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Motivations for Attempting Suicide in Mid- and Late-Life

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Abstract

Objectives—To understand pathways to suicide by investigating the association between personality and suicidal motivations in mid- and late-life attempts.

Design—In a two-study approach, we measured different components of suicidal motivations using an existing self-report investigating reasons for suicide and a semi-qualitative assessment of motivational states preceding attempts.

Setting—Inpatient and outpatient psychiatric services in Pittsburgh, PA

Participants—Study 1 (n = 50, mean age at attempt = 60.4) was a smaller sample of suicide attempters included in Study 2 (n = 69, mean age at attempt = 60.9). Non-psychiatric healthy controls (n = 50, mean age = 67.1) were used as benchmarks for dispositional measures.

Measurements—Motives for suicide were measured by the Reasons for Attempting Suicide Questionnaire (RASQ). Participants' written descriptions of the thoughts and feelings preceding their attempt captured motivational states. Measures of personality for both studies included assessments of impulsivity, five-factor model, interpersonal dysfunction, and borderline traits.

Results—In study 1, escape/self-punishment motives on the RASQ were associated with multiple attempts and borderline pathology, while interpersonal motives were less frequently endorsed and associated with poorly planned attempts. In study 2, experiences of defeat (i.e. powerlessness, poor coping to threats to autonomy/status) were more frequently endorsed by men and associated with disagreeableness.

Conclusions—Study 1 revealed that attempters high in dysfunctional psychopathology were more likely to report self-oriented escape motives for suicide, while study 2 identified a putative pathway to suicide in men involving antagonism and the experience of defeat.

Keywords

Suicide; Personality Disorders; Gender Differences

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Conflict of Interest: None

Introduction

Suicide rates generally increase with age, with the largest percent increase in suicide occurring in adults ages 45–64 in the United States (CDC, 2015). Given that every stage of adult psychological development has unique challenges, it is important to understand the psychological pathways to suicide in middle-aged and older adults (De Leo et al., 2001). Various stressors such as interpersonal conflict, physical illness, or economic hardship can precipitate suicidal behavior. However, as most people facing these circumstances will never attempt suicide, the impact of these stressors must be moderated by individual vulnerability. The stress-diathesis framework predicts the existence of specific, lock-and-key interactions between stressors and dispositional vulnerabilities (e.g. loss of a relationship and borderline personality; Brodsky et al., 2006). While such interactions may be difficult to observe empirically, individuals' report of their motivations for attempting suicide can illuminate the interplay of events, emotional states, and behavioral responses preceding suicidal behavior (Holden et al., 1998).

Prior studies have probed motivations for attempting suicide (Bancroft, Skrimshire, & Simkin, 1976; Schnyder et al., 1999; Hjelmeland et al., 2002), but we lack empirical knowledge of how such motivations may be influenced by dispositional vulnerabilities. Furthermore, this discussion is often clouded by the conflation of two distinct constructs: *motivations* that give rise to suicidal behavior, and the behavior's *aims*, or intended outcome (Hjelmeland & Knizek, 1999). "Reasons" given for suicidal behavior may fall into distinct categories: (i) external triggers, (ii) *motivational states* such as hopelessness or anger, and (iii) *aims* or anticipated outcomes, such as escape or interpersonal objectives. While accounts of triggers and motivational states preceding suicidal behavior are historical and potentially causal, its stated aims are teleological explanations of behavior, which are particularly subject to post-hoc rationalization (Hjelmeland & Knizek, 1999). In this study, we primarily focused on the implications of motivations that give rise to suicidal behavior rather than intended outcomes.

Only one earlier study by Van Orden and colleagues (2015) assessed self-reported reasons for suicidal behavior in older adults. The authors delineated 8 categories, with escape, loss of functioning/autonomy, and psychological problems (e.g. depression) being the most commonly endorsed. Notably, these categories encompass triggers, motivational states, and intended outcomes without differentiation. Van Orden and colleagues also did not examine whether certain attributions were associated with unique personality profiles. We sought to extend these findings by examining how personality traits may moderate motivations in mid- and late-life suicide. We also sought to investigate whether certain motivations are related to attempt characteristics such as lethality or degree of planning.

