

The relationship among attachment styles, interpersonal needs, and suicidal ideation in patients with psychiatric disorders

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Contributions: MP, DE, conceptualization and research design; ER, MM, data collection; SS, IB, drafting of the manuscript; SS, MI, data curation and formal analysis; MP, MI, critical revision of the manuscript.

Conflict of interest: the authors declare no potential conflict of interest.

Ethics approval and consent to participate: the local ethical review board approved the study as a part of a broader investigation of the Rif.CE 6626/2021. The study was conducted following the principles outlined in the Declaration of Helsinki.

Informed consent: informed consent was obtained from all participants included in the study.

Availability of data and materials: data and materials supporting this study's findings are available from the corresponding author upon reasonable request.

Citation: Sarubbi, S., Rogante, E., Erbuto, D., Migliorati, M., Berardelli, I., Innamorati, M., & Pompili, M., (2024). The relationship among attachment styles, interpersonal needs, and suicidal ideation in patients with psychiatric disorders. *Research in Psychotherapy: Psychopathology, Process and Outcome, 27(3)*, 785. doi: 10.4081/ripppo.2024.785

Received: 30 April 2024. Accepted: 22 November 2024.

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ABSTRACT

Suicide is a major public health concern; therefore, numerous factors have been investigated for their role in increasing suicide risk. Distal factors, such as attachment style, and proximal factors, like unmet interpersonal needs, interact with each other and may influence suicidal ideation. Understanding this interplay is crucial for developing effective interventions for suicide prevention. The present study aimed to investigate the association between attachment and interpersonal needs in suicidal ideation. For this study, we administered the Attachment Style Questionnaire and the Interpersonal Needs Questionnaire-15, and suicide risk was assessed using the Columbia-Suicide Severity Rating Scale. We collected data from 181 psychiatric inpatients at the Sant'Andrea Hospital in Rome. The results indicated that suicidal ideation was negatively and significantly associated with ASQ Confidence and positively associated with ASQ's Need for Approval and Discomfort with Closeness and INQ's perceived burdensomeness. The mediation model showed that perceived burdensomeness mediated the relationship between secure attachment style and suicidal ideation. The results have also shown significant associations among suicidal ideation, some attachment styles, and interpersonal needs. Secure attachment showed a potential protective role in suicidal ideation through lower levels of perceived burdensomeness, highlighting the importance of a careful evaluation of the patient's individual experiences and characteristics that can guide the adaptation of therapeutic goals and strategies. Interventions that promote functional interpersonal beliefs, as well as interventions oriented to limit the negative effects of disruptive models of attachment, may contribute to reconstructing trust towards others, reducing perceived burden, and preventing suicide risk.

Key words: attachment style, interpersonal needs, suicidal.

Introduction

Suicide is one of the most prevalent causes of death among various populations, with more than 700,000 deaths from suicide occurring every year. Among young people aged between 15 and 29 years, it ranks as the fourth leading cause of death (WHO, 2023). Suicide is a complex phenomenon in which biological, psychological, social, and environmental factors interact, necessitating a multidisciplinary approach for effective understanding and intervention. Recent theoretical frameworks try to explain the process that characterizes individuals at risk





for suicide, considering the development of suicidal ideation and the progression from ideation to suicide attempts as distinct processes with different explanations (Joiner, 2005; Klonsky & May, 2014; O'Connor, 2011).

Research has suggested that several critical elements are associated with developmental vulnerability to suicide risk, such as exposure to adverse childhood experiences (Berardelli et al., 2022; Sahle et al., 2022) and dysfunctional family relationships (Freudenstein et al., 2011). Some studies suggest that various family factors may play an important role in adolescents' suicidal thoughts and behaviors (STBs), such as high family conflict, low warmth, and high control, which have been associated with a high risk for suicide. In contrast, parenting styles perceived as close, connected, and supportive seem to be protective factors against suicide risk (Diamond et al., 2022). Adam (1994) offered a possible explanation for suicidal ideation and suicide attempts based on early adverse parenting experiences, resulting in the development of insecure attachments, which could act as a vulnerability factor for suicide risk later in adulthood through effects on emotional regulation, self-representation, and interpersonal difficulties. This model is based on attachment theory, first proposed by John Bowlby in 1969, and on Ainsworth's work, which suggests the permanent effects of early attachment experiences (Ainsworth & Bowlby, 1991). The quality of early attachment experiences has a relevant influence on shaping the attachment style. In broad terms, attachment styles are classified as secure or insecure, with insecure styles further classified as anxious or avoidant. Securely attached individuals often exhibit healthy interpersonal relationships, whereas those who tend to be insecurely attached are typically maladjusted regarding their emotional regulation and relationship satisfaction (Ainsworth, 1978; Bowlby, 1969; cfr. also Messina et al., 2023; Parolin et al., 2023).

A systematic review by Zortea et al. (2021) examined the relationship between attachment and STBs. Specifically, the review highlighted that most studies reported statistically significant negative associations between higher levels of secure attachment and suicide ideation and attempts. Thus, secure attachment appears to be a protective factor against suicide risk. Instead, insecure attachment (both avoidant and anxious) appears to be a vulnerability factor that compromises an individual's ability to cope with relationship issues, thereby increasing the suicide risk. Moreover, a recent meta-analysis (Macneil et al., 2023) examined several studies to investigate the relationship between different attachment styles and suicidal thoughts and behaviors. The findings revealed that secure attachment was linked to lower levels of suicidal thoughts, while no significant association was found with suicide attempts. In contrast, all types of categorical insecure attachment styles were positively correlated with suicidal thoughts, indicating a higher likelihood of experiencing suicidal ideation.

In this framework, different attachment styles significantly impact an individual's ability to meet their interpersonal needs, which underpins psychological well-being or, in the case of insecure attachment, may negatively impact how individuals perceive and engage in relationships (Stepp *et al.*, 2008). According to Baumeister and Leary (1995), one of the primary human motivations is the need to form and maintain lasting, positive, and meaningful interpersonal relationships. This need is satisfied by regular and pleasant social interactions based on mutual interests and affection.

As indicated by Joiner's Interpersonal Theory of Suicidal Behavior (Joiner, 2005), unmet interpersonal needs incorporate a lack of connection and the need to perceive oneself as a burden

to others. The theory posits that thwarted belongingness and perceived burdensomeness contribute to suicidal ideation and behaviour (Joiner, 2005; Van Orden *et al.*, 2010). Typically, when an individual's interpersonal needs are unmet, feelings of isolation and worthlessness are present, leading to suicidal ideation. Similarly, insecure attachment may facilitate the development of thwarted belongingness and burdensomeness (Zortea *et al.*, 2021).

