

**Looking back on self-poisoning: the relationship between depressed mood and reporting of suicidal intent in people who deliberately self-poison**

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## Abstract

### **Background**

Lifetime worst-point suicidality is associated with risk of subsequent death by suicide. Yet little is known about how people who deliberately self-poison (DSP) change their appraisal of suicidal intent (SI) of a single DSP episode over time. We assessed whether SI for a single index episode of DSP changed over time and factors associated with such change.

### **Methods**

We studied 202 patients admitted for DSP (66.3% female, all Caucasian), 18-85 years old ( $M=37.8$ ,  $SD=14.8$ ), using a longitudinal design (0, 3 and 12 months). Measures included items from the Suicidal Intent Scale and Beck Depression Inventory. The primary outcome measure was change in suicidal intent for a single index DSP episode, analysed using multilevel modelling.

### **Results**

Wish to die and whether the episode was considered a suicide attempt increased significantly with depressed mood. Wish to die associated with the index episode also increased over time independently of depressed mood. No association with time or depressed mood was found for perceived likelihood of dying.

### **Conclusion**

Depressed mood was strongly associated with appraisal of SI associated with a DSP episode. In suicide risk assessment, reports of the nature and severity of past DSP should be interpreted in the light of current mood.

Key words: deliberate self-harm, suicidal intent, repetition, suicide risk assessment, depression

## **Introduction**

It is well known that people who deliberately self-harm (DSH) are at increased risk of subsequent death by suicide compared to the general population (Owens, Horrocks, & House, 2002, Carroll, Metcalfe, & Gunnell, 2014), particularly during the first year following a DSH episode (Hawton, Zahl, & Weatherall, 2003), and when the behaviour is repeated (Zahl & Hawton, 2004). Also, repetition of DSH increases risk of further episodes (Owens, et al., 2002), and is strongly linked to recurrent depression (Beautrais et al., 1996). However, the tendency for previous DSH to influence future action not only relates to the occurrence of suicidal behaviour per se, but also to the severity of suicidal intent associated with previous episodes. Notably, in some studies lifetime worst-point suicidal ideation has been shown to be a stronger predictor of subsequent death by suicide than current level of suicidal ideation (Beck, Brown, Steer, Dahlsgaard, & Grisham, 1999), including after controlling for hopelessness and depression (Joiner, 2003). In a recent study, lifetime worst-point intent and lethality of previous DSH episodes were better predictors of repeat DSH episodes than intent and lethality of the most recent DSH episode, even when taking number of past DSH episodes and methods used into account (Sapyta et al., 2012). Consequently, determining not only lifetime prevalence of suicidal behaviour, but also historical peaks of suicidal intent associated with previous DSH episodes is key when assessing suicide risk.

However, what constitutes a severe episode of DSH and worst-point suicidality is not straightforward. DSH is heterogenous with regard to medical severity and suicidal intent underlying the act (Brown, Henriques, Sosdjan, & Beck, 2004; Haw, Hawton, Houston, & Townsend, 2003; Stefansson, Nordstrom, & Jokinen, 2012). In this study we have examined change over time in the subjective experience of suicidal intent associated with a previous episode of self-poisoning, and its association with depressed mood.

