

GEORGE The Moderating Role of Social Support on the Relationship Between Impulsivity and Suicide Risk

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Background

Nearly 35,000 people died by suicide in the United States in 2007. This represented an increase of 3.75% from 2006 (Center for Disease Control, 2010). For some age groups, suicide is one of the leading causes of death. The increasing rate of suicide makes it imperative to investigate risk and protective factors associated with it.

Impulsivity has been established as an important correlate of suicidal behavior (Mann et al., 1999; McGirr et al., 2008; Zouk et al., 2006). Research shows that individuals who display an inability to resist impulses and an inability to consideration for the consequences of such behavior may be predisposed to act on their suicidal thoughts in the face of stress. Although never directly applied to impulsivity, there has been evidence that social support serves as a protective factor in suicide against factors such as negative life events and stress (Chioqueta & Styles, 2007; Yang & Clum, 1994).

The purpose of the present study is to test the hypothesis that social support moderates the relationship between impulsivity and suicide.

Method

The sample included 172 college students (75.1% female) at a large, ethnically diverse, suburban university. Data were collected in the context of a larger study. The sample was 49% Caucasain, 20% Asian, 15% African American, 2% American Indian, and 14% listed as other.

Suicide risk was measured using a composite score from the *Self-Injurious Thoughts and Behaviors Interview* (SITBI; Nock, et al., 2007). Responses for items regarding self-rated risk of future suicide attempts, plans, gestures, and ideation were summed to create a general perception of future suicide risk variable.

Impulsivity was measured using the impulse control subscale of the Difficulties in Emotion Regulation Scale (DERS; Gratz & Roemer, 2004), a 36-item self-report measure that assesses clinically relevant difficulties in emotion regulation

Social support was measured using the Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988), a 12-item measure that assesses perceived support from family, friends, and significant others.

Results

Table 1 displays the means, standard deviations, and intercorrelations for all study variables. Table 2 presents the results of a hierarchical multiple regression analysis in which suicide risk was regressed onto MSPSS, DERS impulsivity, and the interaction between the two.. MSPSS and DERS scores were centered prior to calculating the interaction term to facilitate the interpretability of the interaction according to the recommendations of Aiken & West (1991). This analysis yielded a significant interaction between MSPSS social support and DERS impulsivity, suggesting a moderation effect for social support on the relationship between impulsivity and suicide risk.

Table 1. Intercorrelations, means, and standard deviations for all study variables.

	DERS Impulsivity	MSPSS Total Support	SITBI Likelihood of Suicide Risk
Total Support	08		
Suicide Risk	.33***	18*	
Mean	13.41	70.12	0.71
SD	3.30	14.45	1.83

Note. DERS= Difficulties in Emotion Regulation Scale; MSPSS= Multidimensional Scale of Perceived Social Support; * p < .05., **p < .01, *** p < .001.

Table 2. Results of hierarchical regression analysis of the buffering effect of social support on the relationship between impulsivity and suicide risk

Variable	В	SE B	6
Step 1			
DERS Impulsivity	.57***	.15	.29
MSPSS Total Support	50**	.16	233
Step 2			
Impulsivity X Social Support	51**	.16	25

Note. DERS= Difficulties in Emotion Regulation Scale; MSPSS= Multidiment Social Support; * p < .05., **p < .01, *** p < .001. Step 1 R² = .15; Step 2

When the interaction was probed based on Aiken & West's (1991) recommendation, it was found that social support moderated the impact of impulsivity, such that individuals with higher levels of impulsivity were at decreased risk for suicide if they had high levels of social support.

Figure 1. Plot of interaction between impulsivity and social support



Discussion

The present study contributes to previous research by documenting impulsivity as a factor related to suicidal behavior, and it extends past research by demonstrating the moderating role of social support in this relationship. With replication, future studies could investigate mobilization of social support networks among impulsive individuals at high risk for suicide.

This study had two key limitations that should be examined in future research. First, the study was cross-sectional and did not capture the temporal relationship that would be possible in a longitudinal study. Second, the study used a suicide outcome variable that has not been evaluated in previous studies and may not accurately assess true suicide risk. Future studies should use a well-validated measure of suicidality.

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