To our knowledge, the only previously validated self-report measure of motivations for suicidal behavior is the Reasons for Attempting Suicide Questionnaire (RASQ) (Holden & McLeod, 2000). RASQ items can be aggregated into a minimum of two subscales: escape/self-punishment and interpersonal motives. Most items include the phrase "I wanted to", indexing intended outcomes, while also including motivational states such as feeling like a failure. The RASQ thus conflates motivations and aims and may be particularly vulnerable

to social desirability bias, post-hoc rationalization and cognitive dissonance (Freedenthal, 2007).

To overcome the limitations of the RASQ, we aimed to generate new hypotheses regarding motivations, and in particular motivational states, preceding an attempt by eliciting their open-ended descriptions. We therefore utilized a two-study approach: study 1 examined subjective motives for suicide as measured by the RASQ and study 2 employed a semi-qualitative assessment of participants' open-ended responses describing the thoughts and feelings leading to their attempt. In the first study, we hypothesized that individuals whose suicidal behavior was driven by interpersonal motives would display higher levels of dysfunctional personality traits. Given that more impulsive attempts have previously been associated with interpersonal conflict (Williams et al., 1980), we also expected that attempts driven by interpersonal motives would be less planned and less lethal. In the second study, we sought to identify recurrent psychological themes in participants' descriptions of their motivational states preceding an attempt, using a content-driven approach without definite a priori expectations.

Method

Participant characteristics in study 1 and study 2 are described in Table 1. Seventy-four suicide attempters were recruited between August 2004 and June 2016 from an inpatient psychiatric unit, outpatient clinics, and through community recruitment sources as part of an ongoing longitudinal study. Participants either made a recent suicide attempt, defined as a self-injurious act with intent to die (O'Carroll et al., 1996) within the month of baseline assessment, or had a past history of attempt and current suicidal ideation with a specific plan within the past month. In order to avoid clustering within subjects and minimize recall bias, we focused on participants' most recent attempt. To capture motivations unique to mid- and late-life suicide, analyses were restricted to attempts made at age 40 years or older, excluding 5 participants from analysis. Because some participants were recruited with current ideation but remote history of attempts, mean time between participants' most recent attempt and assessment was 2.41 (SD = 3.9) years, with 53% of the sample assessed within a year. Approximately 85% of the sample was assessed within 5 years of attempting.

The study psychiatrist verified attempt history using patient report, available medical records, and collateral information from family and treatment teams. All attempters met DSM-IV criteria for unipolar depression as assessed by the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID). Ineligibility criteria included history of mania, psychotic disorder, dementia, neurological disorder, or electroconvulsive therapy in the previous six months. As a benchmark for dispositional measures, we also included 50 non-psychiatric healthy controls with no lifetime history of suicidal ideation, behavior, or psychiatric diagnosis. Healthy controls were recruited through community recruitment sources and an online research registry maintained by the University of Pittsburgh. All participants provided written informed consent as required by the University of Pittsburgh Institutional Review Board.

Clinical characterization

Medical seriousness of attempt was assessed using the Beck Lethality Scale (Aaron T. Beck, Beck, & Kovacs, 1975). Beck's Suicidal Intent Scale measured intent (Aaron T. Beck, Schuyler, & Herman, 1974) and the SIS-planning subscale assessed degree of planning (Mieczkowski et al., 1993). Non-violent methods included overdose and cutting (lethality score less than 4) and violent methods included gunshot, hanging, jumping and stabbing/deep cutting (lethality score 4 or greater). Physical illness burden at baseline was assessed with the Cumulative Illness Rating Scale for Geriatrics (CIRS-G; Miller et al., 1992).

Personality measures

The 60-item NEO Five-factor Inventory (NEO) assessed personality dimensions: neuroticism, extraversion, conscientiousness, openness to experience, and agreeableness (Costa & McCrae, 1989). The Personality Assessment Inventory–Borderline Features Scale (PAI-BOR) measured features of Borderline Personality Disorder (Morey, 1991), such as affective instability.

Impulsivity was measured using the nonplanning subscale of the Barratt Impulsiveness Scale (BIS; Patton, Stanford, & Barratt, 1995), the Social Problem Solving Inventory – Impulsive/Careless Style subscale (SPSI-IC; Maydeu-Olivares & D'Zurilla, 1996), and the UPPS Impulse Behavior Scale (Whiteside & Lynam, 2001). High values on the BIS indicate a tendency to act without regard for consequences and focus on more immediate outcomes. The Impulsive/Careless problem-solving subscale of the SPSI measures hurried and incomplete problem-solving style. The UPPS measures impulsivity across the Five-Factor personality dimensions and assesses four domains of impulsivity: lack of premeditation (recklessness, carelessness), negative urgency (tendency to act when experiencing negative emotion), positive urgency (excitability), and lack of perseverance (idleness).