There is theoretical work and empirical evidence from related areas to suggest that fluctuations in depressed mood may affect appraisal of subjective experience of suicidal intent of previous single episodes. For patients with a history of recurrent suicidal depression, the tendency to exhibit over-general memory is an acknowledged vulnerability factor for ongoing risk of suicidal relapse (Williams et al., 2007). This was shown in one study to affect the specificity with which currently depressed patients with a history of suicidal ideation or behaviour described prodromal symptoms leading up to a previous suicidal crisis (Hargus, Crane, Barnhofer, & Williams, 2010). According to the Differential Activation Model for Recurrent Suicidality (Williams, Crane, Barnhofer, & Duggan, 2005b), the subjective experience of suicidal intent is linked associatively with previous crises, and is therefore likely to become re-activated with the re-emergence of dysphoric mood. These predictions have been confirmed empirically by findings showing that suicidal ideation is the most consistent cognitive depressive symptom across episodes (Williams, Crane, Barnhofer, Van der Does, & Segal, 2006). However, the model predicts that once well, it is difficult to distinguish people who have a history of suicidal ideation and DSH from patients with no such history: suicidal urges wane. According to the model, it is not the “resting level” of suicidal urges when in normal (i.e., non-disturbed) mood that determines vulnerability, but how easily the urges are re-activated by small deteriorations in mood. Due to associative learning taking place across suicidal crises, it is hypothesised that re-activation of depressed mood will re-activate a whole pattern of depressed functioning associated with past depressive episodes, including cognitions and emotions intrinsic to appraisal of previous experiences of suicidal intent. Although this model does not deal explicitly with mood-biasing in recollections of suicide intent, it is possible that, over time, DSH patients could be expected to de-emphasise the experienced suicidal intent associated with previous episodes,

as depressed mood is alleviated, and consequently, that appraisal of suicidal intent may depend crucially on level of depressed mood at the time of clinical assessment.

It is not clear how changes in appraisal of suicidal intent experienced in a previous single DSH episode relate to ongoing suicidal vulnerability or risk. A study by Beck and colleagues (1975), later replicated by Brown and colleagues (2004), showed that individuals who accurately perceive lethality of a DSH episode as well as reporting high suicidal intent engage in more medically severe DSH (Beck, et al., 1975; Brown, et al., 2004). However, the cross-sectional design of these studies limits the predictive value of the findings.

In sum, it is unclear how appraisal of suicidal intent associated with a previous single index episode of DSH changes over time, the variability of such change, whether retrospective appraisal is contaminated by current depressed mood, and whether changes in appraisal of suicidal intent experienced in a single previous DSH episode are associated with occurrence of repeat episodes. Moreover, it is not clear whether different aspects of suicidal intent are more strongly related to change in depression than others. Clearly, clarifying these issues is very relevant to interpretation of information obtained in clinical assessment of patients in terms of their risk of future suicidal behaviour. The aims of the present study were to examine 1) if and how appraised suicidal intent for a single index deliberate self-poisoning (DSP) episode changes over time, 2) whether change in appraised suicidal intent covaries with depressed mood (controlling for other markers of severity not contained within the measure), and 3) whether changes in appraisal of suicidal intent for an index DSP episode are associated with repetition of DSH in the year following the DSP episode. Thus, rather than change in perceived suicidal intent being a source of bias/error (e.g., as discussed in Haw et al., 2003), the very nature of change was the phenomenon of interest.

## **Methods**

### **Design**

Change in appraisal of self-reported suicidal intent associated with the single index episode (i.e., the episode that resulted in individuals being included in the study) and the association between changes in appraisal and depressed mood were investigated in a longitudinal design employing questionnaire data at three time points with patients who had engaged in DSP; at the time of the index DSP episode (t1), and three (t2) and twelve months (t3) after the index episode.

### **Study Population**

The patients included in the study were aged 18 years or older who were admitted for DSP to one of three major hospitals in Eastern Norway (Ullevål University Hospital, Oslo, Innlandet Hospital Trust, Gjøvik and Vestre Viken Hospital Trust, Baerum) between January 2006 and March 2007. These are all somatic hospitals treating most identified cases of DSP. Patients treated without admission or referred directly from outpatient units (i.e., GP or psychiatric outpatient clinics) to psychiatric wards were not included in the study. The inclusion criterion was an intentional non-fatal drug overdose, or poisoning, carried out in the knowledge that it was potentially harmful (Kapur, 2009; National Institute for Health and Clinical Excellence, 2011). Patients who were intellectually or developmentally disabled, psychotic or non-Norwegian speaking were excluded, as were patients admitted for episodes with no evidence of intention to self-harm. The medical staff at the hospitals recruited the participants. Each patient completed a questionnaire (see below), with the majority completing within a day following hospital presentation. Trained health personnel assisted the patients in completing the questionnaire. At follow-up (t2 and t3) participants responded

by mail. However, in a limited number of cases participants were assisted over the phone or in person by members of the research team (e.g., due to visual impairment).

