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 ScienceDirect

Addictive Behaviors 32 (2007) 1395–1404

**ADDICTIVE
BEHAVIORS**

Suicide attempts among individuals with opiate dependence: The critical role of belonging[☆]

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Abstract

This study explored the role of three theoretically important interpersonal variables in attempted suicide and unintentional overdose using a diverse sample of one hundred thirty-one (69 women) methadone patients at an urban university hospital. Subjects completed a standardized interview including self-report measures of perceived 1) belonging 2) burdensomeness, and 3) loneliness. In separate multivariate logistic regression analyses, individuals with a history of attempted suicide were compared to non-attempters, and individuals with a history of unintentional overdose were compared to individuals without such a history. As hypothesized, low belonging distinguished suicide attempters but not individuals with a history of unintentional overdose, after accounting for covariates. Results concerning burdensomeness and suicide attempt were also suggestive. Findings underscore the relevance of a sense of belonging to vulnerability to suicidal behavior, and lend further support to the notion that suicide attempts and unintentional overdose have dissimilar correlates.

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Keywords: Attempted suicide; Opiate dependence; Drug overdose; Interpersonal relationships

1. Introduction

Individuals who seek treatment for opiate dependence are at high risk for suicide, showing approximately 13.5 times greater risk compared to the general population (Wilcox, Conner, & Caine,

[☆] The study was supported by NIH grant AA00318. We wish to thank Eller Ross and Dr. Gloria Baciewicz for facilitating the study, Sean Meldrum for preparing the database, and Leticia Astacio, Jeremy Duda, Elizabeth Kidd, Dale Hall, Elizabeth Luebbe, and Elena Rubiconti for conducting the interviews.

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2004). Despite elevated risk, the majority of opiate-dependent individuals do not attempt suicide (Darke & Ross, 2001; Roy, 2002). Therefore, the identification of variables that distinguish suicide attempters from non-attempters within this population can further tailor prevention efforts to those at highest risk.

The interpersonal domain is critical to understand and prevent suicide (Joiner, 2005). Supporting this viewpoint, data show that residing alone (Boardman, Grimbaldston, Handley, Jones, & Willmott, 1999; Murphy, Wetzel, Robins, & McEvory, 1992; King et al., 2001) and disruptions in key interpersonal relationships confer risk for suicidal behavior (Boardman et al., 1999; Conner, Beautrais, & Conwell, 2003; Heikkinen, Aro, & Lönnqvist, 1992; Johnson et al., 2002). A limitation of this literature is, with few exceptions (Groholt, Ekeberg, Wichstrom, & Haldorsen, 2000; Stravynski & Boyer, 2001), *subjective* measures of interpersonal functioning have rarely been used, a critical omission because for example perceived loneliness is *at least* as strongly related to a variety of deleterious health outcomes as more objectively defined measures of social isolation (Hawkey & Cacioppo, 2003). Moreover, in a study of 92 patients admitted for drug detoxification, “loneliness” (along with interpersonal loss) was the most frequent reason given for a prior suicide attempt (Johnsson & Fridell, 1997). Overall, there is a limited understanding in suicidal behavior of the role of interpersonal factors *as perceived by the suicidal individual*. Interpersonal relationship difficulties affect the course of addiction and recovery among opiate-dependent individuals (Gogineni, Stein, & Friedmann, 2001), making this a critical area to examine.

Interpersonal needs play an essential role in development over the course of life (Bowlby, 1973) including the need for consistent interpersonal interaction and care or *belonging* (Baumeister & Leary, 1995). Another need is to contribute to the well-being and survival of others, especially loved ones (de Cantanzaro, 1991). A perception of being a *burden* may be experienced when individuals feel ineffective and incompetent to make such a contribution (Joiner et al., 2002). Joiner (2005) has proposed that low perceived “belongingness” (referred to here as “belonging”) and high perceived “burdensomeness” are potent risk factors for suicidal behavior. Given data that loneliness promotes risk among substance abusers (Johnsson & Fridell, 1997), the subjective experience of loneliness is another important area to examine.