Understanding the interplay between attachment styles, interpersonal needs, and suicidal ideation is essential for developing targeted interventions to reduce suicide risk. Thus, this study aimed to explore the relationship between attachment styles, interpersonal needs, and suicidal ideation, to provide an understanding of how early attachment experiences can impact individuals' vulnerability to suicidal thoughts. Based on previous studies, we formulated the following hypotheses: I) secure attachment is negatively associated with suicidal ideation; in contrast, we expect a positive association between insecure attachment styles and suicidal ideation; II) interpersonal needs are associated with insecure attachment styles; III) the association between attachment styles and suicidal ideation is mediated by interpersonal needs.

This understanding can be a foundation for clinicians to design effective prevention and intervention strategies that address the underlying interpersonal and psychological factors that contribute to suicide risk.

Methods

Participants

The participants were 181 adult psychiatric inpatients (97 females and 84 males; mean age=41.41 years, SD=13.85, age range=18-74 years) enrolled at the Psychiatric Unit of Sant' Andrea Hospital in Rome. The inclusion criteria were being over 18 years old and the signature of the informed consent. The exclusion criteria were being unwilling to participate or denying informed consent and having neurological diseases (*e.g.*, dementia, Parkinson's disease, and epilepsy), cognitive impairments, and language difficulties.

All participants received a comprehensive explanation of the study procedure and provided written informed consent. The participants were treated in accordance with the ethical principles of the Declaration of Helsinki. The local ethical review board approved this study as part of a broader investigation of Rif.CE 6626/2021.

Measures

A socio-anamnestic form was used to collect data on sex, age, diagnosis, marital status, and job conditions. Patients were assessed for psychiatric diagnoses according to the Diagnostic and Statistical Manual of Mental Disorders – 5th edition (DSM-5; APA, 2013). Suicide risk was evaluated by trained psychiatrists using the Columbia-Suicide Severity Rating Scale (Posner et al., 2011). The patients were also administered the Italian version of the Interpersonal Needs Questionnaire – 15 (INQ-15; Illiceto et al., 2021; Van Orden et al., 2012) and the Attachment Style Questionnaire (ASQ; Feeney et al., 1994; Fossati et al., 2003).

The Columbia-Suicide Severity Rating Scale (C-SRRS; Posner *et al.*, 2011) is a semi-structured interview used to assess both suicidal ideation and suicidal behavior in individuals aged





12 years or older. The C-SSRS starts with two items assessing the respondent's wish to be dead (Category 1) and non-specific active suicidal thoughts (Category 2). The following items assess active suicidal ideation with any method but no plan or intent to act (Category 3), active suicidal ideation with some intent to act but no plan (Category 4), and active suicidal ideation with a specific plan and intent (Category 5). The second section evaluates the intensity of suicidal ideation based on frequency, duration, controllability, deterrents, and reasons for suicidal ideation. According to Nilsson *et al.* (2013), the suicidal ideation intensity score was derived from the sum of these items (ranging from 0 to 25). For this study, we used the last month's ratings for all analyses. Cronbach's alpha for this sample was .930.

The Attachment Style Questionnaire (ASO; Feeney et al., 1994; Trad. It. Fossati et al., 2003) is a 40-item self-report instrument measuring adult attachment. It contains five dimensions: Confidence (related to secure attachment - C; 8 items); two dimensions related to avoidant attachment: Discomfort with Closeness (referring to difficulty trusting others - DC; 10 items), Relationships as Secondary (related to the belief that achievement is more important than relationships with others - RS; 7 items); and two dimensions related to anxious attachment: Need for Approval (focused on validation from others and fear of rejection and avoiding doing things that other people will not like - NA; 7 items), and Preoccupation with Relationships (referring to the worry of being abandoned and not making it on your own - PR; 8 items). Each item is rated on a six-point scale (ranging from 1=totally disagree to 6=totally agree). The ASQ has shown adequate reliability and construct validity in university and secondary student samples (Feeney et al., 1994). The Cronbach's alphas for this sample were .630 for C, .712 for DC, .763 for NA, .733 for PR, and .831 for RS.

The Interpersonal Needs Questionnaire (INQ-15; Trad. It. Illiceto *et al.*, 2021; Van Orden *et al.*, 2012) is a 15-item self-report instrument that measures an individual's set of current beliefs and experiences underlying the constructs of *Thwarted Belongingness* (TB; 9 items) and *Perceived Burdensomeness* (PB; 6 items). All items are assessed on a Likert-point scale ranging from «1=not at all true for me» to «7=very true for me». The questionnaire showed good construct validity (Illiceto *et al.*, 2021). For this sample, Cronbach alphas were .586 for TB and .875 for PB.

Data analysis

Statistical analyses were conducted using the Statistical Package for the Social Sciences (SPSS; IBM Corp., Armonk, NY, USA), version 27. Means and percentages were calculated for the descriptive statistics. Pearson's correlation indices were calculated as measures of associations between attachment styles, interpersonal needs, and the intensity of suicidal ideation to obtain a preliminary overview of the variables to be included in the mediation models. In this study, because of the low reliability of the INQ's thwarted belongingness (TB), we used only the PB dimension for the analyses.

Finally, we conducted simple mediation analyses (model no. 4) using the PROCESS macro for SPSS (Hayes, 2018) to investigate whether interpersonal need could partly explain the relationship between attachment styles and suicidal ideation. We included suicidal ideation intensity as the dependent variable (DV), ASQ dimensions (C, NA, and DC) as independent variables (IV) or covariates, and Perceived Burdensomeness as mediator (M) in the models. We calculated 95% confidence interval

(CI) estimates based on bootstrap resampling (N=5000). Including all the ASQ dimensions in the models as IV or covariates allowed us to calculate the total effect (and direct and indirect effects) of each variable on suicide ideation intensity while controlling for the effects of covariates. All statistical analyses were considered significant for p<0.05.

Results

Characteristics of the sample

The sample characteristics are listed in Table 1. The most frequently reported psychiatric diagnoses were schizophrenia or other psychoses (34.3%), bipolar disorders (28.7%), unipolar depressive disorder (8.8%), and personality disorders (21.0%). More than 55% of the patients reported suicidal ideation in the past month: death wishes (3.9%; Category 1), non-specific active suicidal thoughts (9.9%; Category 2), active suicidal ideation with any method but no plan or intent to act (9.9%; Category 3), active suicidal ideation with some intent to act but no plans (13.3%; Category 4), and active suicidal ideation with a specific plan and intent (18.2%; Category 5).