## **Assessment**

**Sociodemographic variables, depressed mood and repeater status.** The following information from the patients' self-report questionnaires was used for this study: The Beck Depression Inventory Short Form (BDI-SF), which is a 13-item measure of level of depression (Furlanetto, Mendlowicz, & Romildo Bueno, 2005). This was used at all three time points. Repeater status, which was assessed at the time of inclusion in the study (i.e., whether the episode that resulted in this inclusion in the study was a repeat or first-ever episode), as assessed by the question 'Have you ever previously deliberately self-poisoned or in other ways tried to injure yourself in ways that could potentially have been dangerous?'. Repeat DSH episodes between time of index episode and three months and between three and twelve months were assessed by one item with the same phrasing at three and twelve months, namely 'After being discharged from hospital, have you deliberately self-poisoned, or harmed yourself in other ways that could potentially have been dangerous?'.

**Suicidal intent.** Subjective experience of suicidal intent was measured by use of three single item variables from the Suicide Intent Scale (SIS; Beck, Schuyler & Herman, 1974), adjusted so as to be amenable to self-report. The dependent variable of interest was subjective experience of suicidal intent at the time and appraised suicidal intent of the single index act at follow-up. Self-reported suicidal intent was used rather than the objective circumstances of the episode (e.g., place the act took place), as it is likely that the former is more subject to bias than the latter, and because several studies have pointed to the poor factorial validity and subscale performance for items pertaining to circumstances of the DSP episode (e.g., timing



of episode to prevent being found; Antretter et al., 2008; Freedenthal, 2008). Subjective experience of suicidal intent was measured by the following three items from the section of the SIS to do with participants feelings and thoughts at the time of the episode, as well as retrospectively at three and twelve months: 1) **perceived likelihood of dying** (ranging from 1 ‘Not at all likely’ to 5 ‘Very likely’), 2) **wish to die** (6 response options ranging from ‘Did not wish to at all’ to ‘Wished to very strongly’), 3) **whether or not the episode was considered a suicide attempt** (‘yes’/‘no’). The items were treated as discrete outcomes and analysed as three separate outcome variables, to allow investigation of differential associations between depressed mood and each of them. Thus, it was possible to establish whether or not perceived likelihood of dying was linked more strongly with practical aspects of the act, and hence was less affected by depressed mood than wish to die, and whether or not the episode was considered a suicide attempt.

### **Statistical Analyses**

The dataset consisted of repeated measurements on individuals over time. Repeat observations on an individual are not independent, they have a hierarchical or clustered structure as an individual’s responses over time are correlated with each other. An appropriate analysis that takes this correlated data structure into account is hierarchical regression, also known as multi-level models (Antretter et al., 2006). To assess how depressed mood changed with time we log-transformed depression scores and fitted a hierarchical linear regression model with log(depression) as the response variable and a subject-specific intercept. The analysis investigated the relationship between current level of depression and current intent, however because there are repeated measures for individuals, the analysis incorporated changes in depression related to changes in intent.

The variables perceived likelihood of dying and wish to die are ordinal as they are categorical and have a natural ordering. Thus an appropriate hierarchical analysis is ordinal

regression with a random intercept (Scott, Goldberg, & Mayo, 1997). First, we fitted the proportional odds model, where the effect of a covariate is assumed to be the same across all categories of the outcome variable, and only relaxed this assumption if the model was not valid. The variable for whether or not the episode was considered a suicide attempt is binary, and therefore we fitted a logistic regression model with a random intercept.