In this context, it is important to consider the differences between loneliness, belonging and burdensomeness. Belonging involves a “combination of frequent interaction plus persistent caring” (Baumeister & Leary, 1995, p. 497), further characterized by pleasantness of interactions and proximity of interaction partners. One may thus report low loneliness (due to frequent interactions), but low belonging (if the frequent interactions lack caring). Similarly, one may perceive oneself as a burden on others, but not feel lonely (or low belonging for that matter), as can happen when people are physically incapacitated but feel well cared for and valued by family members. Perceptions of loneliness, low belonging, and burdensomeness often co-occur, making a *unique* association between any one of them and suicidal behavior of interest. One purpose of this study was to test hypotheses that perceptions of low belonging, high burdensomeness, and high loneliness respectively are associated with attempted suicide among individuals with opiate dependence.

Like suicide, unintentional overdose is also a leading cause of death among opiate-dependent individuals. It is not clear if suicidal behavior and unintentional overdose are related behaviors with a similar risk profile (Neale, 2000; Rossow & Lauritzen, 1999) or represent distinct behaviors with dissimilar risk factors (Darke and Ross, 2001; Kosten and Rounsaville, 1988). Resolving this question carries important implications for prevention. If, for example, suicidal behavior and unintentional overdose share a common risk profile it may suggest the value of common prevention measures, whereas

if they are qualitatively distinct behaviors with different correlates then outcome-specific, targeted prevention strategies may be more effective (Darke & Ross, 2001). Therefore, a second purpose of the study was to explore whether or not unintentional overdose is also associated with perceived belonging, burdensomeness, and loneliness. A pattern of findings such that belonging, etc. differentiated suicide attempts but did not differentiate unintentional overdose, would support the notion of distinct risk profiles.

2. Method

2.1. Procedure

Between 8 July and 26 August 2005, data were gathered from patients enrolled in a methadone maintenance program at a university hospital in upstate New York. Subjects were recruited through poster advertisements in English and Spanish. After providing a patient identification card to confirm enrollment in the program, and after procedures were explained and informed written consent was provided, subjects met with a trained research assistant for approximately 1 h who administered a series of measures. Subjects were invited to return after a minimum of 14 days for one follow-up session to complete an identical interview but with a different investigator not privy to the results of the first assessment. Ten (7.6%) subjects who spoke Spanish met with a Spanish-speaking investigator who administered a Spanish version. Spanish versions of widely used scales were obtained and, for newer scales or items created for the survey, Spanish versions were created by independent consultants through translation and back-translation. Subjects were paid a \$30 gift card following each assessment. The study was approved by the Medical Center's Internal Review Board.

2.2. Subjects

One hundred thirty-one patients completed at least one interview including 69 (52.7%) women. Thirty subjects (22.9%) reported they were Black (regardless of ethnicity) and 28 (21.4%) reported they were Hispanic (regardless of race). Mean (SD) age of participants was 41.8 (9.6) years, ranging from 21 to 59 years. Mean daily methadone dose was 110 (48) mg. One hundred eight (82.4%) subjects reported a history of intravenous drug use. Seventy-three (55.7%) subjects completed a follow-up. Mean follow-up was 24 (8) days (range 14 to 42).

2.3. Measures

2.3.1. Outcomes

Suicide attempt was assessed with the question: "Have you ever tried to kill yourself or attempt suicide?" To assess unintentional overdose, subjects were read the following statement: "These questions refer to accidental overdose on drugs or alcohol. I am referring to unintentional overdose, not to suicide attempts that involve taking an overdose on purpose." Following these instructions, subjects were asked "Have you ever overdosed?" Analyses of subjects who completed a second interview were used to calculate test–retest reliability (percent agreement, kappa) and showed high test–retest reliability of the suicide attempt item (91.8%, $K=.82$) and the overdose item (86.3%, $K=.72$). A series of follow-up questions were asked about attempts and overdoses. For subjects with more than one attempt (or

overdose), subjects were asked to answer the questions based on the “most serious” incident (Preuss et al., 2002).

2.3.2. Key predictor variables

Belonging was assessed with a 10-item self-report scale taken from the Interpersonal Needs Questionnaire (Van Orden, Merill, & Joiner, 2005). The scale measures participants’ beliefs about the extent to which they feel connected to others in a frequent and caring way. A sample item is “These days other people care about me.” Level of agreement on each item is rated with a 7-point scale. Higher scores indicate greater perceived belonging. In the present study, internal consistency (α) = .85 and test–retest reliability (r) = .73.

Burdensomeness was assessed with a 15-item scale on the INQ that assesses the extent to which an individual perceives he/she is (or is not) a burden on the people in his/her life (Van Orden et al., 2005). A sample item is “These days I think I matter to the people in my life”. The scale is also rated on a 7-point scale and higher scores indicate lower perceived burdensomeness. In the present study, α = .90 and test–retest reliability (r) = .73.

