BO. Treating the trauma of rape: Cognitive-behavioral therapy for PTSD. New York: Guilford; 1998.
- Foa EB, Zinbarg R, Rothbaum BO. Uncontrollability and unpredictability in post-traumatic stress disorder: An animal model. *Psychological Bulletin* 1992;112:218–238. [PubMed: 1454893]
- Gerson SC, Baldessarini RJ. Motor effects of serotonin in the central nervous system. *Life Sciences* 1980;27:1435–1451. [PubMed: 6160367]
- Ironside W. Conservation-withdrawal and action-engagement: On a theory of survivor behavior. *Psychosomatic Medicine* 1980;42:163–175. [PubMed: 7413901]
- Keane T, Caddell JM, Taylor KL. Mississippi Scale for Combat-Related Posttraumatic Stress Disorder: Three studies in reliability and validity. *Journal of Consulting and Clinical Psychology* 1988;56:85–90. [PubMed: 3346454]
- King L, King D. Latent structure of the Mississippi Scale for Combat-related Post Traumatic Stress Disorder: Exploratory and higher-order confirmatory factor analyses. *Assessment* 1994;1:275–291.
- King DW, Leskin GA, King LA, Weathers FW. Confirmatory factor analysis of the Clinician-Administered PTSD Scale: Evidence for dimensionality of posttraumatic stress disorder. *Psychological Assessment* 1998;10:90–96.
- Litz BT, Schlenger WE, Weathers FW, Caddell JM, Fairbank JA, LaVange LM. Predictors of emotional numbing in posttraumatic stress disorder. *Journal of Traumatic Stress* 1997;10:607–618. [PubMed: 9391944]
- Maier SF, Drugan R, Grau J. Controllability, coping behavior and stress-induced analgesia in the rat. *Pain* 1982;12:47–56. [PubMed: 7199129]
- Marks I, Lovell K, Noshirvani H, Livanou M, Thrasher S. Treatment of posttraumatic stress disorder by exposure and/or cognitive restructuring. *Archives of General Psychiatry* 1998;55:317–325. [PubMed: 9554427]
- McFall ME, Smith DE, McKay PW, Tarver DJ. Reliability and validity of Mississippi Scale for Combat-Related Post-traumatic Stress Disorder. *Psychological Assessment* 1990;2:114–121.
- McFarlane AC. Avoidance and intrusion in posttraumatic stress disorder. *Journal of Nervous and Mental Disease* 1992;180:439–445. [PubMed: 1624925]
- Perry S, Difede J, Musngi G, Frances A, Jacobsberg L. Predictors of posttraumatic stress disorder after burn injury. *American Journal of Psychiatry* 1992;149:931–935. [PubMed: 1609874]

- Pitman RK, van der Kolk BA, Orr SP, Greenberg MS. Naloxone reversible stress induced analgesia in post traumatic stress disorder. *Archives of General Psychiatry* 1990;47:541–547. [PubMed: 2350206]
- Resick PA, Nishith P, Weaver TL, Astin MC, Feuer CA. A comparison of cognitive processing therapy with prolonged exposure and a waiting condition for the treatment of chronic posttraumatic stress disorder in female rape victims. *Journal of Consulting and Clinical Psychology* 2002;70:867–879. [PubMed: 12182270]
- Sapolsky RM, Hideo E, Rebert CS, Finch CE. Hippocampal damage associated with prolonged glucocorticoid exposure in primates. *Journal of Neuroscience* 1990;10:2897–2902. [PubMed: 2398367]
- Silver SM, Iacono CU. Factor-analytic support for DSM-III's post-traumatic stress disorder for Vietnam veterans. *Journal of Clinical Psychology* 1984;40:5–14. [PubMed: 6746958]
- Tabachnick, BG.; Fidell, LS. *Using multivariate statistics*. 3. New York: Harper Collins; 1996.
- Taylor S, Koch WJ, Kuch K, Crockett DJ, Passey G. The structure of posttraumatic stress symptoms. *Journal of Abnormal Psychology* 1998;107:154–160. [PubMed: 9505048]
- van der Kolk BA, Greenberg MS, Orr SP, Pitman RK. Endogenous opioids and stress induced analgesia in posttraumatic stress disorder. *Psychopharmacology Bulletin* 1989;25:108–112.
- Watson CG, Kucala T, Juba M, Manifold V, Anderson P, Anderson D. A factor analysis of the DSM-III post-traumatic stress disorder criteria. *Journal of Clinical Psychology* 1991;47:205–214. [PubMed: 2030125]
- Yehuda R, Kahana B, Binder-Byrnes K, Southwick S, Mason J, Giller EL. Low urinary cortisol excretion in Holocaust survivors with posttraumatic stress disorder. *American Journal of Psychiatry* 1995;152:982–986. [PubMed: 7793468]