For all analyses we treated time as a categorical variable as there were only three time points, with coefficients representing change in the outcome by month 3, and the further change in the outcome between months 3 and 12. We also adjusted for the variables age at index episode, gender and whether the subject had a repeat deliberate self-harm episode between the index episode and the current time point. Each analysis included subjects with an outcome for at least one time point and all relevant covariates. Results are expressed as odds ratios with 95% confidence intervals (CIs) and a 2-tailed p-value <0.05 considered significant.

All analyses were carried out using R version 3.1.2 (R Core Team, 2014).

## **Ethical approval**

The study was approved by Norway's East Regional Ethics Committee, the Privacy Ombudsman for Research, and the Data Inspectorate. Written informed consent was obtained from all participating patients.

## **Results**

All 286 eligible DSP patients consecutively treated for 378 DSP episodes during the study period were identified. Of the 286 patients, 202 consented to participation (66.3% female), yielding a 70.6% total response rate at the time of admission. There were no gender differences between participating patients and those who declined to participate ( $p = 0.9$ ), whereas older age was associated with non-consent (mean age in included sample was 38.2

years,  $SD=14.7$ , versus  $47.2$ ,  $SD=20.01$ , in non-participants,  $p < .001$ ). Of the 202 patients included in the study, 198 completed the baseline questionnaires (4 forms were lost, however these patients participated in later waves), 175 (86.2%) completed the questionnaire at three months, and 158 (77.8%) completed the questionnaire at twelve months. Whereas there was an age difference between people consenting and not consenting to participate, patients included at all three time points differed only marginally in terms of age and gender from those who dropped out.

Means and standard deviations for the outcome variables and the covariates at all three time points are presented in Table 1.

Table 1 about here

### **Variability in Retrospective Reappraisal of Suicidal Intent Associated With the Index Episode**

Table 2 shows the degree to which people remained stable or changed over the three time points in the reporting of the three different suicidal intent variables. Using the scale of Landis & Koch (1977) for the measurement of observer agreement for categorical data, there was moderate agreement over time in the extent to which participants viewed the act as suicide attempt or not ( $\kappa = 0.60$ ), but considerably less (i.e., fair) agreement in terms of wish to die ( $\kappa = 0.29$ ) and likelihood of death ( $\kappa = 0.31$ ) across the 3 time points.

Table 2 about here

## Factors Associated With Retrospective Reporting of Wish to Die

There were 185 subjects with information on wish to die for at least one time point with full covariate information, contributing 447 observations. The proportional odds model was found to be too restrictive, therefore we fitted a model that was proportional in all explanatory covariates except depressed mood which was allowed to have a different effect depending on wish to die category. The results from this model are given in Table 3, and show that three months after the index episode a participant was 2.12 times more likely to retrospectively rate their wish to die associated with the index episode as a higher category than at the index assessment (CI 95% 1.23-3.67, p-value 0.007), but there was no further change by 12 months (p-value 0.75). A higher level of depressed mood was associated with greater wish to die, but the amount by which it was associated with wish to die depended on the category of wish to die, i.e., the association was bigger the lower the wish category at t1. In other words, because patients reporting a low wish to die at t1 had a bigger range with which their wish to die score could change, the association with depressed mood was strongest in this subsample. Age, gender, and repeat DSH during the follow-up period were not associated with wish to die.

Table 3 about here

Figure 1 shows how subjects reported on their wish to die associated with the index episode at the three time points. Only subjects with information at all three time points were included in this figure (n=149). For example, the first block of 3 bars shows how the 17 individuals who answered at t1 that they “did not wish to die” changed or retained this view over time. After 3 months, 11 of these individuals still answered that at the index episode they “did not wish to die”, while 4 had changed their mind to “wished to die somewhat”, 1

had changed to “wished to strongly”, and 1 to “wished to very strongly”. After 12 months, 13 answered they “did not wish to die”, 1 “wished to die somewhat”, 1 “wished to quite strongly”, and 2 “wished to very strongly”. The other blocks in the Figure show how the other categories of wish to die at t1 changed over time.

