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To cite this article: Rory C. O'Conno (2003) Suicidal Behavior as a Cry of Pain: Test of a Psychological Model, Archives of Suicide Research, 7:4, 297-308, DOI: [10.1080/713848941](https://doi.org/10.1080/713848941)

To link to this article: <https://doi.org/10.1080/713848941>



Published online: 15 Dec 2010.



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Suicidal Behavior as a Cry of Pain: Test of a Psychological Model

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The cry of pain hypothesis (Pollock & Williams, 2001; Williams, 2001) is a psychological model of suicidal behavior that extends existing theories of escape (Baumeister, 1990) and arrested flight (Gilbert & Allan, 1998). The model conceptualizes suicidal behavior as the response (the cry) to a situation that has three components: defeat, no escape and no rescue. In this study, the model was tested empirically in a case control study, by comparing suicidal patients and matched hospital controls on measures of affect, stress and post-traumatic stress. The logistic regression analyses yielded evidence to support the model. The implications for future research are described.

Keywords suicidal behavior, parasuicide, cry of pain, escape, entrapment

Over the centuries there have been many attempts to understand the suicidal mind. To this end, a multitude of perspectives and scientific standpoints have been proffered to explain the aetiology and course of suicidal behavior; these have included sociological, psychiatric, biological and psychological explanations. Nonetheless, suicidologists, for the most part, have not been particularly successful in predicting and preventing suicide (see

O'Connor & Sheehy, 2000). There are many reasons this has been the case. For example, (i) in statistical terms, completed suicide is a relatively rare event and therefore, it is difficult to predict; (ii) attempts at understanding suicidal behavior have frequently been atheoretical (Leenaars, De Leo, Diekstra et al., 1997) and, as a result, they have not been as effective as one hoped; (iii) therapeutic interventions developed to reduce repetition of

This study was funded by The Nuffield Foundation. Grant No. SGS/00659/G. Many thanks to Susan Hill for data collection and input. I am also extremely grateful to the reviewers and the editor for their helpful comments on an earlier version of this manuscript.

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parasuicide¹ (and suicide prevention strategies) have lacked a solid evidence base. All of the former may have been true (and continue to be so), but there was an overarching issue that required attention: Suicidal behavior had been traditionally understood within the biomedical-illness model. Consequently, often we were unable to see beyond the mental illness tautology, that the (suicidal) act defines the illness and the illness defines the act. This had led to a constriction of focus, to the identification of the underlying pathology despite the recognition that pathology alone is not a sufficient explanation for suicidal behavior² (Michel & Valach, 2001; Sheehy & O'Connor, 2002).

Therefore suicidology had to move forward, to be less blinkered in its focus, to determine how the different scientific evidence fit together to explain the 'psychache' that characterizes the suicidal mind (Shneidman, 1985, 1996). To this end, there has been an accumulation of data from different schools of thought that suggests suicidal behavior is usefully conceptualized as being motivated by the desire to *escape* from unbearable pain. Edwin Shneidman, in his list of 10 commonalities of suicide, argues that escape is the common action of suicide. He postulates that suicide is the ultimate egression or escape from intolerable psychological pain. His is not a lone voice: Leenaars also reported that escape (egression) was a dominant theme found in suicide notes irrespective of nationality or gender (Leenaars, 1996, 1999, 2002; O'Connor & Leenaars, 2003). In addition, Baumeister (1990) and Williams (Williams, 1997, 2001; Williams & Pollock, 2000, 2001), albeit exponents of different perspectives within

psychology—social and clinical respectively—both view escape as central to understanding suicidal behavior.

SUICIDE AS ESCAPE

In an attempt to extend the theoretical perspectives on suicide to include current research in social and personality theory, Baumeister (1990) put forward his theory of *Suicide as Escape from Self*. The central tenet of his thesis was the assertion that suicide is the action of escaping from painful self-awareness of certain symbolic interpretations or implications about the self. In this context, the suicidal act does not happen in isolation, rather it is the final step in a series of causally related events. Baumeister draws upon Baechler's early model of suicide-as-escape (Baechler, 1979, 1980) wherein suicide is viewed as a mode of problem solving. As this model was lacking in detail, he proposed a new, more elaborate version that consists of six main steps: The causal chain begins with a severe experience (e.g., interpersonal strife) that results in an individual falling short of their expectations and standards. Next, they attribute blame (for this shortfall) internally and this leads to step three, negative self-awareness and feelings of inadequacy, incompetence or guilt. To escape the resultant negative affect they attempt to avoid meaningful thought and engage in cognitive deconstruction. This numbness leads to disinhibition, which in turn, increases their willingness to attempt suicide thereby elevating suicide risk. Several studies with college students (O'Connor & O'Connor, 2003; Tassava & Ruderman, 1999) and clinical patients (Dean & Range, 1999; Hunter & O'Connor, 2003) have