Loneliness was assessed with the widely used UCLA Loneliness Scale (UCLA LS), a unidimensional, self-report measure of perceived isolation (Russell, 1996). The UCLA LS shows high internal consistency (Cramer & Barry, 1999; Russell, 1996), has high test–retest reliability after one year (Russell, 1996), and is associated with other measures of loneliness (Cramer & Barry, 1999). Items are rated on 5-point scale with higher scores indicating greater loneliness. In the sample, α = .87 and test–retest reliability (r) = .76.

As expected, these measures were strongly correlated. The correlation between belonging and burdensomeness was r = .80 (p < .001), between belonging and loneliness was r = -.67 (p < .001), and between burdensomeness and loneliness was r = -.67 (p < .001).

2.3.3. Covariates

Drug use severity, aggression, depression, and hopelessness are clinical variables that have been shown to confer risk for suicidal behavior among individuals dependent on opiates and other substances (Conner & Duberstein, 2004; Darke & Ross, 2002; Roy, 2002) and so measures of these variables served as covariates for the analyses. To assess these variables, the 50-item Lifetime Inventory of Drug Use Consequences (INDUC; Tonigan & Miller, 2002), the 29-item Aggression Questionnaire (AQ; Buss & Perry, 1992), an 11-item version of the Centers for Epidemiological Studies Depression Scale (CESD; Kohout, Berkman, Evans, & Cornoni-Huntley, 1993; Radloff, 1977), and the 20-item Beck Hopelessness Scale (BHS; Beck, Weissman, Lester, & Trexler, 1974) were administered. These widely used measures showed acceptable internal consistency (α > .85) and test–retest reliability (r > .74).

2.4. Analyses

Data are based on the initial assessment (N = 131). Two sets of analyses were conducted that 1) compared individuals reporting a history of one or more suicide attempts (attempters) to those with no history of attempts (non-attempters), and 2) compared individuals reporting a history of one or more unintentional overdoses (overdose group) to those with no history of unintentional overdose (non-overdose group). These strata were compared using logistic regression with a series of unadjusted tests (Hosmer & Lemeshow, 2000) and by calculating the standardized mean difference, d (Cohen, 1988). These strata were also compared using multiple logistic regression analyses (Hosmer & Lemeshow, 2000) that adjusted for gender, age, race

(Black vs. other), ethnicity (Hispanic vs. other), and scores on the covariate scales. For each multivariate analysis, the covariates were entered as a block followed by entry of belonging, burdensomeness, or loneliness. Finally, all of these interpersonal variables were entered into the same multivariate model in order to evaluate their association with the outcomes after adjusting for the covariates and for one another. Odds ratios and asymmetric confidence intervals were computed using the method of maximum likelihood, and model fit was assessed using the Hosmer–Lemeshow goodness of fit test (Hosmer & Lemeshow, 2000). Listwise deletion was used for missing data. There was little missing data; across multivariate analyses, data are based on between 122 (93.1%) and 129 (98.5%) subjects.

3. Results

3.1. Sample representativeness and descriptive data

Compared to the total population of methadone patients from which the sample was obtained ($N=434$), study participants were overrepresented by women $\chi^2(1, N=565)=4.91, p=.027$ and African Americans $\chi^2(1, N=565)=3.67, p=.055$ (trend level), and received a somewhat lower average daily dose of methadone $t(563)=3.58, p=.000$. There were no differences in age $t(565)=1.25, p=.210$ or Hispanic ethnicity $\chi^2(1, N=565)=.865, p=.354$.

Forty-nine (37.4%) subjects reported a lifetime history of attempted suicide and seventy-eight (59.5%) subjects reported a history of unintentional overdose. The presence or absence of these lifetime outcomes yield four strata: neither outcome (34, 30.0%), unintentional overdose only (48, 36.6%), attempt only (19,