Chronic interpersonal dysfunction was measured by the Interpersonal Support Evaluation List (ISEL; Cohen et al., 1985) and the Inventory of Interpersonal Problems (IIP; Morse & Pilkonis, 2007). Subscales on the IIP-15 specifically assess personality pathology and include interpersonal sensitivity (reactivity), interpersonal ambivalence (inability to collaborate with others), and interpersonal aggression (hostile interpersonal cognitions). The ISEL includes four measures of perceived availability of social resources, including Tangible Support, Belonging, Appraisal, and Self-Esteem.

Because of additions to the assessment battery over the 12-year recruitment period in the parent longitudinal study, 17 of the total 64 attempters included in analysis were missing NEO data and 35 were missing PAI-BOR data. Because inclusion/exclusion criteria did not change over time, missingness in the data is not systematic. Participant demographics for those missing NEO and PAI-BOR data are reported in supplemental tables 1–4. T-tests and chi-squared tests were conducted to assess for group differences. Attempters missing NEO data in study 1 ($n = 7$) had significantly lower education (12.9 ± 1.1) than attempters with NEO data (14.3 ± 3.1 ; $\chi^2 = 5.22$, $p = .027$). There were no significant differences in gender, race, or age between participants with or without missing NEO or PAI-BOR data for either

study. All n's for self-report data used in correlation analyses for study 1 and study 2 are specified in the correlation tables included under results.

Reasons for Attempting Suicide Questionnaire

Fifty suicide attempters from study 1 also completed the Reasons for Attempting Suicide Questionnaire (RASQ), a self-report measure intended to assess motives for attempting suicide. This 14-item structured assessment was developed from studies of intentional overdoses, which included participants who denied any intent to die as well as those who endorsed suicidal intent (J. Bancroft et al., 1979; J. H. Bancroft, Skrimshire, & Simkin, 1976). The authors concluded that suicide attempts often include non-suicidal purposes such as communicating hostility or influencing others. From these data, Holden and McLeod (2000) developed and validated a minimum of two subscales from the Reasons for Attempting Suicide Questionnaire: Internal Perturbations-Based (escape/self-punishment) motives, which include the need to escape from unbearable suffering, and Extrapunitive/Manipulation (interpersonal) motives directed towards other people. See Table 2 for a complete list of items included on the RASQ.

Exploration of self-reported motivational states for attempting suicide

In order to understand the broader motivational states preceding suicide attempts, we asked participants the following question: "In 2–3 sentences, please describe the thoughts and feelings that led you to attempt suicide". Given our intention to generate new hypotheses, we sought to interpret the psychological functions of suicidal behavior by identifying consistent themes in individual responses. Participants' open-ended responses were therefore content-analyzed for recurrent themes by a study psychiatrist (AYD), and the presence or absence of these themes in each individual response was coded. Multiple themes could be present in one participant's response. A second study psychiatrist (KS) then reviewed the themes and their coding for each individual response.

Statistical Analysis

Means and standard deviations were calculated to describe participant characteristics and their most recent attempt. Bivariate correlational analyses using Pearson's r for continuous measures and Spearman's ρ for categorical variables were conducted to assess for strength of relationships between motives, attempt characteristics, and dispositional measures. Non-psychiatric controls served as benchmark comparisons to attempters in post-hoc analyses. A post hoc power analysis indicated our sample size yielded 90% power using a t test between means ($\alpha = .05$) to detect an effect size of .42 and .37 in study 1 ($n = 50$) and study 2 ($n=69$), respectively. Given our modest sample sizes, we did not correct for multiple comparisons in order to maximize study power. We therefore limit our interpretation of significant findings to a higher level, focusing on consistent patterns of correlations and robust findings.

Results

Characteristics of suicide attempts

Our sample of 69 suicide attempts included mostly non-violent methods, with 45% of attempts classified as highly lethal (lethality score 4 or greater). Thirty-five of 69 participants had only a single attempt. The majority of attempts were non-ambiguous and with clear intent to die, though there was heterogeneity in suicidal intent (Table 1). On the Intent Scale, 47 (68%) participants stated they unequivocally wanted to die, and 49 (71%) felt this was a serious attempt to end their own life. Forty-two (61%) endorsed using a lethal method, and 43 (62%) expected this method was likely fatal. Just 23 (33%) described their attempts as impulsive with little to no premeditation.