¹Parasuicide is defined as 'an act with non-fatal outcome, in which an individual deliberately initiates a non-habitual behavior that, without intervention from others, will cause self-harm, or deliberately ingests a substance in excess of the prescribed or generally recognized therapeutic dosage, and which the subject desired via the actual or expected physical consequences' (Platt, Bille-Brahe et al., 1992).

²Suicidal Behavior, parasuicide and deliberate self-harm are used interchangeably throughout this paper.

also produced findings consistent with escape theory. It remains an extremely useful explanatory framework.

ENTRAPMENT AND THE CRY OF PAIN

Williams broadened the focus of his endeavors beyond escape theory. He was keen that psychologists took account of how their theories fit with social, biological and genetic facts (Williams, 1997, 2001; Williams & Pollock, 2000, 2001). Consequently, he concentrated on a phenomenon in the field of animal behavior as this provides the ideal interface at which biological, social and psychological theories meet (Williams & Pollock, 2001). The phenomenon in question was 'arrested flight' (Gilbert, 1989; Gilbert & Allan, 1998) which describes a situation where an animal, say a bird, is defeated but cannot escape. According to data from animal conflicts, it is the state of *entrapment*, where the motivation to take flight is blocked, not the defeat itself, that is dangerous (see MacLean, 1990).

With caution, Williams and others (Gilbert & Allan, 1998; Gilbert, Allan, Brough et al., 2002; Goldstein & Willner, 2002; Williams & Pollock, 2000, 2001) have argued that there is an analogous reaction in humans that could explain depression and suicidal behavior. Gilbert and Allan (1998) investigated the relationship between defeat and entrapment in human participants (students and depressed patients) and found that both variables explained substantial variance in depression after controlling for other social rank variables³. Furthermore, Goldstein and Willner (2002), employing experimental mood induction procedures, investigated the causal relationships between perceptions of

defeat/entrapment and depressed mood. They concluded that, consistent with Bower's (1981) network theory of affect, perceived defeat and entrapment were consequences of depressed mood⁴.

Williams (1997, 2001) and Williams and Pollock (2000, 2001) shifted the focus from depression per se to suicidal behavior. They argued that suicidal behavior should be seen as a *cry of pain* rather than the traditional *cry for help*. Consistent with the arrested flight phenomenon, they proposed that suicidal behavior is reactive, the response ('the cry') to a situation that has three components: defeat, no escape and no rescue (see Figure 1, solid lines only).

Consider an individual who encounters a stressful situation, for example, a relationship crisis that results in feelings of defeat, rejection or loss. They wish to escape from this painful situation so they make a judgement concerning how escapable it is, ranging from escapable—not escapable. To determine the chronicity of the reaction, Williams argues, the individual evaluates the presence or otherwise of potential rescue factors—no rescue. Furthermore, the presence of rescue factors (e.g., social support) should moderate (attenuate) the effect of escape to reduce suicide risk. When these three components are present they "cause the biologically mediated 'helplessness script' to be activated." (Williams & Pollock, 2001, 78). Whether or not someone acts upon this activation/impulse is determined by other factors, for example, whether there are available means of suicide, modelling effects and so on. The judgements regarding defeat/rejection/loss, escape and rescue are determined, in part, by psychological variables including problem solving capacity (Pollock & Williams, 1998; Schotte & Clum, 1987),

³ Gilbert & Allan's study focused on the social rank theory of psychopathology (see Gilbert, 1992). Other social rank variables included social comparison and submissive behavior.

