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Insecure Attachment and Suicidal Behavior in Adolescents

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Abstract

Background: Suicide among adolescents is an important public health problem. One risk factor for youth suicidal behavior that has been underexplored is insecure attachment.

Aims: To investigate the association between attachment avoidance/anxiety and suicidal behavior in an adolescent sample.

Method: This study examined attachment insecurity in 40 adolescents who had attempted suicide and 40 never-suicidal demographically matched youths. Adolescents completed self-report measures of attachment style, family alliance, and depressive symptoms.

Results: Suicide attempters reported significantly higher attachment avoidance and anxiety. Attachment avoidance, but not anxiety, predicted suicide attempt status in a conditional logistic regression analysis that controlled for depressive symptoms and family alliance.

Conclusion: Future research should determine the relative utility of attachment insecurity in prospectively predicting suicide attempts and investigate potential mediators and moderators of this association. Implications for clinicians working with suicidal youth with insecure attachment styles are discussed.

Keywords

adolescent suicide; attachment security; risk factors

Eight percent of adolescents in the US report making a suicide attempt within the past year (Eaton et al., 2012) and prior suicide attempts are the most potent risk factor for adolescent suicide (Brent, Baugher, Bridge, Chen, & Chiappetta, 1999). One factor that may increase risk for suicidal behavior is insecure attachment. Attachment theory posits that early experiences with caregivers translate into internal working models that guide individuals' understanding of relationships across the lifespan (Bowlby, 1969, 1980, 1988). Insecure attachment is relevant to adolescent suicidal behavior because it is associated with relationship dysfunction (Kerns & Stevens, 1996), which often precedes adolescent suicide attempts (Brent et al., 1999), and is associated with other risk factors (e.g., depression)

related to suicidal behavior (Brumariu & Kerns, 2010). Prior studies have found that insecure attachment is linked to an increased risk of suicide attempt (Adam, Sheldon-Keller, & West, 1996; Grunebaum et al., 2010; Lizardi et al., 2011; Palitsky, Mota, Afifi, Downs, & Sareen, 2013); however, most studies have used adult samples.

The goal of this study was to investigate the association between attachment avoidance/anxiety and suicidal behavior in an adolescent sample. We hypothesized that attempters would have higher attachment avoidance/anxiety compared with never-suicidal youth and that insecure attachment would predict suicide attempt status after controlling for group differences on other risk factors.

Method

Relation of This Study to Prior Reports

This study of 40 adolescents who attempted suicide and 40 never-suicidal youths 13–18 years old presenting to behavioral health clinics or the emergency department of a large children's hospital has been described previously (Bridge et al., 2012). Comparison subjects were matched to attempters on age (± 1 year), sex, and race/ethnicity. The study included 20 male and 60 female subjects with a mean age of 15.56 years ($SD = 1.35$ years). The majority of adolescents were Caucasian (72.5%), had an annual family income of US \$50,000 (63.8%), and did not reside with both biological parents (67.5%). The aim of the primary study was to examine decision making and impulsive aggression as potential vulnerability markers for youth suicidal behavior. As a secondary aim, we collected information about attachment security, current depressive symptoms, and family alliance to determine whether insecure attachment was independently associated with adolescent suicidal behavior controlling for other known risk factors. This was the focus of the present study. The study was approved by the Institutional Review Board of The Research Institute at Nationwide Children's Hospital. Informed consent/assent was obtained from all participants and their parents.

Measures

Experiences in Close Relationships Scale (ECR)

This 36-item scale measured attachment security on two dimensions: avoidance and anxiety (18 items each). Individuals high on avoidance tend not to disclose their thoughts/feelings, do not seek support when needed, and have a negative view of others. Individuals high on anxiety are often preoccupied with their relationships, worry about abandonment, and have a negative self-view (Brennan, Clark, & Shaver, 1998). For our sample, the ECR showed high reliability (Cronbach's $\alpha = .91$ both scales). Higher scores on both dimensions indicate greater insecure attachment with scores ranging from 1 to 7.