Study 1: Reasons for Attempting Suicide Questionnaire (RASQ)

Individual item responses on the RASQ are presented in Table 2. Most participants endorsed escape/self-punishment items, with the most common (84%) being “the situation was so unbearable I felt I had to do something and did not know what else to do”. These motives were broadly associated with a profile of dysfunctional personality characteristics indicative of borderline pathology (see Figure 1). These motives were also associated with a greater number of attempts ($r = .407$, $p = .003$) and younger age at first attempt ($r = -.349$, $p = .013$).

Interpersonal motives were associated with poor planning of attempts ($r = -.340$, $p = .016$) and lower overall suicidal intent ($r = -.328$, $p = .020$), but generally were not consistently correlated with broad markers of personality pathology (see Table 3). The RASQ subscales were positively intercorrelated ($r = .446$, $p = .001$), indicating limited discrimination of motives.

Study 2: Exploration of motivational states preceding attempted suicide

In study 2, we sought to categorize motivational states preceding attempts. Based on the recurring themes in attempters' written descriptions, responses were aggregated into four primary categories: internal disturbance, interpersonal loss, anger/dyscontrol, and defeat. Internal disturbance described self-oriented feelings of intolerable emotional states, such as depression or feelings of burdensomeness. Interpersonal loss included feelings of abandonment, lack of belonging, and grief. Anger/dyscontrol included feelings of anger, typically in the context of interpersonal conflict, while defeat encompassed feelings of powerlessness and poor coping to external threats to autonomy or status such as physical illness or job loss. Detailed descriptions of the categories and examples of responses can be found in Table 4.

For a complete table of correlations between motivational states, demographics, attempt characteristics, and personality measures, please see Table 5. Attempters endorsing defeat were more likely to be male ($\chi^2 = 5.45$, $p = .031$) than those not endorsing defeat; twice as many men ($n = 22$) endorsed defeat than women ($n = 12$). Defeat was also negatively correlated with interpersonal sensitivity ($\rho = -.316$, $p = .010$). Attempters endorsing defeat were significantly less agreeable (43 ± 4.36) than those not endorsing defeat (47.46 ± 4.0).

This difference, 4.46 ($t(50) = 3.85, p = .000$), represents a large effect size ($d = 1.07$). Notably, in the entire attempter sample, agreeableness was negatively correlated with male gender ($\rho = -.219, p = .039$).

To compare the levels of disagreeableness in attempters endorsing the experience of defeat against a benchmark, we contrasted them against other attempters (not endorsing defeat), and non-psychiatric healthy controls. There was a large difference between groups ($F(2, 90) = 16.23, p = .000, \eta^2_{\text{partial}} = .272$), and a Tukey post-hoc test revealed that attempters endorsing defeat were significantly less agreeable (42.8 ± 4.4) than the rest of attempters (47.8 ± 3.6) or healthy controls (47.6 ± 3.1 ; see Figure 2).

Internal disturbance and defeat were modestly negatively correlated ($\rho = -.251, p = .038$) with each other, such that those endorsing internal disturbance were less likely to endorse defeat. The RASQ escape/self-punishment subscale was marginally negatively correlated with defeat ($\rho = -.259, p = .070$), while both RASQ escape/self-punishment and interpersonal motives were positively correlated with anger/dyscontrol ($\rho = .286, p = .044$; $\rho = .391, p = .005$, respectively).

Discussion

Our two retrospective studies explored how subjective motivations for attempting suicide might be moderated by dispositional vulnerabilities, with particular focus on motivational states rather than intended outcomes (aims) of suicidal behavior. Study 1 found that attempters high in borderline pathology were more likely to endorse self-oriented escape motives for suicide, while interpersonal motives marked suicide attempts of a more situational nature. Study 2 identified a putative pathway to suicide in men, involving dispositional antagonism and the experience of defeat.