Figure 1 about here

### **Factors Associated With Retrospective Reporting of Perceived Likelihood of Dying**

There were 185 subjects with information on perceived likelihood of dying for at least one time point with full covariate information, contributing 443 observations. Perceived likelihood of dying associated with the index episode did not change over time, and was not associated with age or depressed mood. Females were less likely than males to report a higher level of likelihood of death (OR=0.33; CI 95%: 0.13 – 0.81,  $p = 0.02$ ). Participants who repeated self-harm in the year following the index episode were 2.86 times more likely to report a higher level of likelihood of dying compared to participants who did not engage in repeated self-harm in the follow-up period (CI 95% 1.31-6.23,  $p = 0.008$ ). The results are given in Table 4 and the data for those subjects with information on all three times ( $n=141$ ) are shown in Figure 2.

Table 4 about here

Figure 2 about here

## **Factors Associated With Retrospective Reporting of Whether or Not the Index Episode Was Considered a Suicide Attempt**

There were 184 subjects with full information for at least one time point contributing 440 observations. Reporting the index episode as a suicide attempt was not associated with age, gender or time since the index episode. However, participants who engaged in repeat self-harm in the 12 months following the index episode were 39 (95% CI: 3.5-446,  $p = 0.003$ ) times more likely to report the index episode as a suicide attempt than participants who did not repeat self-harm. Tendency to report the index episode as a suicide attempt increased with depressed mood: given a 1 unit increase in depression, participants were 8.9 (95% CI 2.05-38.9,  $p$ -value 0.004) times more likely to report an index episode as a suicide attempt.

### **Discussion**

In this study we have investigated change in appraisal of subjective experience of suicidal intent of a single index DSP episode, identified factors having an impact on such change and explored its association with repetition of DSH during a one year follow up of patients who had been admitted to hospital for a DSP episode. We were particularly interested in whether there was any association between depressed mood and changes in appraisal of subjective experience of suicidal intent, and the nature of such an association. To our knowledge, this is the first study to investigate how DSP patients' appraisal of suicidal intent associated with confirmed previous DSP episodes changes over time, and factors that may affect such change. Our findings point to considerable variability over time in reporting of suicidal intent associated with a previous episode of self-poisoning.

## **Variables Affecting Appraisal of Suicidal Intent**

**Wish to die associated with the index DSP episode.** Our findings showed that depressed mood was associated with increased wish to die, thereby providing preliminary support to the notion of mood-dependency in appraisal of suicidal intent associated with a previous instance of self-poisoning. What does this mean clinically? The strong association between depressed mood and appraised wish to die indicates that self-report of previous experienced suicidal intent is influenced by the level of depressed mood at the time of assessment, i.e., the direction of the potential response bias needs to be interpreted in terms of current depressed mood. Thus, more severely depressed patients will tend to report previous DSP episodes as being associated with a strong wish to die, whereas less depressed patients will report correspondingly lower death wish associated with previous episodes.

What, then, to make of the finding that when controlling for depressed mood, wish to die associated with the index episode increased over time especially during the first three months following the index episode? It is possible that retrospectively reporting a high level of wish to die is perceived by an individual as providing justification in cases where they self-poisoned without wishing to die. In the aftermath of the episode, subscribing to having had a wish to die at the time of the index episode might reduce such dissonance. Moreover, it is possible that participants felt ashamed by the episode or that their response at t1 was motivated by a wish to be discharged. It is possible that there was an effect of repeated assessments over time, i.e., that the being asked three times in itself instigates a tendency to report a high wish to die. However, given the fact that the association between intent and depressed mood remained significant even when controlling for time, this is less likely in the context of this data set.