⁴ The authors do not exclude a causal role for defeat/entrapment as there is considerable evidence for reciprocal influences (e.g., Carr, Teasdale, & Broadbent, 1991)

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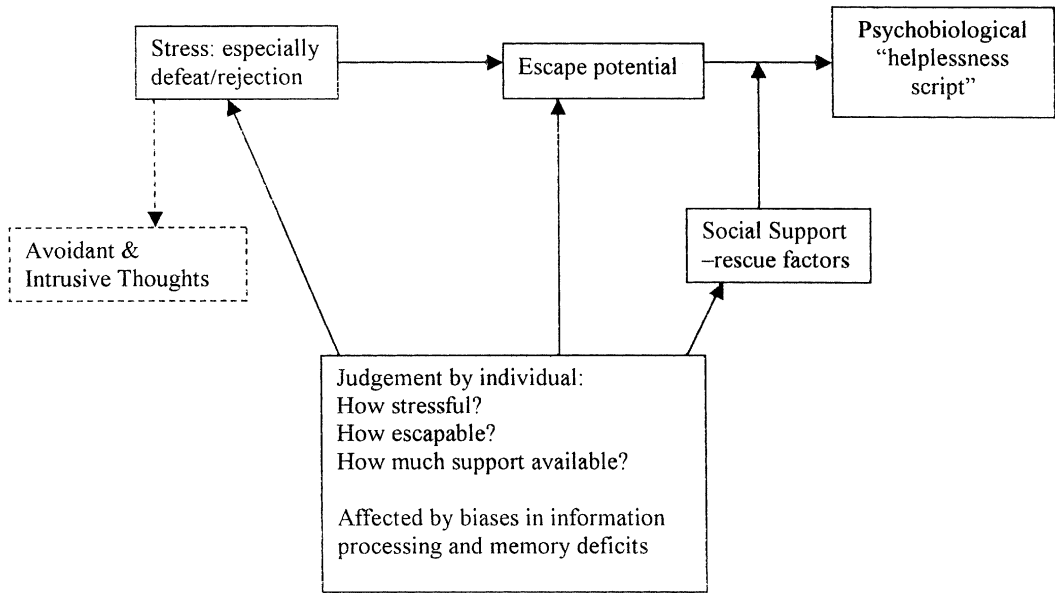


FIGURE 1. *Cry of Pain Hypothesis (adapted from Williams & Pollock, 2001).*

the generality of autobiographical memory (Pollock & Williams, 2001; Williams & Broadbent, 1986), the quality of future cognitions (MacLeod, Pankhania, Lee et al., 1997; O'Connor, Connery, Cheyne, 2000) and perceived standards (Hewitt, Norton, Flett et al., 1998; Hunter & O'Connor, 2003).

In light of the view that, within suicidology, “the robustness of theories have not been tested and significant theoretical development [is] virtually non-existent of late” (Leenaars, De Leo, Diekstra et al., 1997, 140), the overarching focus of this research was to test a psychological model of suicidal behavior. In the present study, two groups of general hospital patients (parasuicides and matched hospital controls) completed measures of affect, stress and the cry of pain components on the day following admission to hospital. The central aim was to extend the entrapment hypothesis beyond depressed patients and to test Williams’ cry of pain hypothesis of suicidal behavior. In addition, given their

established relationships with psychological ill-health (Rassin, Merckelbach, & Muris, 2000; Reese, Kliever, & Suarez, 1997), and autobiographical memory (Henderson, Hargreaves, Gregory et al., 2002) the cry of pain hypothesis was tentatively extended (see Figure 1, dotted lines), to determine whether suicidal patients also reported more post-traumatic thoughts associated with stressful life events than their case controls.

Specifically, it was hypothesized that:

- (1) The parasuicides would report significantly higher levels of defeat, lower levels of escape potential and lower levels of rescue (i.e., social support) relative to the hospital controls.
- (2) Social support would buffer the effect of escape potential to reduce suicide risk.
- (3) When considered along with indices of affect, the cry of pain variables would enhance the statistical discrimination between the parasuicides and the controls.

- (4) The parasuicides would report significantly more perceived stress and post-traumatic thoughts (i.e., intrusive and avoidant thoughts) than the matched controls.

METHOD

Participants

Sixty participants took part in this study: 30 parasuicide patients (10 men and 20 women) and 30 hospital controls (11 men and 19 women). All parasuicide patients presenting to one hospital in the west of Scotland with an episode of deliberate self-harm (ICD codes X60–X84) were considered for inclusion in the study. However, only those patients who were admitted overnight, via the accident & emergency department, to the acute receiving wards were included. During the study period, 30 parasuicides were assessed on the day following admission. This did not represent a consecutive sample rather it reflects the practical limitations of recruiting via a general hospital. Thirty controls were matched for age, sex and marital status and were recruited from the same acute receiving wards as the parasuicides, presenting with physical problems.