Limited discrimination of RASQ subscales

Escape/self-punishment motives on the Reasons for Attempting Suicide Questionnaire were robustly associated with a dysfunctional personality profile suggestive of borderline personality traits. Accordingly, escape/self-punishment motives were also associated with a higher number of attempts and younger age at first attempt. These findings do not support the common belief that suicidal behavior in individuals with borderline pathology is primarily interpersonally manipulative, highlighting instead the general lack of psychological resources in an emotional crisis. The association between escape/self-punishment motives with broad indices of borderline traits is not particularly distinct however, and does not yield new insights into more specific interactions between personality characteristics and suicidal motivations.

In our sample, instrumental interpersonal motives were less frequently endorsed and associated with poorly planned attempts of lower suicidal intent, but were not strongly associated with a specific psychopathology profile. Such motives may therefore arise in suicidal crises of a more situational and transient nature. The high prevalence of escape/self-punishment motives in our study, on the other hand, is similar to that observed in previous studies which find that escape and desire to die are, not surprisingly, overwhelmingly

endorsed by suicide attempters (Schnyder et al., 1999; Van Orden et al., 2015). Notably, the most commonly endorsed item on the RASQ in our sample was to “do something” in an unbearable situation and not knowing what to do, as opposed to more specific aims. This finding may indicate a lack of specific aims in many suicide attempts, providing further support for the assessment of motivational states preceding an attempt rather than intended outcomes.

Our content analysis of self-reported motivational states yielded four categories: internal disturbance, interpersonal loss, anger/dyscontrol and defeat. In our sample, anger/dyscontrol was often endorsed in the interpersonal context (i.e. “felt betrayed, argued with ex-husband”). While the RASQ subscales and the categorical motivational states are not directly comparable, we note that anger/dyscontrol was the least frequently endorsed motivational state and the only one positively correlated with both RASQ subscales. This association suggests that the RASQ likely oversamples motivations arising in the interpersonal context, which may be more characteristic of non-suicidal self-injury and recurrent suicidal behavior in disorders of the borderline-spectrum.

Antagonism and the experience of defeat in men

Experiences of defeat attributed to external threats were more frequently endorsed by men and were associated with disagreeableness/antagonism, a marker for narcissism (Saulsman & Page, 2004). A contemporary clinical model of pathological narcissism includes both narcissistic grandiosity and narcissistic vulnerability, characterized by an increased sensitivity to ego threats and ensuing dysregulation and impairment (Pincus, Cain, & Wright, 2014). Individuals high in vulnerable narcissism may be particularly susceptible to suicide in the face of shameful, ego-threatening experiences of defeat. For such individuals, the significant physical, economic, and social changes that accompany older age can be particularly threatening. This hypothesis is congruent with the findings of psychological autopsy studies in which elderly who died by suicide are described by relatives as obstinate and egotistical, with a self-esteem dependent on their ability to remain in control (Kjølseth, Ekeberg, & Steihaug, 2009). In a study of suicide attempters age 70 and older, Wiktorsson and colleagues (2016) found that highly lethal attempts were more often attributed to loss of functioning and autonomy, as well as social problems, rather than feelings of perceived burdensomeness. Though our sample included middle-age attempters, we similarly observed a high prevalence of defeat motives (49%), suggesting that the experience of defeat is not unique to late-life suicide.

The results of our study suggest that men may be more likely to endorse defeat as a motivational state leading to suicide in part because they are more disagreeable than women. The degree of male predominance in suicidal behavior varies across culture, likely shaped by different gender role expectations (Schmidtke et al., 1996). Though explanations for this vulnerability remain speculative (Bilsker & White, 2011), loss of social dominance is hypothesized to be one key motivation for suicide in men (Canetto, 1997). In a society that expects men to aggressively maintain social dominance, suicide in response to an experience of defeat (e.g. a debilitating illness) may be viewed as powerful, masculine, and therefore socially acceptable response in men (Canetto, 1997; Qin et al., 2000).

Understanding the interaction between triggers for suicide and personality characteristics may have treatment implications. Older men with narcissistic traits can pose significant challenges during treatment; these patients may initially appear high functioning, but their antagonism and entitlement can quickly evoke therapy-interfering negative countertransference (Maltzberger & Buie, 1974). Clinical awareness of this profile can foster compassion and sensitivity to the increased risk of suicide in those most vulnerable to the narcissistic injury of aging.