Table 1. Socio-demograp±hic and clinical characteristics of the sample.

N=181 Sex (females) 97 (53.6%) Age M ±SD 41.41±13.85 Marital status With a partner 37 (20.4%) Divorced or widowed 30 (16.6%) Single 114 (63.0%) Job Condition Employed 78 (43.1%) Unemployed 69 (38.1%) Retired 18 (9.9%) Student 16 (8.8%) Diagnosis Schizophrenia and other psychoses 62 (34.3%) Bipolar disorder 52 (28.7%) Depressive disorder 16 (8.8%) Personality disorder 38 (21.0%) Other 13 (7.2%) C-SSRS Last month SI severity No suicidal ideation 81 (44.8%) Wish to be dead 7 (3.9%) Non-specific active suicidal thoughts Active SI with any method but no plan or intent to act Active SI with as pecific plan and intent 33 (18.2%) Last month SI intensity M ±SD 27.08±7.30 Discomfort with Closeness M ±SD 27.08±7.30 Relationships as Secondary M ±SD 20.28±7.94 Preoccupation with Relationship M ±SD 20.28±7.94 Relationships as Secondary M ±SD 17.18±7.12 INQ Perceived burdensomeness M ±SD 12.93±9.18	Variables	Whole sample
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Personality disorder 38 (21.0%) Other 13 (7.2%) C-SSRS Last month SI severity No suicidal ideation 81 (44.8%) Wish to be dead 7 (3.9%) Non-specific active suicidal thoughts 18 (9.9%) Active SI with any method but no plan or intent to act 18 (9.9%) Active SI with some intent to act but no plan 24 (13.3%) Active SI with a specific plan and intent 33 (18.2%) Last month SI intensity M \pm SD 7.42 \pm 7.81 ASQ dimensions Confidence M \pm SD 27.08 \pm 7.30 Discomfort with Closeness M \pm SD 33.64 \pm 9.34 Need for Approval M \pm SD 20.28 \pm 7.94 Preoccupation with Relationship M \pm SD 25.14 \pm 9.49 Relationships as Secondary M \pm SD 17.18 \pm 7.12	Bipolar disorder	52 (28.7%)
Other 13 (7.2%) C-SSRS Last month SI severity No suicidal ideation 81 (44.8%) Wish to be dead 7 (3.9%) Non-specific active suicidal thoughts 18 (9.9%) Active SI with any method but no plan or intent to act 18 (9.9%) Active SI with some intent to act but no plan 24 (13.3%) Active SI with a specific plan and intent 33 (18.2%) Last month SI intensity M \pm SD 7.42 \pm 7.81 ASQ dimensions Confidence M \pm SD 27.08 \pm 7.30 Discomfort with Closeness M \pm SD 33.64 \pm 9.34 Need for Approval M \pm SD 20.28 \pm 7.94 Preoccupation with Relationship M \pm SD 25.14 \pm 9.49 Relationships as Secondary M \pm SD 17.18 \pm 7.12	Depressive disorder	16 (8.8%)
C-SSRS Last month SI severity No suicidal ideation Wish to be dead Non-specific active suicidal thoughts Active SI with any method but no plan or intent to act Active SI with some intent to act but no plan Active SI with a specific plan and intent Last month SI intensity M ±SD ASQ dimensions Confidence M ±SD Discomfort with Closeness M ±SD Need for Approval M ±SD Relationships as Secondary M ±SD Relationships as Secondary M ±SD NO Non-specific active suicidal thoughts 18 (9.9%) 18 (9.9%) 18 (9.9%) 18 (9.9%) 18 (9.9%) 24 (13.3%) 24 (13.3%) 27 (13.2%) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 18 (19.9%) 19 (19.9%) 19 (19.9%) 19 (19.9%) 20 (19.9%) 21 (19.9%) 22 (19.9%) 23 (19.9%) 24 (13.3%) 25 (18.2%) 27 (18.27.81) 27 (18.27.81) 27 (18.27.81) 18 (19.9%) 27 (18.27.81) 28 (18.28.91) 29 (18.28.91) 29 (18.28.91) 20 (18.28.91) 21 (18.28.91) 21 (18.28.91) 22 (18.28.91) 23 (18.28.91) 24 (18.28.91) 25 (18.28.91) 26 (18.28.91) 27 (18.28.91) 28 (18.28.91) 28 (18.28.91) 28 (18.28.91) 28 (18.28.91) 28 (18.28.91)	Personality disorder	38 (21.0%)
No suicidal ideation 81 (44.8%) Wish to be dead 7 (3.9%) Non-specific active suicidal thoughts 18 (9.9%) Active SI with any method but no plan or intent to act 18 (9.9%) Active SI with some intent to act but no plan 24 (13.3%) Active SI with a specific plan and intent 33 (18.2%) Last month SI intensity M \pm SD 7.42 \pm 7.81 ASQ dimensions Confidence M \pm SD 27.08 \pm 7.30 Discomfort with Closeness M \pm SD 33.64 \pm 9.34 Need for Approval M \pm SD 20.28 \pm 7.94 Preoccupation with Relationship M \pm SD 25.14 \pm 9.49 Relationships as Secondary M \pm SD 17.18 \pm 7.12	Other	13 (7.2%)
Wish to be dead 7 (3.9%) Non-specific active suicidal thoughts 18 (9.9%) Active SI with any method but no plan or intent to act 18 (9.9%) Active SI with some intent to act but no plan 24 (13.3%) Active SI with a specific plan and intent 33 (18.2%) Last month SI intensity M \pm SD 7.42 \pm 7.81 ASQ dimensions Confidence M \pm SD 27.08 \pm 7.30 Discomfort with Closeness M \pm SD 33.64 \pm 9.34 Need for Approval M \pm SD 20.28 \pm 7.94 Preoccupation with Relationship M \pm SD 25.14 \pm 9.49 Relationships as Secondary M \pm SD 17.18 \pm 7.12	C-SSRS Last month SI severity	
$\begin{array}{c} \text{Non-specific active suicidal thoughts} & 18 \ (9.9\%) \\ \text{Active SI with any method but no plan or intent to act} & 18 \ (9.9\%) \\ \text{Active SI with some intent to act but no plan} & 24 \ (13.3\%) \\ \text{Active SI with some intent to act but no plan} & 24 \ (13.3\%) \\ \text{Active SI with a specific plan and intent} & 33 \ (18.2\%) \\ \text{Last month SI intensity M \pm \text{SD}} & 7.42 \pm 7.81 \\ \hline \text{ASQ dimensions} & \\ \text{Confidence M } \pm \text{SD} & 27.08 \pm 7.30 \\ \text{Discomfort with Closeness M } \pm \text{SD}} & 33.64 \pm 9.34 \\ \text{Need for Approval M } \pm \text{SD}} & 20.28 \pm 7.94 \\ \text{Preoccupation with Relationship M } \pm \text{SD}} & 25.14 \pm 9.49 \\ \text{Relationships as Secondary M } \pm \text{SD}} & 17.18 \pm 7.12 \\ \hline \text{INQ} & \\ \hline \end{array}$	No suicidal ideation	81 (44.8%)
Active SI with any method but no plan or intent to act 18 (9.9%) Active SI with some intent to act but no plan 24 (13.3%) Active SI with a specific plan and intent 33 (18.2%) Last month SI intensity M \pm SD 7.42 \pm 7.81 ASQ dimensions Confidence M \pm SD 27.08 \pm 7.30 Discomfort with Closeness M \pm SD 33.64 \pm 9.34 Need for Approval M \pm SD 20.28 \pm 7.94 Preoccupation with Relationship M \pm SD 25.14 \pm 9.49 Relationships as Secondary M \pm SD 17.18 \pm 7.12 INQ	Wish to be dead	7 (3.9%)
Active SI with some intent to act but no plan Active SI with a specific plan and intent 133 (18.2%) Last month SI intensity M \pm SD ASQ dimensions Confidence M \pm SD Discomfort with Closeness M \pm SD Preoccupation with Relationship M \pm SD Relationships as Secondary M \pm SD 17.18 \pm 7.12	Non-specific active suicidal thoughts	18 (9.9%)
Active SI with a specific plan and intent Last month SI intensity M \pm SD 7.42 \pm 7.81 ASQ dimensions Confidence M \pm SD 27.08 \pm 7.30 Discomfort with Closeness M \pm SD 33.64 \pm 9.34 Need for Approval M \pm SD 20.28 \pm 7.94 Preoccupation with Relationship M \pm SD 25.14 \pm 9.49 Relationships as Secondary M \pm SD 17.18 \pm 7.12 INQ	Active SI with any method but no plan or intent to ac	t 18 (9.9%)
Last month SI intensity M ±SD 7.42±7.81 ASQ dimensions 27.08±7.30 Confidence M ±SD 27.08±7.30 Discomfort with Closeness M ±SD 33.64±9.34 Need for Approval M ±SD 20.28±7.94 Preoccupation with Relationship M ±SD 25.14±9.49 Relationships as Secondary M ±SD 17.18±7.12 INQ	Active SI with some intent to act but no plan	24 (13.3%)
ASQ dimensions Confidence M ±SD	Active SI with a specific plan and intent	33 (18.2%)
Confidence M ±SD 27.08±7.30 Discomfort with Closeness M ±SD 33.64±9.34 Need for Approval M ±SD 20.28±7.94 Preoccupation with Relationship M ±SD 25.14±9.49 Relationships as Secondary M ±SD 17.18±7.12 INQ	Last month SI intensity M ±SD	7.42±7.81
Discomfort with Closeness M ±SD 33.64±9.34 Need for Approval M ±SD 20.28±7.94 Preoccupation with Relationship M ±SD 25.14±9.49 Relationships as Secondary M ±SD 17.18±7.12 INQ	ASQ dimensions	
$ \begin{array}{lll} \mbox{Need for Approval M \pmSD} & 20.28 \pm 7.94 \\ \mbox{Preoccupation with Relationship M \pmSD} & 25.14 \pm 9.49 \\ \mbox{Relationships as Secondary M \pmSD} & 17.18 \pm 7.12 \\ \mbox{INQ} & & & & & & & & & & & & & & & & & & &$	Confidence M ±SD	27.08±7.30
Preoccupation with Relationship M ±SD 25.14±9.49 Relationships as Secondary M ±SD 17.18±7.12 INQ	Discomfort with Closeness M ±SD	33.64±9.34
Relationships as Secondary M ±SD 17.18±7.12 INQ	Need for Approval M ±SD	20.28±7.94
INQ	Preoccupation with Relationship M ±SD	25.14±9.49
	Relationships as Secondary M ±SD	17.18±7.12
Perceived burdensomeness M ±SD 12.93±9.18	INQ	
	Perceived burdensomeness M ±SD	12.93±9.18