Table 1
Results of univariate and multivariate logistic regression analyses

Predictor	Suicide attempt		Unintentional overdose	
	Univariate odds ratio (95% CI)	Multivariate odds ratio (95% CI)	Univariate odds ratio (95% CI)	Multivariate odds ratio (95% CI)
Age ^a	1.00 (0.96, 1.04)	1.01 (0.96, 1.05) ^a	0.97 (0.94, 1.01)	0.98 (0.94, 1.02) ^a
Female ^a	1.88 (0.92, 3.85)	2.17 (0.99, 4.99) ^a	0.69 (0.34, 1.39)	0.62 (0.28, 1.34) ^a
Black ^a	0.96 (0.41, 2.23)	1.56 (0.57, 4.33) ^a	0.42 (0.19, 0.97)	0.50 (0.19, 1.31) ^a
Hispanic ^a	0.75 (0.31, 1.81)	0.71 (0.26, 1.87) ^a	0.51 (0.22, 1.18)	0.32 (0.12, 0.84) ^a
INDUC ^a	1.07 (1.00, 1.15)	1.07 (0.99, 1.15) ^a	1.08 (1.01, 1.14)	1.06 (1.00, 1.14) ^a
AQ ^a	1.03 (1.01, 1.05)	1.02 (0.99, 1.04) ^a	1.01 (0.99, 1.03)	1.01 (1.00, 1.04) ^a
CESD ^a	1.08 (1.02, 1.14)	1.04 (0.96, 1.12) ^a	1.03 (0.97, 1.08)	1.02 (0.94, 1.10) ^a
BHS ^a	1.13 (1.04, 1.22)	1.06 (0.95, 1.19) ^a	1.03 (0.95, 1.11)	0.96 (0.85, 1.07) ^a
Belonging ^b	0.94 (0.91, 0.97)	0.94 (0.90, 0.98) ^b	0.99 (0.96, 1.01)	1.00 (0.96, 1.04) ^b
Burdensomeness ^b	0.96 (0.94, 0.98)	0.96 (0.93, 0.99) ^b	0.99 (0.97, 1.01)	1.01 (0.98, 1.04) ^b
Loneliness ^b	1.04 (1.01, 1.07)	1.01 (0.98, 1.05) ^b	1.01 (0.99, 1.04)	1.01 (0.97, 1.04) ^b

Note. INDUC = Inventory of Drug Use Consequences; AQ = Aggression Questionnaire; CESD = 11-item version of the Centers for Epidemiological Studies Depression Scale; BHS = Beck Hopelessness Scale.

^a Covariate entered as a block in multivariate analyses prior to entry of interpersonal variables (belonging, burdensomeness, or loneliness). Multivariate results pertaining to covariates are therefore adjusted for all other covariates, but not adjusted for interpersonal variables.

^b Belonging, burdensomeness, or loneliness respectively was entered into multivariate analysis following entry of covariates. Multivariate results pertaining to each these interpersonal variables are therefore adjusted for all covariates, but not adjusted for the other interpersonal variables.

14.5%), both outcomes (30, 22.9%). Histories of suicide attempt and unintentional overdose were not statistically associated: $\chi^2(1)=0.92, p=.762$.

3.2. Suicide attempts

Among suicide attempting individuals, 33 (67.4%) had made two or more attempts, 7 (14.3%) had made an attempt within the past year, 34 (69.4%) received emergency treatment within 24 h of an attempt, and the most common methods were intentional overdose (29, 59.2%), cutting (9, 18.4%), and hanging (5, 10.2%). In attempters compared to non-attempters, belonging scores were 39.0 (14.3) and 49.1 (11.4); burdensomeness scores were 64.8 (18.3) and 77.3 (16.7); and loneliness scores were 60.0 (13.4) and 52.3 (13.6). These data indicate a large difference in belonging ($d=.75$) and burdensomeness ($d=.68$) and a moderate difference in loneliness ($d=.55$) between attempters and non-attempters (Cohen, 1988).

The crude (unadjusted) comparison of suicide attempters and non-attempters on these variables as well as the covariates are presented in the second column of Table 1. Higher belonging scores, indicating greater perceived belonging, were associated with lower probability of a history of attempted suicide, odds ratio (OR) with 95% confidence intervals in parentheses (95% CI)=0.94 (0.91, 0.97). Higher scores on the burdensomeness scale, indicating lower perceived burdensomeness, were associated with a lower probability of an attempt, OR (95% CI)=0.96 (0.94, 0.98). Higher scores on the loneliness score, indicating greater loneliness, were associated with a higher probability of an attempt, OR (95% CI)=1.04 (1.01, 1.07). Unadjusted tests also showed that higher scores on measures of aggression (AQ), depression (CESD), and hopelessness (BHS) were associated with a higher probability of an attempt.