The mean ages of the groups did not differ significantly ($t(58) = -.104$, *NS*): 32.6 years for the parasuicides ($SD = 11.5$) and 32.9 years for the hospital controls ($SD = 10.8$). There were comparable numbers of men and women in each of the groups ($Chi = .073$, $df = 1$, *NS*) and they did not differ in terms of marital status ($Chi = 1.8$, $df = 4$, *NS*). Both groups of patients were drawn from the same geographic catchment area.

Measures

Hopelessness. Hopelessness was measured using the 20-item Beck Hopelessness Scale

(BHS; Beck, Weissman, & Lester et al., 1974). Respondents are asked to indicate either agreement or disagreement with statements that assess pessimism for the future (e.g., 'I look forward to the future with hope and enthusiasm'). Higher scores represent higher hopelessness. This is a reliable and valid measure that has been shown to predict eventual suicide (Beck, Weissman, Lester et al., 1974; Beck, Steer, Kovacs et al., 1985; Holden & Fekken, 1988). In the present study, internal consistency was very good (Kuder-Richardson-20 = .93).

Anxiety and Depression. The Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983) consists of 14 questions, 7 corresponding to the anxiety sub-scale (e.g., 'I feel tense or wound up') and 7 corresponding to the depression sub-scale (e.g., 'I feel as if I am lacking in energy'). Items are rated on a 0–3 point scale indicating strength of agreement with each item. The maximum score for each sub-scale is 21. Higher scores represent high levels of depression and anxiety. Both sub-scales are reliable and valid (Bjelland, Dahl, Haug et al., 2002). The Cronbach's α for the present study were .79 and .75 for anxiety and depression, respectively.

Stress. The Perceived Stress Scale (PSS; Cohen, Kamarck & Mermelstein, 1983) is a 14-item global measure of self-appraised stress (e.g., 'In the last month, how often have you been upset because of something that happened to you unexpectedly?'). Respondents are asked to rate the extent of agreement with these items across a 5-point Likert-type scale ranging from 0 (never) to 4 (very often). Higher scores reflect elevated levels of stress. In this study, we employed the shorter 4-item version of PSS. Test-retest reliability and construct validity have been

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shown to be acceptable (Cohen & Williamson, 1988; Cohen et al., 1983). Cronbach's α for the present sample was .75.

Post-traumatic Stress. The Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979) assesses the degree to which respondents have experienced intrusive and avoidant thoughts relating to a specified event that occurred in the last 6 months. Respondents are instructed to think of the most stressful life event that they have experienced in the last 6 months, either at work or at home⁵. The IES contains 15 items, 7 relate to intrusion (e.g., 'I thought about it when I didn't mean to') and 8 to avoidance (e.g., 'I avoided letting myself get upset when I thought about it or was reminded of it'). The frequency with which respondents have experienced each item is rated on a 5-point scale anchored at 'not at all' and 'very often.' Internal consistency of the scales was very good; Cronbach's α were .83 and .72 for intrusion and avoidance, respectively.

Escape Potential. Given the importance of escape and control in depression and hopelessness (Baumeister, 1990; Brown & Siegel, 1988), escape potential was a composite score of two items assessing escapability and controllability. After completion of the Impact of Events scale, participants were asked to rate the following items on a 5-point Likert-type scale with respect to the stressful event that they had just specified. The first item asked participants to indicate the degree to which they felt able to escape from 'the most stressful life event that they had experienced in the last six months'

(see IES above). It was anchored at 'extremely escapable' and 'not at all escapable.' The second item assessed loss of control: Participants were asked to rate on a 5-point scale anchored at 'very much indeed' and 'not at all,' the degree to which they had lost control over the most stressful life event. A higher score suggests less escapable/controllable. This measure of escape potential was internally consistent (Cronbach's $\alpha = .63$).

Defeat. The defeat scale consisted of 4 items. Participants were instructed to indicate on a 5-point scale the degree to which their most stressful recent life event led to feelings of defeat, rejection, loss and failure. Each scale was anchored at 'not at all' and 'very much indeed.' These items were chosen given their prevalence in suicide notes and suicidal communications (e.g., O'Connor & Leenaars, 2003; O'Connor, Sheehy, & O'Connor, 2000). The defeat scale yielded good internal consistency (Cronbach's $\alpha = .86$).