Correlation among variables

Table 2 reports the correlations between variables. Last month suicidal ideation intensity was negatively and significantly associated with ASQ Confidence (r=-.164, p<.05), and positively and significantly associated with Discomfort with Closeness (r=.179, p<.05), Need for Approval (r=.216, p<.01), and perceived burdensomeness (r=.317, p<.001). Moreover, perceived burdensomeness was negatively and significantly associated with ASQ Confidence (r=-.235, p=.001), and positively and significantly associated with Discomfort with Closeness (r=.290, p<.001), Relationships as Secondary (r=.210, p<.01), Need for Approval (r=.351, p<.001), and Preoccupation with Relationships (r=.164, p<.05). Despite significant correlations, they were mostly weak (r<.30).

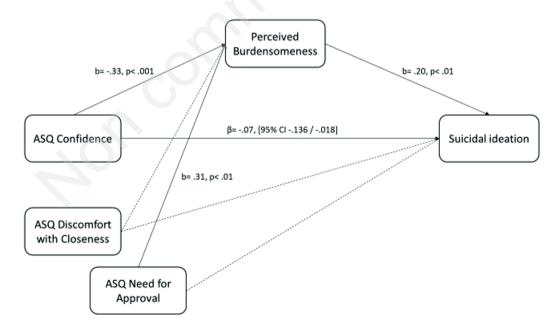
Mediation analysis

The mediating role of perceived burdensomeness in the relationship between attachment styles and suicidal ideation was tested using mediation models (Figure 1). In the first model, ASO Confidence was included as IV, suicidal ideation as VI, perceived burdensomeness as mediator, and Discomfort with Closeness and Need for Approval dimensions as covariates. The results showed a significant total effect (b=-.20, p=.012), with a non-significant direct effect of Confidence on suicidal ideation (b=-.13, p=.105). The effect of the IV was completely mediated by perceived burdensomeness (β=-.07, 95%CI -.136/-.018), indicating that patients who reported lower confidence were more likely to experience higher levels of perceived burdensomeness (b=-.33, p<.001) and, consequently, higher suicidal ideation intensity (b=.20, p<.01). In the second model, ASQ Discomfort with Closeness was included as IV, suicidal ideation as VI, perceived burdensomeness as mediator, and ASQ Confidence and ASQ Need for Approval as covariates. The results did not show significance for the total effect (b=.08, p=.287) or for the direct effect (b=.05, p=.496), but there was a significant indirect effect (β=.03, 95%CI .002/.070). Finally. in the third model, ASO Need for Approval was included as IV, suicidal ideation as VD, perceived burdensomeness as mediator,

