

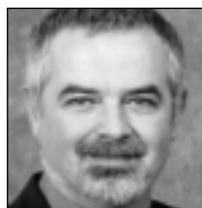
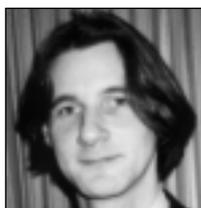
Suicidal behaviour

THE suicide rate increased steadily throughout the 1980s and much of the 1990s. Recent statistics suggest that it is stabilising (McClure, 2000), but it is estimated that between eight and 14 people per 100,000 kill themselves each year. In actual terms, suicide is no longer an unusual kind of death.

There are a variety of views on suicidal behaviour. Some, like Albert Camus, argue that judging whether life is or is not worth living is the only true philosophical question. Others view suicide as the outcome of a disturbed mind caused by biological processes that can only be explained using psychiatric concepts and labels. Such an approach might be caricatured as the 'Bad Apple' explanation of suicide: If only the bad apples (the suicidal) could be distinguished from the 'good apples'; by identifying the telltale worm that leads to suicide, they could be given appropriate therapy at an early stage. Still others see suicide as the result of society's impact on the individual. This approach is less concerned with identifying bad apples, instead focusing on the effects of rotten barrels – social factors.

So how have we come to understand suicide? What has psychology contributed to our understanding of this complex problem? These are questions that are asked time and again; unfortunately answers remain elusive.

It is probably true to say that the first systematic study of suicide was conducted



RORY C. O'CONNOR and NOEL P. SHEEHY look at the cognitive style that can lead people to self-harm or take their own lives.

by Emile Durkheim, and published in 1897 in his classic volume *Le Suicide* (Durkheim, 1897/1952). Durkheim could be regarded as a 'rotten barrel' theorist. He argued that suicide was the result of society's influence and control over an individual. He proposed four types of suicide, each characterised by a particular pattern of tensions between the individual and society (see box below).

In many respects Durkheim's framework is as applicable today as it was over a hundred years ago. However, his postulations are difficult to test empirically, and they do not explain why a specific individual commits suicide. Therein lies the difficulty in suicidology. How do we find the balance between nomothetic generality – examining rotten barrels – and the idiosyncrasies of the idiographic standpoints – investigating bad apples?

Intrinsic to this problem is the question of foreseeability. How can we anticipate such a rare event? How can we predict the day when someone chooses to take their own life?

The relative infrequency of suicide

renders prediction problematic. Pokorny (1983, 1993) followed 4800 psychiatric patients over a five-year period and tried to predict who would commit suicide. Unsurprisingly, he was not particularly successful: he performed only slightly better than chance.

Our inability to accurately predict those who are at risk from suicide is probably also due to the relatively crude tools available for assessment and prediction (see O'Connor & Sheehy, 2000). Historically, the vast majority of research on suicidal behaviour has focused on socio-demographic and clinical risk factors, examined within a biomedical framework. This emphasis on the biomedical model has resulted in (a) the medicalisation and 'abnormalisation' of suicidal behaviour and (b) for a large part, the exclusion of psychological correlates. To this day suicidal behaviour is still wrongly included in 'abnormal' psychology texts and book chapters.

This (mis)representation of the act as abnormal contributes to the maintenance of the stigma associated with suicidal behaviour (O'Connor *et al.*, 2000b). We believe, irrespective of the criterion for 'normality–abnormality', that in the vast majority of cases suicide is not abnormal but rather the unfortunate consequence of a complex interaction of risk factors and precipitants. Such factors can lead anyone to take their own life. In one recent study (O'Connor *et al.*, 1999a) the profile of less than 15 per cent of 142 completed suicides concurred with the traditional picture of suicide – older, male, clinically depressed, with psychiatric history, and so on.

In our view, the biomedical model of suicide has failed. It often doesn't take into consideration the complexity of the precipitants. It cannot account for why, for example, Person A commits suicide despite

DURKHEIM'S FOUR TYPES OF SUICIDE

Egoistic suicide: Thought to occur in individuals who feel socially excluded, with little social support and no integration with society, resulting from a sense of personal failure.

Altruistic suicide: Quite the opposite of egoistic suicide. Describes individuals who are actually overly integrated into society and feel that only through suicide can they meet society's demands. For example, *hara-kiri* is a form of suicide common in Japan in the nineteenth century performed for the sake of personal honour.

Anomic suicide: Linked with societal regulation – or deregulation. This occurs when individuals become, for example, redundant and the societal rules that guided their lives are no longer appropriate. This leads to instability and alienation and, in some cases, suicide.