Rescue. Consistent with Williams (2001), rescue was operationalized in terms of availability of social support. The Medical Outcomes Study's (MOS) measure of social support was employed (Sherbourne & Stewart, 1991); it is an 18-item multidimensional instrument that was developed for patients with chronic conditions (e.g., 'How often do you have... someone to confide in or talk to about yourself or your problems?'). It consists of four dimensions of support: emotional/informational (8 items), tangible (4 items), affectionate (3 items), and positive social interaction (3 items) as well as an overall composite score (18 items).

⁵ In the pilot phase of this study we instructed participants to think of up to three stressful life events in the last six months. However, many of the parasuicide patients expressed difficulty with doing so, as a result we limited the IES to the *single* most stressful life event. This is not particularly surprising given the recognized cognitive constriction often found among suicidal patients (see O'Connor & Sheehy, 2001).

All items are rated on a 5-point scale anchored at 'none of the time' and 'all of the time.' In the present study, the dimensions were internally consistent, Cronbach's α ranged from .83 to .93.

Procedure

All participants were given a brief introduction of what the study would require before being invited to participate. To control for transfer effects, the order of presentation of the measures was counter-balanced. However, the questions regarding defeat and escape potential were always asked immediately following the completion of the Impact of Events scale. Ethical approval had been obtained from the University Psychology Department's ethics committee and the University Hospital Trust. All those who participated completed a written consent form. Demographic details were obtained from hospital medical records and the interviews with the participants.

RESULTS

A series of bivariate logistic regression analyses were conducted to determine the individual effects and potential gender interactions of the psychological variables on the risk of parasuicide. The group means, odds ratios and 95% confidence intervals are summarized in Table 1. The level of significance was set at $p < .01$ to reduce the likelihood of making a Type I error. As expected, the parasuicides reported significantly higher levels of hopelessness, depression, anxiety and perceived stress than the case controls. The suicidal participants ($X = 15.71$, $SD = 6.61$) also recorded significantly more intrusive thinking relative to the matched hospital controls ($X = 9.63$, $SD = 6.15$) but they did not differ significantly in the frequency of avoidant thoughts reported.

In terms of the cry of pain variables, the groups also differed in the predicted directions. Compared with the control patients, the parasuicides reported

TABLE 1. Mean Scores (Standard Deviations in Parentheses) for Variables by Group

Variable	Parasuicide (N = 30)	Hospital Controls (N = 30)	Odds Ratios ^{ab} (95% CI)
Hopelessness	11.03 (6.05)	4.97 (4.96)	.83 (.75-.92)***
Depression	11.30 (4.62)	7.10 (4.16)	.81 (.71-.92)**
Anxiety	13.33 (4.98)	9.67 (3.99)	.84 (.74-.95)**
Stress	11.50 (2.64)	7.33 (3.92)	.69 (.56-.85)***
Impact of events			
Intrusive	15.71 (6.61)	9.63 (6.15)	.86 (.78-.95)**
Avoidant	15.50 (4.67)	11.00 (7.69)	.89 (.82-.98)
Escape potential	6.13 (1.63)	3.27 (1.95)	.45 (.31-.67)***
Composite defeat	15.06 (4.90)	9.93 (5.19)	.80 (.71-.91)***
Rescue-social support			
Emotional/informational	2.97 (1.07)	4.04 (.91)	3.58 (1.74-7.39)***
Tangible	3.53 (1.31)	4.05 (1.10)	1.50 (.94-2.37)
Affectionate	3.63 (1.25)	4.31 (.93)	2.03 (1.14-3.60)
Positive social interaction	3.22 (1.09)	4.07 (1.01)	2.29 (1.27-4.12)**
Total social support	58.40 (16.52)	73.67 (13.25)	1.09 (1.04-1.14)***

*** $p \leq .001$, ** $p \leq .01$

^aOdds ratios are taken from logistic regressions to investigate independent effects and any gender interactions.

^bTo reduce likelihood of making a Type I error, $p < .01$ was adopted as critical level of significance.

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significantly higher levels of defeat and lower levels of escapability as well as markedly lower levels of social support. As is described in Table 1, emotional/informational social support and positive social interaction appear to be the most important types of social support associated with increased suicide risk. There were no significant interactions.