Table 2. Bivariate correlations between suicidal ideation, attachment styles, and interpersonal needs

	1.	2.	3.	4.	5.	6.	7.		
1. Suicidal ideation intensity	-								
2. ASQ Confidence	164*	-							
3. ASQ Discomfort with Closeness	.179*	.114	-						
4. ASQ Relationships as Secondary	.068	.108	.516***						
5. ASQ Need for Approval	.216**	.051	.618***	.396***	-				
6. ASQ Preoccupation with Relationship	.140	.241**	.673***	.442***	.627***	-			
7. INQ Perceived burdensomeness	.317***	235**	.290***	.210**	.351***	.164*	-		

^{*}p<.05; **p<.01; ***p<.001.



Total effect b=-.20, p=.012; direct effect b=-.13, p=.105; indirect effect β=-0.07; [95% CI -.136/-.018].

Figure 1. Mediation model 1 analyzes the relationship between ASQ Confidence (IV) and suicidal ideation intensity (DV), Perceived Burdensomeness as mediator, and ASQ Discomfort with Closeness and ASQ Need for Approval as covariates.





and ASQ Confidence and ASQ Discomfort with Closeness as covariates. As for the previous model, results showed a significant indirect effect (β =.06, 95% CI .014/.127), but no significant total or direct effects (b=.16, p=.075; b=.099, p=.276, respectively).

Discussion

This study aimed to investigate the relationship between attachment styles, interpersonal needs, and suicidal ideation. Based on these findings, we observed that in our sample, suicidal ideation was negatively and significantly associated with secure attachment style (ASQ Confidence). This result aligns with our first hypothesis and several previous studies. In a systematic review, Zortea and colleagues (2021) found that 20 studies reported a significant association between secure attachment and suicidal ideation (e.g., Kidd & Shahar, 2008; Rodgers et al., 2011). Moreover, in other studies, secure attachment predicted a reduction in suicidal ideation even when confounders were controlled (e.g., Fergusson et al., 2000; Turanovic & Pratt, 2015; Venta et al., 2014;). In contrast, only one study (Nye et al., 2009) found higher current suicidal ideation in the group with secure attachment compared to the group with insecure attachment; however, these findings should be interpreted with caution due to the small sample size and specific population studied. Furthermore, a meta-analysis conducted by Macneil and colleagues (2023) to investigate the relationship between secure attachment and suicidal thoughts reported an overall moderate negative effect (Hedges'g=-0.456, p<.001).

Concerning insecure attachment, only two dimensions, one related to anxiety and the other to avoidant attachment (Need for Approval and Discomfort with Closeness, respectively), were positively and significantly associated with suicidal ideation. These results are in line with previous studies that emphasized the link between anxious attachment and suicidal ideation (Lessard & Moretti, 1998; Riggs & Jacobvitz, 2002; Zortea et al., 2021) and between avoidant attachment and suicidal ideation (Grunebaum et al., 2010; Palitsky et al., 2013; Zeyrek et al., 2009). Granieri et al. (2022) found a positive association between both the Need for Approval and Preoccupation with Relationship dimensions and suicidal ideation in a sample of Italian university students. In contrast, in our sample, the PR dimension, which refers to the worry of abandonment, was not significant. This result may be due to the different populations studied.

Moreover, the association between Discomfort with Closeness (DC) and suicidal ideation suggests that suicide could be viewed as the ultimate way of rejecting others and life itself, as hypothesized by Adams' model (1994). In fact, Discomfort with Closeness is tightly linked to a lack of trust and openness towards others to avoid frustration and distress. This result has already been observed in a recent study by Turton *et al.* (2022), in which avoidant attachment was significantly and positively associated with suicidal ideation.

Finally, suicidal ideation was significantly associated with perceived burdensomeness in our sample. Consistent with the IPTS theory (Joiner, 2005; Van Orden *et al.*, 2010), perceived burdensomeness is a crucial factor in the determination of suicidal ideation. Several studies have pointed out that perceived burdensomeness has a stronger effect on suicidal ideation than does thwarted belongingness. A comprehensive review by Ma and colleagues (2016) confirmed a significant effect of burdensomeness on suicidal ideation. In addition, the results of a meta-analysis conducted by Chu and colleagues (2017) confirmed

that perceived burdensomeness is strongly associated with suicidal ideation.

Regarding the second hypothesis, we expected attachment styles to be associated with interpersonal needs. In our sample, perceived burdensomeness was positively associated with both anxious and avoidant attachment styles. Dienst and colleagues (2023) point out that individuals with insecure attachment may repress or not acknowledge their needs for attachment. Therefore, they tend to avoid close relationships but are still subconsciously influenced by unsatisfied belongingness, increasing the feeling of being a burden for significant others.

Moreover, perceived burdensomeness is negatively associated with secure attachment. As expected, this result highlighted the protective role of secure attachment. This attachment style ensures a safe environment in which individuals can develop their full potential, cope effectively, and use adequate strategies in stressful situations, ultimately preventing them from developing dysfunctional beliefs about perceiving themselves as burdensome.

Finally, the third hypothesis investigated the interplay between attachment styles, interpersonal needs, and suicidal ideation. Although we initially hypothesized the potential mediating role of interpersonal needs between attachment and suicidal ideation, we were not able to completely test our hypothesis because of the low reliability of the thwarted belongingness dimension. Mediation analysis showed that perceived burdensomeness mediates the relationship between secure attachment and suicidal ideation. Specifically, patients who reported lower secure attachment were more likely to experience higher levels of perceived burdensomeness and, thus, higher suicidal ideation. This result can be explained by considering that a secure attachment orientation is characterized by a self-perception of worthiness (lovability) connected with the expectation that other people are generally accepting and responsive (Ainsworth et al., 1978). It is likely that perceiving oneself as a lovable person can decrease the level of feeling a burden on others and, therefore, is less likely to have suicidal thoughts.