Limitations

The limitations of our study include the retrospective design, potential response bias, and modest sample size. People who die by suicide may have unique and divergent motives for suicide than those who survive their attempt. However, this concern is partly mitigated by our sampling of highly lethal attempts with high suicidal intent. Additionally, some of the suicide attempts in our sample were remote, though the majority of participants were assessed within 5 years of attempting. Finally, our study was likely underpowered due to sample size.

Conclusion

Our overarching goal was to generate new hypotheses about psychological pathways toward suicidal behavior in those most at risk of dying by suicide. We attempted to distinguish between motivations and intended outcomes of suicidal behavior, and conclude that assessment of motivations, particularly motivational states, may be a more clinically relevant measure of reasons for suicide. This study yields the specific hypothesis that one of the pathways to suicide in men involves dispositional antagonism and the experience of defeat.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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	RASQ Esc	RASQ Int
RASQ Int	0.45	
Neuroticism	0.32	0.15
Extraversion	-0.19	-0.05
Openness	-0.21	-0.02
Agreeableness	0.15	0.12
Conscientiousness	-0.43	-0.06
BIS	0.36	0.1
SPSI-IC	0.34	0.2
UPPS Negative Urgency	0.4	0.3
UPPS Positive Urgency	0.18	0.25
UPPS Lack of Premeditation	0.23	-0.11
UPPS Lack of Perseverance	0.37	0.07
IIP Interpersonal Sensitivity	0.21	0.25
IIP Interpersonal Ambivalence	0.28	0.31
IIP Interpersonal Aggression	0.36	0.29
ISEL Self Esteem Support	-0.43	-0.18
ISEL Belonging	-0.04	-0.23
ISEL Appraisal	-0.08	-0.26
ISEL Tangible Support	-0.19	-0.19
PAIBOR Affective Instability	0.37	0.09
PAIBOR Self-Harm	0.27	-0.04
PAIBOR Total	0.39	0.14

Figure 1.

Personality correlates of escape/self-punishment and interpersonal motives on the Reasons for Attempting Suicide Questionnaire. (RASQ). Pearson's rs are reported, with significant correlations ($p < .05$) shaded. Total $n = 50$, NEO total = 43, PAI-BOR: $n = 34$, all other measures $n = 49$.

Figure 2.

Agreeableness boxplots. Minimum, Q1, Q3, and maximum values reported for non-psychiatric controls, attempters not endorsing defeat motivations, and attempters endorsing defeat motivations for their suicide attempt. Attempters endorsing defeat were significantly more disagreeable than all other attempts or healthy controls. * denotes significant difference between all other groups ($p = .000$)

Table 1

Participant Characteristics

	Suicide Attempters Study 1 (n = 50)	Suicide Attempters Study 2 (n = 69)	Non-psychiatric healthy controls (n = 50)
Female, no. (%)	25 (50%)	34 (49.3%)	33 (66%)
White, no. (%)	44 (88%)	63 (91.3%)	44 (88%)
Educational level, years (SD)	14.1 (3)	14 (3.1)	15.6 (2.6)
Age at baseline assessment (SD)	61.1 (10) [41–79]	61.3 (10.1) [41–85]	67.1 (10.1)
Age at most recent attempt (SD)	60.4 (10.2) [41–79]	60.9 (10.6) [41–85]	–
Total attempts (SD)	2.4 (2.2)	2.2 (2)	–
Suicidal total intent at most recent attempt (SD)	18.4 (5.4)	17.9 (5.6)	–
Lethality of most recent attempt (SD)	3.4 (2.1)	3.5 (2)	–
Violent method (%) (<i>Hanging, gunshot, jumping, stabbing/deep cutting</i>)	6 (12%)	9 (13%)	–
	Drug OD	Drug OD	
	Cutting	Cutting	
	Jumping	Jumping	
	Hanging	Hanging	
	Shooting	Shooting	
	Immolation	Immolation	

Table 2

Individual items on the Reasons for Attempting Suicide Questionnaire (RASQ)