**Whether or not the index DSP episode was considered a suicide attempt.** Time since index episode did not affect whether a subject recorded the index DSP episode as a

suicide attempt or not. Depressed mood, however, did in that the more depressed a subject was the more likely they were to report it as an attempt. Moreover, and in keeping with this finding, participants who made a repeat episode during follow-up were more likely to consider the index DSP episode a suicide attempt. Interestingly, the degree to which the episode was perceived as a suicide attempt was not associated with gender. Together, these findings support the notion of depressed mood as covarying with the appraisal of previous self-harm. Clinically, this suggests that it is not so much temporal proximity to previous episodes of self-harm which determine accuracy of reported suicidal intent associated with the act. Rather, our findings indicate that the degree to which depressed mood at the time of risk assessment matches previous crises provides a more helpful context to interpret whether or not previous DSP episodes were seen by the patients as suicide attempts. This is significant, given the prominence of questions about previous suicide attempts in suicide risk assessments done in a clinical context (e.g., Suicide Attempt Self-Injury Interview, Linehan et al., 2006).

**Perceived likelihood of dying associated with the index episode.** Perceived likelihood of dying was not associated with either time, depressed mood or age. It was however lower in females compared to males, and higher among people who engaged in repeat episodes of DSH during the follow-up period. What does this suggest? One possibility for the different pattern of findings for perceived likelihood of dying compared to wish to die is that the former might be more strongly related to practical aspects of the self-poisoning episode, such as factual knowledge about suicidal means or access to means, which is likely to be less influenced by depressed mood, thus enabling them to view them more objectively. The finding that women tended to report a lower perceived likelihood of dying from the episode compared to men was not due to differences in depressed mood, since this was an independent association. Previous studies have yielded mixed findings regarding gender



differences in suicidal intent. A multicentre study of DSH patients found only minor differences (Antretter, et al., 2008), whereas Haw et al. (2003) found higher suicidal intent in men, and a study of a highly selected subgroup of prisoners engaging in near-lethal DSH episodes did not find an association with gender (Rivlin, Fazel, Marzano, & Hawton, 2012).

While this may potentially reflect lower medical severity of DSP in women compared to men, this finding warrants further examination, including discernment of potential differences between subjective and objective components of intent in this regard. The strong association between depressed mood and appraisal of certain aspects of suicidal intent, and the tendency for suicidal intent to be de-emphasised as depressed mood decreases, are in keeping with predictions from differential activation theory of suicidality (Williams, Barnhofer, Crane, & Beck, 2005a), emphasising the ways in which recurrent episodes of depression not only entail re-activation of depressed mood, but also cognitions (i.e., the degree to which the attempt was seen as a suicide attempt) and emotions (i.e., wish to die) associated with previous depressed mood. The model's prediction that depressed mood would also increase the likelihood of activating suicidal behaviour associated with previous depressed mood was supported by our findings – depressed mood was related to whether or not patients made repeat DSH episodes during the follow-up period. However, patients' perceived likelihood of dying at the time of the index self-harm episode was unrelated to fluctuations in depressed mood. Whether this aspect of suicidal intent is more closely related to 'objective' circumstances of a self-harm act awaits further scrutiny.

**Change over time in suicidal intent associated with the index episode.** Whilst wish to die associated with the index episode increased over time, neither perceived likelihood of dying or whether or not the attempt was seen as a suicide attempt changed when considering time alone. What could be the reasons for this discrepancy? One possibility is that whereas wish to die to some extent can be perceived of as fleeting (e.g., Deisenhammer et al., 2009),