Furthermore, consistent with the findings of Zortea *et al.* (2021), secure attachment acts as a protective factor against suicidal ideation. Unexpectedly, insecure attachment did not seem to play a role in the mediation model in our sample. This result could be explained by the fact that in our sample, suicidal ideation was investigated in the last month, so there could be other risk factors, such as proximal factors, that could be more associated with recent suicidal ideation (Pompili *et al.*, 2022) or suicidal crisis (Galynker *et al.*, 2014).

Overall, in our sample, secure attachment showed a potential protective role for suicidal ideation through lower levels of perceived burdensomeness. Thus, individuals who have received consistent emotional and physical care during childhood develop a sense of themselves as worthy of such care and view others as reliable. This consistency plays a role in decreasing the perception of being a burden to others.

Conclusions

These findings may have clinical implications for working with individuals at risk for suicide. Clinicians should consider the relational patterns that patients might act out in their care relationship. According to Adams' model (1994), the connection between adverse parenting experiences and later suicidal behavior is mediated more distally through internalized working models of self and attachment figures, as well as trait variations in self-worth,





emotional regulation skills, and interpersonal capabilities. For example, individuals with secure attachment maintain positive models of themselves and others, which enhance their resilience and ability to contain and self-regulate distress in the face of interpersonal problems. In contrast, insecure attachment is followed by trait vulnerabilities such as low self-esteem, relational issues, and negativity. Therefore, therapists should embrace the need for safety and security, not being satisfied during childhood, as "good enough" (Winnicott, 1965), providing meaning for the patients' emotional experiences. Simultaneously, clinicians should focus on identifying and modifying avoidant and/or anxious relational patterns through the therapeutic process (Slade & Holmes, 2019). Preoccupied patients tend to seek simultaneously but also resist contact, whereas avoidant patients tend to downplay disclosure and distress (Talia et al., 2014). In contrast, a positive working alliance, predicted by a secure attachment orientation (Diener & Monroe et al., 2011; Mikulincer & Shaver, 2008), conveys the maintenance of emotional proximity, expression of distress without hesitation, and open help requests (Slade & Holmes, 2019).

Considering patients at risk for suicide, trait vulnerabilities, combined with acute loss, rejection, and disappointment, generate an attachment crisis that quickly spirals out of control. Insecure subjects react with paralyzing anxiety, anger, and hopelessness, eventually culminating in suicidal thoughts and behavior. Clinicians working with suicidal clients must consider this aspect when conducting suicide risk assessment and formulation. Green et al. (2020) highlighted several vulnerability traits that could be targeted by psychological interventions to reduce suicide risk. Among these traits, we found that maladaptive self-schemas, selfcriticism, limited self-disclosure, and interpersonal difficulties impact the development of stable relationships. Any intervention to reduce suicidal thoughts and behavior that does not address vulnerability traits and internal working models underlying this behavior is unlikely to yield lasting and clinically meaningful changes, as suggested by Pompili (2024), who identified a collaborative and empathetic approach as crucial to explore mental pain in individuals at risk for suicide and contributes to unlocking the suicidal mind. Considering patients' attachment styles, clinicians may improve working alliance with their patients and, in turn, improve patient outcomes (Westerling et al., 2019). A metaanalysis by Taylor et al. (2015) revealed that secure patient attachment was associated with an increased working alliance. In contrast, insecure attachment is associated with a negative therapeutic relationship and decreased alliance. These features are even more relevant when working with suicidal patients; consequently, a comprehensive understanding of the patient's personal experience is necessary to establish a targeted intervention for suicide prevention.

Strengths and limitations

This study has some limitations that should be considered. The study design was cross-sectional; thus, it was impossible to speculate about a cause-effect relationship. It would be interesting to conduct longitudinal studies to assess the impact of attachment styles on suicide risk. Moreover, the study's results should be read, considering that some effect sizes of the associations among variables were weak and the reliability of some dimensions of the questionnaires utilized was low. This highlights the need for further studies on the psychometric properties of questionnaires used in psychiatric inpatients. Finally, given the number of patients enrolled, we decided to use a self-report questionnaire for attachment assessment. However, other instruments (e.g., AAI) can provide

a more accurate evaluation and are less susceptible to social desirability bias. Despite these limitations, the present study contributes to the understanding of the role of attachment styles and interpersonal needs on suicidal ideation in adult psychiatric inpatients. This contribution may offer insights for clinical practice with individuals at risk for suicide.

References

- Adams K.S. Suicidal behaviour and attachment: A developmental model. In: Blumenthal S.J., Kupfer D.J., editors. Suicide over the Life Cycle: Risk Factors, Assessment and Treatment of Suicidal Patients. Guilford Press; New York, NY, USA: 1994. pp. 39–96.
- Ainsworth, M. S., & Bowlby, J. (1991). An ethological approach to personality development. *American Psychologist*, 46(4), 333
- Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978).
 Patterns of attachment: A psycho-logical study of the strange situation. Hillsdale, NJ: Lawrence Erlbaum Associates.
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders, fifth edition: DSM-5.* Arlington, VA: American Psychiatric Association.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117(3), 497–529.
- Berardelli, I., Sarubbi, S., Rogante, E., Erbuto, D., Giuliani, C., Lamis, D. A., Innamorati, M., & Pompili, M. (2022). Association between Childhood Maltreatment and Suicidal Ideation:
 A Path Analysis Study. *Journal of Clinical Medicine*, 11(8), 2179. doi: 10.3390/jcm11082179
- Bowlby, J. (1969). *Attachment and loss*. Vol. 1. London: Random House
- Chu, C., Buchman-Schmitt, J. M., Stanley, I. H., Hom, M. A., Tucker, R. P., Hagan, C. R., Rogers, M. L., Podlogar, M. C., Chiurliza, B., Ringer, F. B., Michaels, M. S., Patros, C. H. G., & Joiner, T. E. (2017). The interpersonal theory of suicide: A systematic review and meta-analysis of a decade of cross-national research. *Psychological Bulletin*, 143(12), 1313–1345. doi: 10.1037/bul0000123
- Diamond, G., Kodish, T., Ewing, E. S. K., Hunt, Q. A., & Russon, J. M. (2022). Family processes: Risk, protective and treatment factors for youth at risk for suicide. *Aggression and Violent Behavior*, 64, 101586. doi: 10.1016/j.avb.2021.101586
- Diener, M. J., & Monroe, J. M. (2011). The relationship between adult attachment style and therapeutic alliance in individual psychotherapy: a meta-analytic review. *Psychotherapy* (Chicago, Ill.), 48(3), 237–248. doi: 10.1037/a0022425
- Dienst, F., Forkmann, T., Schreiber, D., & Höller, I. (2023). Attachment and need to belong as moderators of the relationship between thwarted belongingness and suicidal ideation. *BMC psychology*, 11(1), 50. doi: 10.1186/s40359-023-01080-y
- Feeney J, Noller P, Hanrahan M. Assessing adult attachment. In: Sperling MB, Berman WH, editors. *Attachment in Adults: Clinical and Developmental Perspectives*. New York, NY: Guilford Press (1994). p. 128–55.
- Fergusson, D. M., Woodward, L. J., & Horwood, L. J. (2000). Risk factors and life processes associated with the onset of suicidal behaviour during adolescence and early adulthood. *Psychological Medicine*, 30(1), 23–39. doi: 10.1017/s003329179900135x
- Fossati, A., Feeney, J. A., Donati, D., Donini, M., Novella, L.,