A multivariate logistic regression model was fitted to the cry of pain variables and the measures of affect to predict status, that is, parasuicides versus hospital controls. Specifically, hopelessness, anxiety, depression, and the cry of pain variables (defeat, escape potential, total social support) were entered together in the first block. In addition, to test the moderating effect of social support on escape potential, the social support \times escape potential multiplicative term was entered in block two. The regression model successfully classified 90% of the participants. Social support (odds ratio = 1.55, 95% CI = 1.04–2.31,

$p < .05$), defeat (odds ratio = .81, 95% CI = .65–.99, $p < .05$) and the interaction between escape potential and social support (odds ratio = .94, 95% CI = .89–1.00, $p < .05$) were the only significant contributors to the model. To enhance the statistical power of the analysis, and to determine whether the latter interaction was robust, we conducted an additional bivariate logistic regression, entering escape potential, social support and the multiplicative term as predictors. Consonant with the multivariate regression, this model also yielded a significant main effect of social support (odds ratio = 1.32, 95% CI = 1.04–1.68, $p < .025$) and a significant interaction (odds ratio = .96, 95% CI = .93–.99, $p < .05$). As posited, the interaction shows that high levels of social support increased the probability that those reporting high levels of inescapability would be classified as members of the control rather than the parasuicide sample (see Figure 2).

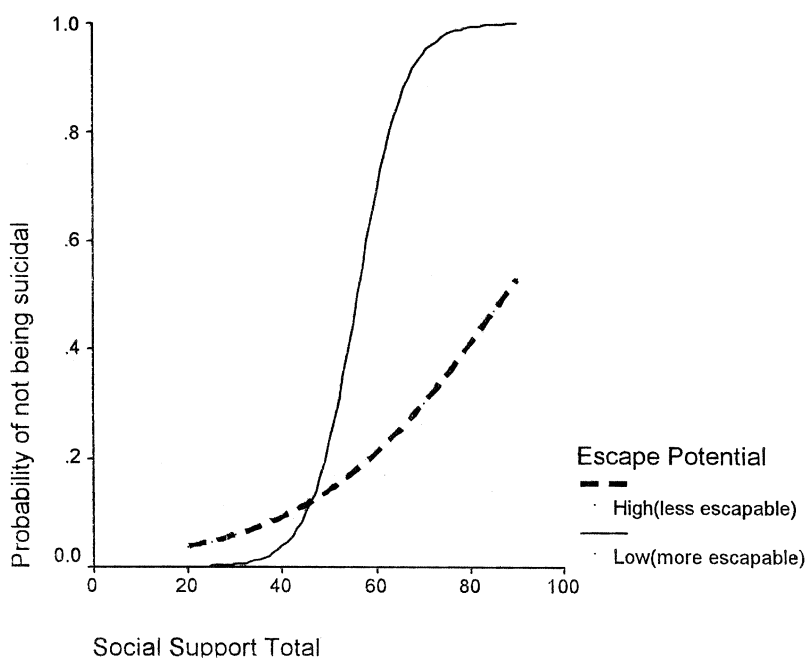


FIGURE 2. The probability of not being suicidal as a function of escape potential and social support.

DISCUSSION

This is the first empirical study to provide direct support for the cry of pain hypothesis. Specifically, the results yielded substantial corroboration for each of the four hypotheses. The inference from the first hypothesis was that the co-presence of all three cry of pain variables primes an individual for suicidal behavior. The case control analyses strongly affirmed this supposition; the parasuicides, with respect to a recent stressful event, reported significantly higher levels of defeat, lower levels of escape potential and lower levels of rescue (social support) than the matched hospital controls. The importance of these variables in the suicidal process, as highlighted by the multivariate regression analyses, should not be underestimated. When considered alongside clinical factors including depression and hopelessness, the cry of pain variables enhanced the statistical classification with respect to whether participants were suicidal or not (hypothesis 2). Moreover, social support was found to buffer the effect of escape potential on suicide risk (hypothesis 3). These findings fit well with the arrested flight literature in general (Gilbert & Allan, 1998) and Williams and Pollock's cry of pain hypothesis specifically (Williams & Pollock, 2000, 2001).

The final hypothesis was partially supported. In an attempt to understand better the characteristics of the stressors that precede a suicidal episode, we posited that the suicidal participants would report higher levels of intrusive and avoidant thoughts than the matched controls. Analysis suggested that intrusive rather than avoidant thoughts were most pertinent to suicidal risk. This finding extends the suicidal behavior literature by enhancing our knowledge of parasuicide-preceding stressors. This also fits with the autobiographical memory literature which suggests that overgeneral memories are characteristic of patients suf-

fering from post-traumatic stress disorder as well as depression and hopelessness (e.g. Henderson, Hargreaves, Gregory et al., 2002). However, future research ought to determine whether intrusive thinking is a cause or consequence of the cry of pain state.