Fatalistic suicide: The converse of anomic. Thought to be prevalent in instances of excessive regulation where individuals have lost all direction in life and feel that they have no control over their own destiny.

having the same clinical diagnosis and biological predisposition as Person B, who does not. We acknowledge that this is an oversimplification of the process of diagnosis and prognosis, but it highlights the divergent perspectives that characterise the research in this field. Unfortunately, the risk factor prevalence approach, often characteristic of this model, 'misses' many high-risk individuals. For instance, it is estimated that as many as 70 per cent of cases of depression go untreated (Kelly & France, 1987). By way of encouragement, the last two decades have witnessed an almost universal acceptance of the biopsychosocial model and a growing recognition of the role of psychological factors in health and illness.

In the context of this article, we are not going to describe the traditional risk factors associated with suicide and attempted suicide (e.g. depression, alcoholism, substance abuse, schizophrenia, personality disorder, child abuse; see O'Connor & Sheehy, 2000). Instead, we will comment on the contributions made to understanding the 'person factors': those psychological correlates that have aided our understanding of suicidal behaviour.

Person factors

Hopelessness is thought to be the component of depression that is most often associated with suicidal ideation or thinking (Nekanda-Trepka *et al.*, 1983), repetitive 'parasuicide' (engaging in deliberate self-harm irrespective of intention) (Petrie *et al.*, 1988), and completed suicide (Beck *et al.*, 1989). Defined as the degree to which an individual is pessimistic about the future, hopelessness is thought to mediate the relationship between depression and suicidal behaviour (for a review, see O'Connor & Sheehy, 2000). It is operationalised, almost exclusively, via the Beck Hopelessness Scale (Beck *et al.*, 1974). This is a 20-item, true/false forced choice questionnaire – the higher the score the more hopeless the respondent is thought to be; for example 'My future seems dark to me' or 'Things just don't work out the way I want them to'.

Hopelessness is not simply a contrived psychological construct. There is evidence of hopelessness and unbearable psychological pain in over 90 per cent of suicide notes – the closest we get to the suicidal mind (Leenaars, 1996; O'Connor *et al.*, 1999b). Despite its clinical importance, for many years this measure of hopelessness remained virtually

ADY COUSINS

The 'Bad Apple' explanation of suicide: By identifying the telltale worm, the suicidal 'bad apples' could be given appropriate therapy at an early stage

unchallenged. As a result some argue that it lacks conceptual clarity (MacLeod *et al.*, 1993).

Accordingly, MacLeod *et al.* (1993, 1997) devised a personal future fluency task, an objective measure of the degree to which an individual can generate positive and negative future thoughts. They found that parasuicides are impaired in their ability to generate positive future thoughts, compared with controls drawn from either hospital or non-hospital populations. Notably, however, they do not generate more future negative experiences than non-parasuicides even when depression is controlled for. In short, it seems that positive future thinking can differentiate between suicidal and non-suicidal individuals, independent of depression. This effect has been partially replicated with hospital parasuicides and matched hospital controls in Scotland (O'Connor *et al.*, 2000a).

Ways of thinking, remembering, and solving problems

Cognitive style has long been implicated as a risk factor for depression and suicidal behaviour. The depressive cognitive triad, described by Aaron Beck (1976), is also evident in the suicidal mind. The suicidal person expresses negative patterns of thinking regarding (a) their sense of self, (b) their future, and (c) their environment.

Related to Beck's triad, there is evidence for a depressogenic attributional style. This is often measured using the

Attributional Style Questionnaire (Peterson *et al.*, 1982). This assesses three dimensions: internal–external, stable–unstable, global–specific.

Depressed and suicidal individuals tend to blame themselves for negative events (internal), they think that the causes will always be present (stable) and will interfere with all aspects of their lives in future (global). This pattern of thinking is more potent when it is applied to explaining negative interpersonal events (e.g. relationship crises), rather than negative achievement-related events (e.g. job failure). Needless to say, such a pattern of thinking sustains the individual's negative state and impairs their ability to problem-solve (e.g. to deal with an interpersonal crisis), hence maintaining their hopelessness and increasing their risk from suicide.

The role of impaired problem solving as a suicide risk factor has been recognised for some time. Intuitively, it is not surprising that a suicidal person – someone who is cognitively rigid, with tunnel vision – is less likely to consider alternative solutions to their perceived problems, and hence is more likely to view suicide as a viable option.