- Bagnato, M., & Maffei, C. (2003). On the dimensionality of the Attachment Style Questionnaire in Italian clinical and non-clinical participants. *Journal of Social and Personal Relation-ships*. 20(1), 55-79. doi: 10.1177/02654075030201003
- Freudenstein, O., Zohar, A., Apter, A., Shoval, G., Weizman, A., & Zalsman, G. (2011). Parental bonding in severely suicidal adolescent inpatients. *European psychiatry: the journal of the Association of European Psychiatrists*, 26(8), 504–507. doi: 10.1016/j.eurpsy.2011.01.006
- Galynker, I., Yaseen, Z., & Briggs, J. (2014). Assessing risk for imminent suicide. *Psychiatric Annals*, 44(9), 431–436. doi: 10.3928/00485713-20140908-07
- Granieri, A., Casale, S., Sauta, M. D., & Franzoi, I. G. (2022). Suicidal Ideation among University Students: A Moderated Mediation Model Considering Attachment, Personality, and Sex. *International Journal of Environmental Research and Public Health*, 19(10), 6167. doi: 10.3390/ijerph19106167
- Green, J., Berry, K., Danquah, A., & Pratt, D. (2020). The role of psychological and social factors in the relationship between attachment and suicide: A systematic review. *Clinical Psychology & Psychotherapy*, 27(4), 463–488. doi: 10.1002/ cpp.2445
- Grunebaum, M. F., Galfalvy, H. C., Mortenson, L. Y., Burke, A. K., Oquendo, M. A., & Mann, J. J. (2010). Attachment and social adjustment: relationships to suicide attempt and major depressive episode in a prospective study. *Journal of Affective Disorders*, 123(1-3), 123–130. doi: 10.1016/j.jad.2009.09.010
- Hayes, A. F. (2018). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach (Methodology in the Social Sciences) (2nd ed.). New York, NY: The Guilford Press.
- Iliceto, P., D'Antuono, L., Fino, E., Carcione, A., Candilera, G., Silva, C., & Joiner, T. E. (2021). Psychometric properties of the Italian version of the Interpersonal Needs Questionnaire-15 (INQ-15-I). *Journal of Clinical Psychology*, 77(1), 268– 285. doi: 10.1002/jclp.23026
- Joiner T. Why people die by suicide. Cambridge, MA, US: Harvard University Press; 2005
- Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: the key role of self-esteem. The *American Journal of Orthopsychiatry*, 78(2), 163–172. doi: 10.1037/0002-9432.78.2.163
- Klonsky, E. D., & May, A. M. (2014). Differentiating suicide attempters from suicide ideators: a critical frontier for suicidology research. Suicide & Life-Threatening Behavior, 44(1), 1–5. doi: 10.1111/sltb.12068
- Lessard, J. C., & Moretti, M. M. (1998). Suicidal ideation in an adolescent clinical sample: attachment patterns and clinical implications. *Journal of Adolescence*, 21(4), 383–395. doi: 10.1006/jado.1998.0169
- Ma, J., Batterham, P. J., Calear, A. L., & Han, J. (2016). A systematic review of the predictions of the Interpersonal-Psychological Theory of Suicidal Behavior. *Clinical Psychology Review*, 46, 34–45. doi: 10.1016/j.cpr.2016.04.008
- Macneil, S., Roderbourg, L., Orri, M., Geoffroy, M. C., Mcgrath, J. J., Renaud, J., & Gouin, J. P. (2023). Attachment Styles and Suicidal Thoughts and Behaviors: A Meta-Analysis. *Journal* of Social and Clinical Psychology, 42(4), 323-364.
- Messina, I., Calvo, V., & Grecucci, A. (2023). Attachment orientations and emotion regulation: new insights from the study of interpersonal emotion regulation strategies. *Research in psychotherapy (Milano)*, 26(3), 703. doi: 10.4081/ripppo. 2023.703
- Mikulincer, M., & Shaver, P. R. (2008). Adult attachment and af-