Table 1

Clinician-Administered PTSD Scale Item Composition of Primary Study Variables

Variable	CAPS Items
Intrusion	Intrusive thoughts
	Nightmares
	Flashbacks
	Emotional reactivity
	Physiological reactivity
Avoidance	Avoidance of trauma-related thoughts
	Avoidance of situational reminders
Numbing	Loss of interest
	Detachment
	Restricted affect
	Sense of foreshortened future
Arousal	Disturbed sleep
	Irritability
	Difficulty in concentrating
	Hypervigilance
	Startle

Note. CAPS = Clinician-Administered PTSD Scale.

Table 2Pearson Product-Moment Correlations Among Primary Study Variables ($N = 272$)

Variable	Intrusion	Avoidance	Numbing	Arousal
Intrusion	—			
Avoidance	.64***	—		
Numbing	.40***	.48***	—	
Arousal	.57***	.49***	.59***	—

 $p < .001$.

Table 3Hierarchical Regression to Examine Prediction of Numbing from Arousal ($N = 272$)

Symptom Cluster	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Step 1				
Constant	6.78	1.20	—	5.65**
Intrusion	0.18	0.07	0.16*	2.37*
Avoidance	0.82	0.15	0.37**	5.40**
Step 2				
Constant	1.55	1.26	—	1.23
Intrusion	−0.04	0.07	−0.04	−0.56
Avoidance	0.59	0.14	0.27**	4.23**
Arousal	0.49	0.06	0.48**	8.08**

Note. $R^2 = .24$ for step 1, $F(2,269) = 43.76$, $p < .01$. $\Delta R^2 = .15$ for step 2, $F(1,268) = 65.37$, $p < .01$.

*
 $p < .05$.

**
 $p < .01$.

Table 4Hierarchical Regression to Examine Prediction of Numbing from Intrusion ($N = 272$)

Symptom Cluster	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Step 1				
Constant	1.53	1.25	—	1.22
Arousal	0.48	0.06	0.46**	8.50**
Avoidance	0.55	0.12	0.25**	4.58**
Step 2				
Constant	1.55	1.26	—	1.23
Arousal	0.49	0.06	0.48**	8.08**
Avoidance	0.59	0.14	0.27**	4.23**
Intrusion	−0.04	0.07	−0.04	−0.56

Note. $R^2 = .39$ for step 1, $F(df) = 86.98(2,269)**$; $\Delta R^2 = 0$ for step 2, $F_{\text{change}}(df) = 0.32(1,268)$.

* $p < .05$.

** $p < .01$.

Table 5Hierarchical Regression to Examine Prediction of Avoidance from Intrusion ($N = 272$)

Symptom Cluster	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Step 1				
Constant	3.41	0.58	—	5.90**
Arousal	0.15	0.03	0.32**	5.12**
Numbing	0.13	0.03	0.29**	4.58**
Step 2				
Constant	2.40	0.51	—	4.69**
Arousal	0.03	0.03	0.07	1.10
Numbing	0.11	0.02	0.23**	4.23**
Intrusion	0.25	0.03	0.51**	9.47**

Note. $R^2 = .30$ for step 1, $F(2,269) = 57.15$, $p < .01$. $\Delta R^2 = 0.18$ for step 2, $F(1,268) = 89.66$, $p < .01$.

* $p < .05$.

** $p < .01$.

Table 6Hierarchical Regression to Examine Prediction of Avoidance from Arousal ($N = 272$)

Symptom Cluster	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Step 1				
Constant	2.66	0.45	—	5.86**
Intrusion	0.26	0.02	0.54**	11.10**
Numbing	0.12	0.02	0.26**	5.40**
Step 2				
Constant	2.40	0.51	—	4.69**
Intrusion	0.25	0.03	0.51**	9.47**
Numbing	0.11	0.02	0.23**	4.23**
Arousal	0.03	0.03	0.07	1.10

Note. $R^2 = .47$ for step 1, $F(df) = 120.12 (2,269)**$; $\Delta R^2 = 0$ for step 2, $F_{\text{change}}(df) = 1.20 (1,268)$.

*
 $p < .05$.

**
 $p < .01$.