Reasons for Living Inventory for Adolescents (RFL-A)

The 7-item Family Alliance scale of the RFL-A was used to assess the connection/cohesiveness of the family (Osman et al., 1998). Family alliance was explored as a protective factor since familial discord, low adaptability, and low support have been

associated with adolescent suicidal behavior even after controlling for other known risk factors (Brent, 1995). This specific scale of the RFL-A was used to measure family alliance since other studies have shown an association with this scale and suicidal behavior (Gutierrez, Osman, Kopper, & Barrios, 2000; Lee, 2011; Osman et al., 1998). Items include, *My family cares about the way I feel* and *I enjoy being with my family*. Cronbach's α for our adolescent sample was .94. Average scores, ranging from 1 to 7, were used and higher scores indicated greater family alliance.

Beck Depression Inventory – FastScreen for Medical Patients (BDI-FS)

This 7-item measure was derived from the Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996) to assess current depressive symptoms. Total scores ranging from 0 to 21 were computed with higher scores indicating more severe depressive symptoms (Cronbach's α = .84 for our study; Beck, Steer, & Brown, 2000).

Columbia University Suicide History Form (SHF)

Lifetime history of suicide attempts was assessed using this measure (Mann et al., 1992).

Statistical Analysis

Paired-samples *t* tests were used to compare the groups on all variables of interest and Pearson correlations were used to test the associations amongst the variables. Conditional logistic regression was used to determine which attachment dimension(s) predicted suicide attempt status above the known risk factors investigated. Analyses were conducted using IBM SPSS (version 21) and STATA 12.0. Statistical significance was set at $p < .05$.

Results

Attempters had higher mean scores on attachment avoidance and anxiety relative to comparison subjects, indicating an insecure attachment. Attempters also had lower family alliance and higher depressive symptoms (Table 1).

Pearson correlations revealed significant associations among some of the risk factors and the attachment dimensions (Table 2). Attachment avoidance and anxiety were positively associated with depressive symptoms ($r = .22, p < .05$; $r = .52, p < .01$, respectively) and attachment anxiety was negatively associated with family alliance ($r = -.29, p < .05$).

The conditional logistic regression model included depressive symptoms, family alliance, and the two attachment dimensions to predict suicide attempt status. Attachment avoidance ($OR = 2.05$; 95% CI = 1.04–4.04) was the only predictor that remained significant in the model (Table 3).

Discussion

As predicted, attempters had higher attachment avoidance and anxiety when compared with never-suicidal youth. This finding is consistent with an emerging literature on both adults and adolescents that insecure attachment may be an important risk factor for suicidal

behavior (Adam et al., 1996; Grunebaum et al., 2010; Lizardi et al., 2011; Sheftall, Mathias, Furr, & Dougherty, 2013).

When predicting suicide attempt status, attachment avoidance was the only significant predictor after controlling for family alliance and depressive symptoms. This finding is consistent with the findings of Grunebaum and colleagues (2010), who reported that adult attachment avoidance predicted prospective suicidal ideation and attempts. Individuals with avoidant attachment styles tend to minimize the value of relationships, are less likely to disclose their feelings, and are inclined not to depend on others. These behaviors could lead to interpersonal difficulties that have been associated with adolescent suicide attempts (Johnson et al., 2002).

Anxious attachment, however, did not predict suicide attempt status when controlling for other factors. One reason may be that anxious attachment was highly correlated with depressive symptoms ($r = .52$), consistent with prior research on adults (Shaver, Schachner, & Mikulincer, 2005) and adolescents (Brumariu & Kerns, 2010). Thus, after controlling for depressive symptoms in the analyses, anxious attachment no longer made a unique contribution to predicting attempt status. Conversely, attachment avoidance was only modestly related to depressive symptoms ($r = .22$).