RASQ subscale	RASQ item	Attempters endorsing 'agree' or 'completely agree' (n = 50)
Escape/self-punishing motives	I wanted to punish myself	18 (36%)
	I seemed to lose control and have no idea why I behaved that way	22 (44%)
	Make people sorry for the way they treated me	7 (14%)
	I wanted to frighten someone	0 (0%)
	The situation was so unbearable I felt I had to do something and did not know what else to do	42 (84%)
	I wanted to escape for a while from an impossible situation	30 (60%)
	I wanted to get relief from a terrible state of mind	39 (78%)
	Because I feel I am not good enough to have accomplished anything worthwhile, I am a failure	20 (40%)
Interpersonal motives	Because I was angry with someone and wanted to get back at him/her	4 (8%)
	I wanted to seek help from someone for my nerves and my difficulties	18 (36%)
	I wanted to make people understand how I was feeling and how distressed I was	22 (44%)
	I wanted to show how much I love someone	9 (18%)
	I wanted to find out if someone loves me or not	6 (12%)
	I wanted to try and influence or change someone's mind	8 (16%)

Table 3

Correlations between Reasons for Attempting Suicide Questionnaire (RASQ) subscales and demographics, attempt characteristics, and personality measures

	n	Escape/Self-punishment		Interpersonal	
		Correlation statistic	p	Correlation statistic	p
Demographics	Gender	.013	.931	.140	.331
	Race	.026	.859	.110	.447
	Education	-.068	.637	-.250	.080
	Current Marital Status	-.029	.844	.192	.182
	Physical Illness Severity	.117	.420	.068	.637
	Age at baseline	-.258	.070	.049	.734
	Age at depression onset	-.100	.503	-.049	.742
	Age at first attempt	-.349 *	.013	-.180	.210
	Age at most recent attempt	-.227	.113	.043	.767
	Suicidal total intent of most recent attempt	-.088	.543	-.328 *	.020
Attempt Characteristics	Suicidal planning intent of most recent attempt	.012	.933	-.340 *	.016
	Lethality of most recent attempt	-.144	.319	-.092	.524
	Method (nonviolent/violent)	.113	.433	.103	.478
	Total lifetime attempts	.407 **	.003	.050	.729
	Neuroticism	.317 *	.038	.148	.345
Personality Measures	Extraversion	-.194	.214	-.047	.764
	Openness	-.210	.176	-.022	.887
	Agreeableness	.150	.338	.115	.462
	Conscientiousness	-.433 **	.004	-.055	.724
	BIS non-planning	.365 *	.010	.096	.510
	SPSI-IC	.339 *	.017	.197	.174
	UPPS Lack Premeditation	.234	.106	-.107	.462
	UPPS Lack Perseveration	.366 **	.010	.070	.634

	n	Escape/Self-punishment		Interpersonal	
		Correlation statistic	p	Correlation statistic	p
UPPS Negative Urgency	49	.402 **	.004	.297 *	.038
UPPS Positive Urgency	49	.180	.217	.248	.086
IIP interpersonal ambivalence	49	.279	.052	.310 *	.030
IIP interpersonal aggression	49	.364 *	.010	.292 *	.042
IIP Interpersonal sensitivity	49	.206	.157	.252	.080
ISEL self-esteem support	49	-.431 **	.002	-.177	.225
ISEL belonging	49	-.041	.780	-.232	.108
ISEL appraisal	49	-.080	.584	-.261	.070
ISEL tangible	49	-.192	.186	-.193	.184
PAIBOR affective instability	37	.372 *	.023	.088	.603
PAIBOR self-harm	37	.270	.107	-.036	.834
PAIBOR total	37	.394 *	.016	.139	.412

Pearson's r is reported for continuous measures, and Spearman's ρ is reported for categorical measures (gender, race, current marital partner, method).

* Correlation is significant at the .01 level;

** correlation is significant at the .05 level.

Table 4

Self-reported motivations for attempt: categories and examples

Motivational States	<i>n</i> total (%)	<i>n</i> among men (%)
Internal disturbance "Worthless, not feeling needed and simply disgusted at myself." "I had no future. I was not good enough. I was a bad person." "Everyone around me would be better off if I were dead." <i>Includes the experience of excruciating negative affects and low self-esteem: feelings of hopelessness, depression, emptiness, feelings of burdensomeness</i>	43 (62%)	21 (60%)
Abandonment/Interpersonal Loss "Felt alone"; "Felt abandoned" "Missed my daughter so much, felt like a part of me died." <i>Includes reasons citing grief, divorce, loneliness, lack of belonging</i>	21 (30%)	10 (29%)
Anger/dyscontrol "Felt betrayed." "Argument with ex-husband." "Fright, anger, lack of control, and the inability to allow those feelings to build up inside of me until I could not control it anymore." <i>Includes loss of control and feelings of anger, particularly those directed at another person</i>	13 (19%)	8 (22%)
Defeat "Overwhelmed by physical health deterioration, loss of job, dwindling financial savings, possible homelessness." "I can't cope with the world anymore." <i>Includes feelings of powerlessness, poor coping to external threats to autonomy/status such as somatic illness, financial troubles, job loss, eviction</i>	34 (49%)	22 (63%)

Frequencies for categories endorsed within individual participant responses describing the 'thoughts and feelings leading up to their attempt' in total sample and stratified by sex. *n* total = 69, *n* of men = 35.