In particular, individuals at high risk of suicide tend to be impaired in their social or interpersonal problem-solving abilities. Social problem solving is most often assessed using the Means–End Problem-solving Procedure (MEPS) (Platt *et al.*, 1975). The suicidal seem to have considerable difficulty in conceptualising, identifying and formulating appropriate solutions to somewhat straightforward social problems. The MEPS presents respondents with social scenarios and requires them to generate possible solutions and obstacles. Time and again, parasuicides (by comparison with matched controls) generate fewer, and often less relevant, solutions (see Pollock & Williams, 1998, for a review).

However, the MEPS is not without its critics. Some argue that the instrument would benefit from some modifications: respondents should be asked for a problem-solving strategy instead of a story; the procedure should include more realistic problems; and qualitative ratings of perceived ineffectiveness in poor problem solving should be introduced (House & Scott, 1996). These are important recommendations, as more detail about the characteristics of the problem-solving process is required if we are to be effective in developing interventions

A suicidal person – cognitively rigid, with tunnel vision – is less likely to consider alternative solutions to problems, and is more likely to view suicide as an option

aimed at enhancing problem-solving capacity.

A more recent literature has developed concerning the role of autobiographical memory in the problem-solving process. Mark Williams argues that suicidal (and depressed) individuals, when presented with specific memory cues, tend to generate over-general autobiographical memories and take longer to recall positive memories than matched controls (Williams, 1997; Williams & Broadbent, 1986). He explains this generation of overly general memories (i.e. summaries of experiences) in terms of a 'mnemonic interlock' – these people are 'trapped' at an intermediate

level of memory recall, being able to access general but not specific memories.

Such memory biases are thought to be related to problem-solving proficiency (Evans *et al.*, 1992). If we are not capable of generating specific memories, and it takes us longer to recall positive memories, then when presented with a problem we are going to have difficulty in coming up with solutions – which by their nature are specific. Hence, any therapeutic intervention should aim to address these impairments and how they influence problem solving, hopelessness and self-esteem within a diathesis framework. Exponents of this framework argue that many behaviour patterns (e.g. suicidal behaviour) are the result of an inherited susceptibility combined with a stressful environment and one's learned responses to stressful situations.

Hopelessness pathways

As noted above, impaired positive future thinking occurs independently of depression, and we have yet to clarify what contributes to its aetiology. One recent study (O'Connor *et al.*, 2000a) investigated the relationship between negative cognitive style and positive future thinking, as one possible pathway to hopelessness.

O'Connor *et al.* (2000a) assessed parasuicides and matched hospital controls shortly after a parasuicide episode on

measures of cognitive style, depression, anxiety, future-directed thinking and hopelessness. Cognitive style was assessed by way of the Cognitive Style Questionnaire (see Abramson *et al.* 1998), an extended version of the Attributional Style Questionnaire that includes measures of consequences and self-worth. They found that parasuicides differed from hospital controls on measures of depression, hopelessness and negative cognitive style in the predicted direction, and that these three measures explained 70.5 per cent of the hopelessness variance. In addition, positive future thinking (personal future fluency) was not associated with depression or negative cognitive style. This suggests that negative cognitive style, distinct from depression itself, is also unrelated to impairment in positive thinking. So what is?

Another possible correlate currently being investigated in relation to personal future fluency is that of perfectionist tendencies. Intuitively, we can envisage that the more perfectionist we are, the less likely we are to look forward to positive events – because each event represents an occasion for failure. In addition, perfectionism has been implicated in psychopathology for some time (Pacht, 1984), in particular with respect to eating disorders (Vohs *et al.*, 1999), so its association with suicidal behaviour is not surprising. In many respects eating disorders and suicidal behaviour are very similar – both being self-harming in the broadest sense.

The Multidimensional Perfectionism Scale (Hewitt & Flett, 1991) has been developed as a measure of psychopathological perfectionism and is composed of three dimensions: self-oriented perfectionism (when we place unrealistic demands on ourselves); socially prescribed perfectionism (perceived perfectionistic demands made by significant others); and other-oriented perfectionism (expectations of others to meet unrealistic and exaggerated demands). The first two dimensions seem to be most germane to psychological well-being, and are associated with reduced self-esteem and social hopelessness.