Developing a safety plan for adolescents with suicidal behaviors is a primary goal for clinicians. Strategies that are commonly used within the safety plan include socializing with others as a distractive method and identifying social contacts (usually family and friends) the individual can turn to for help during a suicidal crisis (Stanley & Brown, 2012). However, adolescents who have insecure attachment commonly experience interpersonal difficulties (Allen & Land, 1999) and these specific safety-planning strategies may be insufficient for preventing suicidal behavior. Future research should consider adaptations to the safety plan to account for individuals with insecure attachment styles.

When interpreting these results, it is important to consider this study was cross-sectional and cannot support causal inferences. Second, a self-report measure was used to assess attachment, and interview methodology (e.g., The Attachment Interview for Childhood and Adolescence; Ammaniti, van Ijzendoorn, Speranza, & Tambelli, 2000) may provide a more thorough assessment of an individual's underlying attachment representations. Third, insecure attachment may be associated with characteristics of the index suicide attempt. However, these potential associations were not explored in this study because the study was not powered for subgroup analyses. Finally, peer relationships, which become important in shaping attachment security in adolescence (Allen & Land, 1999), and have been shown to serve as a protective factor against adolescent suicidal behavior (Armsden & Greenberg, 1987; Fergusson, Beautrais, & Horwood, 2003), were not examined or controlled for in our analyses.

Focusing on attachment security may be a promising avenue for decreasing suicide risk in adolescents. Attachment-based family therapy (ABFT; Diamond, Reis, Diamond, Siqueland, & Isaacs, 2002), for example, assumes poor attachment and environmental factors (e.g., high familial conflict) inhibit adolescents from developing coping skills and focuses on rebuilding

familial attachments and encouraging communication/trust in parents. So far, ABFT has been associated with decreases in major depression, anxiety, and suicidal ideation (Diamond et al., 2010; Shpigel, Diamond, & Diamond, 2012). Future research should determine the effectiveness of ABFT in preventing youth suicide attempts, investigate whether insecure attachment prospectively predicts suicide attempts, and examine mediators and moderators of this association. These steps are necessary to inform existing and future interventions designed to prevent youth suicide.

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Biography

Arielle H. Sheftall, PhD, is a postdoctoral fellow at the Research Institute at Nationwide Children's Hospital in the Center for Innovation in Pediatric Practice, Columbus, OH, USA. Her primary interests are in adolescent socioemotional development and its relationship to suicide. Her work incorporates attachment style, behavior (impulsivity), interpersonal difficulties, and clinical symptoms.

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Table 1.Paired-samples *t* tests comparing groups on variables of interest

	Paired differences									
	Attempter group <i>M</i> (<i>SD</i>)	Comparison group <i>M</i> (<i>SD</i>)	Mean difference	<i>SD</i>	<i>SD</i> error mean	Lower	Upper	<i>t</i>	<i>df</i>	<i>p</i>
Attachment avoidance	4.06 (1.12)	3.31 (0.96)	0.75	1.40	0.22	0.30	1.20	3.39	39	.002
Attachment anxiety	3.89 (1.27)	3.17 (1.18)	0.71	1.62	0.26	0.20	1.23	2.79	39	.008
Family alliance	4.20 (1.57)	5.06 (0.86)	-0.86	1.81	0.29	-1.44	-0.29	-3.02	39	.004
Depressive symptoms	4.43 (4.08)	2.43 (2.69)	2.00	4.75	0.75	0.48	3.52	2.66	39	.011

Table 2.Correlations among the risk factors and attachment dimensions within the entire sample ($N = 80$)

Variables	1	2	3	4
1. Attachment avoidance	–			
2. Attachment anxiety	.41 **	–		
3. Family alliance	–.14	–.29 *	–	
4. Depressive symptoms	.22 *	.52 **	–.29 **	–

*
 $p < .05$.**
 $p < .01$.

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Table 3.

Conditional logistic regression model

Predictor	β	SE β	OR	95% CI
Family alliance	-.36	.26	0.70	0.42–1.17
Depressive symptoms	.05	.10	1.06	0.86–1.30
Attachment avoidance	.72 *	.35	2.05	1.04–4.04
Attachment anxiety	.27	.31	1.31	0.71–2.40

* $p < .05$.