Results of the multivariate logistic regression analyses concerning suicide attempts are presented in the third column of the table. In regards to the multivariate analysis of belonging, model fit was acceptable, $\chi^2(8, N=126)=7.72, p=.461$. Consistent with the univariate result, after adjusting for covariates, higher belonging scores were associated with lower probability of a history of attempted suicide, OR (95% CI)=0.94 (0.90, 0.98), $p=.005$. This result may be interpreted to indicate that, after adjusting for potential confounders, a one-point higher score on this scale is associated with a 6% (2%, 10%) lower probability of a suicide attempt.

In the multivariate analysis of *burdensomeness*, model fit was acceptable, $\chi^2(8, N=127)=6.54, p=.587$. Consistent with the univariate result, higher scores on the burdensomeness scale, indicating lower burdensomeness, were associated with a lower probability of an attempt, OR (95% CI)=0.96 (0.93, 0.99), $p=.024$. After adjusting for potential confounders, a one-point higher score is associated with a 4% (1%, 7%) lower probability of an attempt.

In the multivariate analysis of *loneliness*, model fit was acceptable, $\chi^2(8, N=124)=10.41, p=.237$. After adjusting for covariates, higher scores on loneliness were *not* statistically associated with a higher probability of an attempt, OR (95% CI)=1.01 (0.98, 1.05), $p=.474$.

Finally, a multivariate analysis was conducted that included all of the covariates and belonging, burdensomeness, and loneliness (data not shown). Model fit was acceptable, $\chi^2(8, N=124)=5.34, p=.721$. After adjusting for covariates and the other interpersonal variables, higher scores on belonging were associated with lower probability of a suicide attempt, OR (95% CI)=0.93 (0.87, 0.99), $p=.016$. This result may be interpreted to indicate that a one-unit increase on belonging is associated with a 7% (1%, 13%) lower probability of a suicide attempt. Multivariate results pertaining to burdensomeness, OR (95% CI)=0.99 (0.94, 1.04), $p=.653$, and loneliness, OR (95% CI)=0.98 (0.94, 1.03), $p=.360$, were non-significant.

3.3. Unintentional overdose

Among overdosing individuals, 60 (76.9%) had overdosed two times or more, 8 (10.3%) reported an overdose within the past year, 47 (60.3%) received emergency treatment within 24 h of overdose, 69 (88.5%) involved use of “street” drugs either alone or in combination with alcohol or prescription medications, and 61 (78.2%) reported an overdose rendered them “unconscious.” Mean (with standard deviation in parentheses) belonging scores in individuals with a history of overdose compared to non-overdose subjects were 44.5 (12.4) and 46.7 (14.9); burdensomeness scores were 71.6 (18.2) and 74.1 (18.4); and loneliness scores were 56.1 (13.5) and 53.6 (14.8), indicating small differences in belonging ($d=.16$), burdensomeness ($d=.14$), and loneliness ($d=.18$) between overdose and non-overdose subjects (Cohen, 1988).

Unadjusted analyses pertaining to the interpersonal variables, presented in the fourth column of the table, do *not* indicate that belonging [OR (95% CI)=0.99 (0.96, 1.01), $p=.349$], burdensomeness [OR (95% CI)=0.99 (0.97, 1.01), $p=.454$], or loneliness [OR (95% CI)=1.01 (0.99, 1.04), $p=.331$], is associated with unintentional overdose. Univariate tests indicate that black individuals were less likely to have a history of unintentional overdose, and subjects with greater drug use severity were more likely to have such a history.

Multivariate tests pertaining to unintentional overdose are presented in the fifth column of the table. Model fit was acceptable for each analysis: belonging, $\chi^2(8, N=129)=5.81, p=.669$; burdensomeness, $\chi^2(8, N=127)=4.81, p=.778$; loneliness, $\chi^2(8, N=124)=10.41, p=.237$. Consistent with the univariate tests, multivariate results pertaining to the interpersonal variables were statistically non-significant: belonging, odds ratio (with 95% confidence interval in parentheses) = 1.00 (0.96, 1.04), $p=.950$; burdensomeness=1.01 (0.98, 1.04), $p=.498$; loneliness=1.01 (0.97, 1.04), $p=.785$. Finally, a multivariate analysis was conducted that included all three of these interpersonal variables along with covariates that did not support an association of belonging, burdensomeness, or loneliness with unintentional overdose.