Correlations between motivational states and demographics, attempt characteristics, and personality measures

Table 5

	n	Internal Disturbance		Abandonment/Loss		Anger/Dyscontrol		Defeat	
		ρ	p	ρ	p	ρ	p	ρ	p
Demographics	Gender	69	-.049	.692	-.041	.737	.104	.394	.276 *
	Race	69	-.191	.117	-.095	.435	.118	.334	.113
	Education	69	-.060	.626	-.111	.362	-.114	.351	.059
	Current Marital Status	68	-.308 *	.011	-.131	.287	.100	.418	.185
	Physical Illness Severity	69	.114	.352	.167	.171	-.098	.425	.046
	Age at baseline	69	-.035	.778	.024	.846	-.231	.056	.166
	Age at depression onset	65	-.008	.952	.157	.211	-.118	.348	.131
	Age at first attempt	69	-.037	.764	.025	.841	-.103	.398	.210
	Age at most recent attempt	69	-.098	.425	.101	.408	-.149	.222	.201
Attempt Characteristics	Suicidal total intent of most recent attempt	69	.164	.178	-.050	.684	-.136	.265	.220
	Suicidal planning intent of most recent attempt	69	.127	.297	-.061	.618	-.134	.274	.182
	Lethality of most recent attempt	69	-.061	.619	.059	.633	-.069	.574	.220
	Method (nonviolent/violent)	69	-.054	.659	.118	.335	.254 *	.036	-.123
	Total lifetime attempts	69	.066	.592	.041	.738	.019	.876	-.219
	Neuroticism	52	.017	.907	.171	.225	.003	.981	-.178
	Extraversion	52	.108	.444	.106	.454	.047	.738	-.028
	Openness	52	-.141	.320	.162	.252	-.015	.914	.092
	Agreeableness	52	.025	.860	-.009	.952	-.032	.820	-.477 **
Personality Measures	Conscientiousness	52	.096	.499	.093	.510	.056	.694	.086
	BIS non-planning	68	-.036	.769	-.239 *	.049	-.010	.937	-.257 *
	SPSI-IC	66	-.052	.679	-.274 *	.026	-.040	.748	-.156
	UPPS Lack Premeditation	65	-.166	.186	-.110	.352	.170	.177	-.024
	UPPS Lack Perseveration	65	-.117	.352	-.108	.390	-.066	.603	-.197
	UPPS Negative Urgency	65	.013	.918	-.053	.674	-.020	.874	-.130
	UPPS Positive Urgency	65	.013	.918	-.011	.931	-.065	.609	.034
									.790

	n	Internal Disturbance		Abandonment/Loss		Anger/Dyscontrol		Defeat	
		ρ	p	ρ	p	ρ	p	ρ	p
		.058	.643	-.258*	.037	.056	.655	-.165	.187
	IIP interpersonal ambivalence								
	IIP interpersonal aggression	.065	.605	-.037	.767	-.043	.734	-.162	.195
	IIP Interpersonal sensitivity	-.019	.879	.145	.246	.026	.836	-.316**	.010
	ISEL self-esteem support	-.089	.476	.124	.321	.088	.480	.124	.323
	ISEL belonging	.050	.692	-.051	.687	-.195	.117	-.078	.534
	ISEL appraisal	.047	.707	-.201	.105	-.182	.143	-.110	.379
	ISEL tangible	-.029	.815	-.121	.334	-.090	.472	-.037	.769
	PAIBOR affective instability	.158	.338	.010	.949	.018	.914	-.087	.597
	PAIBOR self-harm	.110	.505	-.187	.255	-.144	.383	-.062	.707
	PAIBOR total	.221	.176	.081	.624	-.021	.900	-.071	.668

* Correlation is significant at the .01 level;

** correlation is significant at the .05 level. Spearman's rho is reported.