Two limitations of this study could be usefully addressed. Firstly, albeit that this was a comparative study that matched suicidal patients with suitable control participants (as recommended by Leenaars, De Leo, Diekstra et al., 1997), it must be remembered that the design was cross-sectional. It is imperative that we investigate whether the relationships reported herein have predictive utility and whether there are meaningful differences between 'repetitive' and 'single episode' parasuicides. Moreover, it is not clear whether the cry of pain responses are causes or consequences of the suicidal attempt. A longitudinal study tracking high-risk groups over time is required to disentangle the direction of causality. Another means of teasing out such relationships might be to design an experimental manipulation study, to determine whether the cry of pain variables can be reliably modified.

Secondly, the strengths of the cry of pain measures, as employed in this study, were (i) their ease of administration and (ii) that they were specific to life events reported by the patients. Nonetheless, it would be useful to pursue in more depth the dimensions of defeat, escape and rescue. One possibility would be to employ the entrapment and defeat scales developed by Gilbert and Allan (1998). While their scale describes internal and external entrapment, they suggest that the internality-externality of the entrapment probably is of little theoretical or psychotherapeutic importance. Another approach could focus on defeat more closely, to investigate whether, consistent with the depressogenic attributional style literature (Abramson,

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Metalsky, & Alloy, 1989), achievement- or interpersonal-related defeat is more pernicious to suicide risk.

Two further issues require comment. First of all, by design the present study only included psychological variables that were central to testing the cry of pain hypothesis. As a result, one could argue that such a perspective is confounded as it fails to take into account the recognized contextual, developmental and life history factors associated with suicidal behavior. At one level I agree with this argument, that the measures of defeat and escape potential may be a reflection of these antecedent factors. However, the determination of the precipitants of the cry of pain variables was beyond the scope of this study: No one model can encompass all suicide risk factors. Moreover, one might speculate that the cry of pain variables would mediate the relationship between the antecedents and suicidal behavior anyway. Accordingly, suicidologists should investigate whether this is the case or not, and refocus our efforts, to determine whether the cry of pain hypothesis generalizes across participant groups irrespective of social and contextual factors. Lastly, it is worth noting that a larger sample would have increased the statistical power of the regression analyses. As a consequence, the final model may also have included the measures of affect as significant predictors of status. Nevertheless, this study demonstrated that the cry of pain variables are statistically meaningful even when assessed in relatively small samples.

The results also suggest that we should direct attention to the (lack of) availability of certain types of social support when considering its impact on well-being. The data from this study point to the value of emotional/informational support and positive social interaction in buffering against suicide risk. The items which tapped the emotional/informational dimen-

sion are concerned with the availability of support during times of stress. For example, having 'someone to turn to for suggestions about how to deal with a personal problem' or having 'someone to share your most private worries and fears with.' By contrast, the positive social interaction dimension concentrates on having someone available to socialize and relax with (e.g., 'the availability of someone to have a good time with'). It is noteworthy that the availability of affectionate social support did not distinguish between the suicidal patients and the controls.

The confirmation of the four hypotheses provides an empirical framework within which therapeutic interventions could be developed. Williams and colleagues have already demonstrated the effectiveness of one type of therapeutic intervention, mindfulness-based cognitive therapy, with recovered depressives, wherein the patients are trained to disengage from dysphoria-activated depressogenic thinking (Teasdale, Segal, Williams et al., 2000; Williams, Teasdale, Segal et al., 2000). A focus of future research ought to be the development of such interventions aimed at modifying the recognized suicidal risk factors so as to reduce the occurrence of the proximal components of the cry of pain (i.e., defeat, no escape and no rescue) that are thought to trigger the helplessness biological processes.

To conclude, this study successfully tested the cry of pain hypothesis in a sample of suicidal patients and matched controls. The findings suggest that the combination of arrested flight and the absence of rescue are powerful factors in the suicidal process. In addition to the finding that stressors reported by suicidal patients are more often rated as leading to feelings of entrapment relative to control patients, these stressors are also more frequently associated with intrusive thinking. Future research should replicate these findings within a prospective research

design, disentangle the direction of causality and endeavor to devise interventions within the cry of pain framework to deter-

mine whether we can modify these components and thus reduce suicide risk.

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