4. Discussion

The results supported our hypothesis that perceived belonging is associated with suicide attempts among individuals in treatment for opiate dependence after a rigorous accounting for a range of demographic, clinical, and interpersonal covariates. Indeed, the large difference in belonging scores between attempters and non-attempters supports the clinical relevance of these findings. Although the relationship between social isolation and suicide attempts has been examined among individuals with opiate dependence in prior reports (Darke & Ross, 2001; Rossow & Lauritzen, 1999), it has been operationalized in terms of objective measures such as residing alone. However, individuals may feel as though they do not belong despite objective indications of social connectedness (Joiner, 2005). Although more study of this issue is required, the results suggest that perceived belonging is an important element to include in suicide risk assessment of individuals treated for opiate dependence, and that the development of clinical interventions that improve the sense of belonging may reduce risk.

Results of this study provided mixed support for the hypothesis that perceived burdensomeness is associated with suicide attempts among individuals in treatment for opiate dependence. A statistically significant difference between attempters and non-attempters on burdensomeness was observed in the univariate analysis and after a rigorous adjustment for a range of demographic and clinical covariates,

suggesting a role in suicidal behavior. However, a significant association was not observed after accounting for other interpersonal variables. Antisocial features are prevalent among treated opiate-dependent individuals (Brooner, King, Kidorf, Schmidt, & Bigelow, 1997) and, to the extent that such psychopathology reflects a tendency to exploit others and/or provides a buffer against guilt, perhaps concerns about being a *burden on others* plays a reduced role in suicidal behavior in this population. Unfortunately, data on antisociality or related constructs are not available to examine this possibility. Moreover, our adjustment for other interpersonal variables was a rigorous examination of burdensomeness in light of the moderate sample size and shared variance with the other interpersonal measures, particularly belonging. Therefore, the non-significant result should be interpreted with caution; further research on burdensomeness and suicidal behavior is needed.

With the exception of the unadjusted analysis, the results did not support an association of loneliness and suicidal behavior. These data appear to support Joiner's (2005) assertion that thwarted belonging, more so than perceived isolation per se, plays a key role in suicidal behavior. We are aware of no prior reports that have examined the relative contributions of belonging and loneliness in suicidal behavior, after accounting for one another, and so this novel finding requires replication. Moreover, although it is the most widely used measure of loneliness, the UCLA Scale represents but one of the many measures of this variable and taps the social dimension more so than other aspects of loneliness (e.g., emotional) (Cramer & Barry, 1999). Therefore, future studies might explore additional measures of this construct.

In contrast to findings pertaining to suicidal behavior, there was no statistically significant association or clinically meaningful difference in perceived belonging, burdensomeness, or loneliness between individuals with a history of unintentional overdose and those with no such history. The findings thus display signatures of specificity of these outcomes in that belonging (and in some analyses burdensomeness) showed associations with suicidal behavior but not with unintentional overdose. Moreover, histories of suicide attempts and unintentional overdose were uncorrelated. The data thus support perceived belonging (and to a lesser extent burdensomeness) as an important suicide-related variables, and that unintentional overdose and attempted suicide are distinct outcomes with different risk profiles (Darke & Ross, 2001).

There were limitations of the study. The extent to which assessments of belonging and burdensomeness at the time of the interviews captured these experiences at the time of suicide attempts that occurred more distally is unclear. These variables were highly correlated and so the feasibility and practical utility of disentangling these constructs require more research. Because measures of depression and hopelessness assessed current symptoms, covariate coverage for these variables was not optimal. However, given dubious reliability of retrospective reports of history of depression (Foley, Neale, & Kendler, 1998) and that multiple assessments of hopelessness are required to capture trait hopelessness (Young et al., 1996), it was not feasible to rigorously account for these covariates. Other limitations were the use of patient volunteers resulting in some demographic and clinical dissimilarity between study participants and the patient population, and the moderate sample size.

Strengths include the study of a diverse, high-risk clinical population, moderate to high reliability of measures, tests of a-priori hypotheses, minimal missing data, exploration of two outcomes (suicide attempt, unintentional overdose) of great public health significance, and the use of novel interpersonal measures that were developed explicitly for research of suicidal behavior (Joiner, 2005; Van Orden et al., 2005). The findings support the value of continued study of belonging in suicidal behavior among individuals with opiate dependence, ideally with the use of prospective research designs that may evaluate the prognostic significance of belonging and related interpersonal processes in attempted suicide and

suicide. The use of larger samples is also recommended including to explore the role of belonging etc. in different aspects of suicidal behavior (e.g., level of planning, repeat attempts).

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