subsequently subscribing to having made a suicide attempt and/or engaged in self-harm characterised by high likelihood of dying may be tainted with more stigma, thus potentially exerting a more negative impact on patients' self-identity and autobiographical history. Thus, Misson et al.'s (2010) notion of 'censoring bias' may be more relevant for these aspects of suicidal intent than wish to die, as thinking of oneself as someone who at some stage in one's life has had a wish (of varying degree) to die may be less difficult to incorporate in one's emotional history than having actually engaged in behaviour that one perceives as a suicide attempt or that was likely to lead to death. Our findings suggest that the tendency found in non-clinical populations for contextual details to fade and memory of events to become more schematic, and for reports about individuals' past emotional experience to be based on semantic (i.e., categorical) knowledge about the types of emotions they typically feel in particular situations (Robinson & Clore, 2002), may not apply to highly negatively charged, traumatic events such as an episode of DSP. By contrast, our findings suggest that the change in appraisal of a DSP episode – particularly to do with wish to die and whether or not the act was seen as a suicide attempt covaries with fluctuations in mood and must be interpreted accordingly. Whether adopting an interview format for these questions instead of using questionnaires would have changed patients' report of suicidal intent awaits further scrutiny.

These findings have important clinical implications. Based on our findings, we can predict that patients whose level of depressed mood progressively decreases over time are likely to view their DSP episode as less serious (in terms of wish to die and whether or not the index episode was seen as a suicide attempt) compared to people who remain depressed. Patients in whom depressed mood worsen over time are likely to overemphasise wish to die associated with the index episode and to be more likely to rate their index attempt as a suicide attempt. This response bias must be taken into account when interpreting patients' reports of the nature and severity of past DSP.

## **Limitations**

The current study has several limitations. First, while the sample size was adequate, it was relatively small for examining complex interactions. Second, the phrasing of the three suicidal intent items used both past and present tense (e.g., ‘How likely do you think it was that you would have died as a result of what you did?’ vs ‘Did you wish to die?’). Whereas the phrasing using the present tense could potentially invite appraisal over time as individuals’ perceptions of the single episode changed, the item using past tense might have encouraged retrospective recall. Although all three items contain potential bias, studies are warranted which delineate differences between accuracy of memory of a DSP episode (i.e. what individuals recollect having experienced at the time – which was not the variable of interest here) and retrospective appraisal of a DSP episode. Third, it was not possible with the current data to address the potential impact of suicidal ideation present at the time of follow-up on appraisal of suicidal intent at the time of the self-poisoning episode. It is likely, however, that such an impact would also in part be accounted for by depressed mood at the time of follow-up, but this means that it was not possible to establish whether the variability shown in the findings was specific to depressed mood or to other related factors (e.g., hopelessness or suicidal ideation). Fourth, it is possible that some of the responses were biased by demand characteristics, i.e., that participants may have been aware of what we were investigating, and thus might have responded according to what they perceived to be the implicit preferences of the researchers. However, as the focus of the study was variability in suicidal intent and its association with depressed mood, there was no obvious preferred or desirable way to answer. If present, demand characteristics are likely to have been minimized by the fact that most participants responded by mail at t2 and 3. Fifth, it is not clear how generalizable these findings are to other non-hospitalized clinical samples or to non-patient

samples. Finally, this study was limited to cases of self-poisoning, and did not include cases of self-cutting. From what we know from studies which compare self-cutting and self-poisoning, the former is less often reported by individuals as involving suicidal intent (e.g., Rodham, Hawton & Evans, 2004). Consequently, had we included this population, we would expect there to be lower levels of and *less* variability in suicidal intent, and thus that an association with depressed mood would be less pronounced. This warrants further investigation.

## **Conclusions**

Our findings show that there is considerable variability over time in retrospective reports of key aspects of suicidal intent associated with a single episode of self-poisoning, and that these covary with levels of depressed mood at the time of assessment. In suicide risk assessment, reports of the nature and severity of past DSP must be interpreted in the light of current depressed mood to allow for this response bias. Whether the variability in retrospective appraisal of suicidal intent is specific to depressed mood or also depends on other factors (e.g., hopelessness, suicidal ideation) awaits further investigation. Moreover, future research is required to investigate the degree to which this mood bias is also present for ‘circumstances’ aspects of suicidal intent. Finally, whilst our findings point to the possibility that depressed mood causally influences reappraisal of suicidal intent associated with previous crises, experimental studies are warranted to explore such causality.

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