- fect regulation. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (2nd ed., pp. 503–531). New York, NY: The Guildford Press
- Nilsson, M. E., Suryawanshi, S., Gassmann-Mayer, C., Dubrava, S., McSorley, P., & Jiang, K. (2013). Columbia–suicide severity rating scale scoring and data analysis guide. CSSRS Scoring Version, 2, 1-13. Available from: https://cssrs.columbia. edu/wp-content/uploads/ScoringandDataAnalysisGuide-for-Clinical-Trials-1.pdf
- Nye, E. C., Katzman, J., Bell, J. B., Kilpatrick, J., Brainard, M., & Haaland, K. Y. (2009). Attachment representation and suicidal ideation in Vietnam combat veterans with posttraumatic stress disorder. Archives of suicide research: official journal of the International Academy for Suicide Research, 13(2), 195–199. doi: 10.1080/13811110902835213
- O'Connor R. C. (2011). The integrated motivational-volitional model of suicidal behavior. *Crisis*, 32(6), 295–298. doi: 10.1027/0227-5910/a000120
- Palitsky, D., Mota, N., Afifi, T. O., Downs, A. C., & Sareen, J. (2013). The association between adult attachment style, mental disorders, and suicidality: findings from a population-based study. *The Journal of Nervous and Mental Disease*, 201(7), 579–586. doi: 10.1097/NMD.0b013e31829829ab
- Parolin, L., Milesi, A., Comelli, G., & Locati, F. (2023). The interplay of mentalization and epistemic trust: a protective mechanism against emotional dysregulation in adolescent internalizing symptoms. *Research in psychotherapy (Milano)*, 26(3), 707. doi: 10.4081/ripppo.2023.707
- Pompili, M., Innamorati, M., Erbuto, D., Luciano, M., Sampogna, G., Abbate-Daga, G., Barlati, S., Carmassi, C., Castellini, G., De Fazio, P., Di Lorenzo, G., Di Nicola, M., Ferrari, S., Goracci, A., Gramaglia, C., Martinotti, G., Nanni, M. G., Pasquini, M., Pinna, F., Poloni, N., Fiorillo, A. (2022). High depression symptomatology and mental pain characterize suicidal psychiatric patients. European psychiatry: the journal of the Association of European Psychiatrists, 65(1), e54. doi: 10.1192/j.eurpsy.2022.2312
- Pompili M. (2024). On mental pain and suicide risk in modern psychiatry. *Annals of General Psychiatry*, 23(1), 6. doi: 10.1186/s12991-024-00490-5
- Posner, K., Brown, G. K., Stanley, B., Brent, D. A., Yershova, K. V., Oquendo, M. A., Currier, G. W., Melvin, G. A., Greenhill, L., Shen, S., & Mann, J. J. (2011). The Columbia-Suicide Severity Rating Scale: initial validity and internal consistency findings from three multisite studies with adolescents and adults. *The American Journal of Psychiatry*, 168(12), 1266–1277. doi: 10.1176/appi.ajp.2011.10111704
- Riggs, S. A., & Jacobvitz, D. (2002). Expectant parents' representations of early attachment relationships: associations with mental health and family history. *Journal of Consulting and Clinical Psychology*, 70(1), 195–204.
- Rodgers, R. F., van Leeuwen, N., Chabrol, H., & Leichsenring, F. (2011). An exploration of the role of defensive psychopathology in adolescent suicidal ideation and behavior. *Bulletin of the Menninger Clinic*, 75(3), 236–253. doi: 10.1521/bumc.2011.75.3.236
- Sahle, B. W., Reavley, N. J., Li, W., Morgan, A. J., Yap, M. B. H., Reupert, A., & Jorm, A. F. (2022). The association between adverse childhood experiences and common mental disorders and suicidality: an umbrella review of systematic reviews and meta-analyses. *European Child & Adolescent Psychiatry*, 31(10), 1489–1499. doi: 10.1007/s00787-021-01745-2
- Slade, A., & Holmes, J. (2019). Attachment and psychotherapy.





- Current Opinion in Psychology, 25, 152–156. doi: 10.1016/j.copsyc.2018.06.008
- Stepp, S. D., Morse, J. Q., Yaggi, K. E., Reynolds, S. K., Reed, L. I., & Pilkonis, P. A. (2008). The role of attachment styles and interpersonal problems in suicide-related behaviors. Suicide & Life-Threatening Behavior, 38(5), 592–607. doi: 10.1521/suli.2008.38.5.592
- Talia, A., Daniel, S. I., Miller-Bottome, M., Brambilla, D., Miccoli, D., Safran, J. D., & Lingiardi, V. (2014). AAI predicts patients' in-session interpersonal behavior and discourse: a «move to the level of the relation» for attachment-informed psychotherapy research. *Attachment & Human Development*, 16(2), 192–209. doi: 10.1080/14616734.2013.859161
- Taylor, P. J., Rietzschel, J., Danquah, A., & Berry, K. (2015). The role of attachment style, attachment to therapist, and working alliance in response to psychological therapy. *Psychology and Psychotherapy*, 88(3), 240–253. doi: 10.1111/papt.12045
- Turanovic, J. J., & Pratt, T. C. (2015). Longitudinal effects of violent victimization during adolescence on adverse outcomes in adulthood: a focus on prosocial attachments. *The Journal of Pediatrics*, 166(4), 1062–9.e1. doi: 10.1016/j.jpeds. 2014.12.059
- Turton, H., Berry, K., Danquah, A., Green, J., & Pratt, D. (2022). An investigation of whether emotion regulation mediates the relationship between attachment insecurity and suicidal ideation and behaviour. Clinical Psychology & Psychotherapy, 29(5), 1587–1598. doi: 10.1002/cpp.2735
- Van Orden, K. A., Witte, T. K., Cukrowicz, K. C., Braithwaite, S. R., Selby, E. A., & Joiner, T. E., Jr (2010). The interpersonal theory of suicide. *Psychological Review*, 117(2), 575–600. doi: 10.1037/a0018697

- Van Orden, K. A., Cukrowicz, K. C., Witte, T. K., & Joiner, T. E. (2012). Thwarted belongingness and perceived burdensomeness: construct validity and psychometric properties of the Interpersonal Needs Questionnaire. *Psychological assessment*, 24(1), 197–215. doi: 10.1037/a0025358
- Venta, A., Mellick, W., Schatte, D., & Sharp, C. (2014). Preliminary evidence that thoughts of thwarted belongingness mediate the relations between level of attachment insecurity and depression and suicide-related thoughts in inpatient adolescents. *Journal of Social and Clinical Psychology*, 33(5), 428-447.
- Westerling III, T. W., Drinkwater, R., Laws, H., Stevens, H., Ortega, S., Goodman, D., & Drill, R. L. (2019). Patient attachment and therapist countertransference in psychodynamic psychotherapy. *Psychoanalytic Psychology*, 36(1), 73.
- Winnicott, D. W. (1965). The maturational processes and the facilitating environment: Studies in the theory of emotional development. International Universities Press.
- World Health Organization. Suicide. Available from: https://www.who.int/news-room/fact-sheets/detail/suicide [Accessed July 23, 2024].
- Zeyrek, E. Y., Gençöz, F., Bergman, Y., & Lester, D. (2009). Suicidality, problem-solving skills, attachment style, and hopelessness in Turkish students. *Death Studies*, 33(9), 815–827. doi: 10.1080/07481180903142407
- Zortea, T. C., Gray, C. M., & O'Connor, R. C. (2021). The Relationship Between Adult Attachment and Suicidal Thoughts and Behaviors: A Systematic Review. Archives of Suicide Research: official journal of the International Academy for Suicide Research, 25(1), 38–73. doi: 10.1080/13811118.2019. 1661893