In one study on the impact of perfectionism Dean and Range (1999) assessed 132 clinical out-patients on measures of life events, multidimensional perfectionism, depression, hopelessness, reasons for living, and suicide ideation. Indeed, they identified a significant pathway from socially prescribed

WEBLINKS

Befrienders International:

www.befrienders.org

American Association of Suicidology:

www.suicidology.org/

CRISIS- Journal of crisis intervention and suicide prevention:

www.hhpub.com/journals/crisis/index.html

International Association for Suicide Prevention:

www.who.int/ina-ngo/ngo/ngo027.htm

The Samaritans: www.samaritans.org.uk/

perfectionism to depression, from depression to hopelessness, and from hopelessness to suicide ideation and questioning reasons for living. Further evidence, drawn from a sample of hospital parasuicides (Adey & O'Connor, 2000), found a correlation between socially prescribed perfectionism and positive future thoughts. However, this relationship is tentative and has yet to be demonstrated within a prospective framework.

Prospective framework

How useful are psychological constructs in predicting repetitive parasuicide and completed suicide? The evidence has been mixed. MacLeod *et al.* (1998) sought to improve positive future thinking (and by implication to reduce risk of repetitive parasuicide) through a brief, manual-assisted cognitive-behaviour therapeutic intervention (MACT) (Evans *et al.*, 1999). A series of six cognitive-oriented, problem-focused therapeutic sessions was delivered to parasuicide patients, who were re-assessed six months later. At follow-up those parasuicides who received the MACT intervention showed a significant increase

in positive future thinking compared with parasuicides who had treatment as usual. This finding was complicated by the fact that the non-hospital control group also showed an improvement in positive future thinking.

More convincing is recent evidence with depressed people (Williams *et al.*, 2000). Recovered depressed people were randomly allocated to mindfulness-based cognitive therapy or treatment as usual. Those who experienced the cognitive therapy exhibited a significant reduction in the recall of generic memories, compared with the control group. These findings need to be replicated with a parasuicide population.

Employing a non-intervention design, Sidley *et al.* (1999) assessed a high-risk group of people as soon as practicable after their parasuicide episodes, and followed them for a year. Their aim was to improve the specificity of risk assessment for parasuicide repetition by supplementing the established sociodemographic predictors (see Kreitman & Foster, 1991) with two psychological variables, namely personal future fluency (MacLeod *et al.*, 1997) and autobiographical memory (Williams &

Broadbent, 1986). They found that scores on the Beck Hopelessness Scale were the best predictors of future self-harm at six-month follow-up, and that history of previous parasuicides was the strongest predictor 12 months later. Disappointingly, neither personal future fluency nor specificity of autobiographical memory improved risk assessment.

Future directions and conclusions

So what have we learned about the suicidal mind? One of many problems for the 'Bad Apple' approach involves identifying suicidal propensity. The base rate of suicidal behaviour is actually very low, so the required accuracy of any identification instrument must be very high – much higher than currently available. Rotten barrel models fail to explain why everyone does not engage in suicidal behaviour. This is partly because we are not particularly well advanced in determining how differences in situations are to be measured. Other than the simplistic notion that the more favourable the climate the lower the incidence of suicidal behaviour, we know

little about the relationship between a specific behaviour and a particular environment.

We know that hopelessness is the psychological construct most consistently implicated in suicidal behaviour. We believe that there are multiple pathways to hopelessness, and that they may be mediated via a myriad 'person' factors. These include memory biases, future thinking, cognitive style, perfectionist tendencies and problem-solving ability. How these factors interact to enhance risk is still unclear. Moreover, we have still to agree on an overarching perspective; yet there is substantial evidence to support the notion that the characteristics of the suicidal mind are not necessarily abnormal or qualitatively different from those evident in the non-suicidal.

We would like to see future research address the pathways to hopelessness further. Specifically, what are the cognitive and perceptual characteristics that differentiate one-off parasuicides from repetitive parasuicides? We need to look at this phenomenon within the wider health and social psychological context. If, as we suspect, the vast majority of cases of suicidal behaviour are not 'psychiatrically' determined then we ought to be able to frame this behaviour in terms of so-called 'normal' social cognitive models (e.g. theory of planned behaviour, health belief model, protection motivation theory, self-regulation model). The beginning of the 21st century provides us with a threshold opportunity to rethink our attitudes towards suicide and integrate the considerable tools of health, clinical and social psychology to enhance our understanding of this complex problem.

■ *Dr Rory O'Connor is at the Department of Psychology, University of Strathclyde, Graham Hills Building, 40 George Street, Glasgow G1 1QE. Tel: 0141 548 4461; e-mail: rory.o-connor@strath.ac.uk.*

■ *Professor Noel Sheehy is in the School of Psychology at Queen's University of Belfast, Belfast BT7 1NN. Tel: 028 9027 4387; e-mail: n.sheehy@qub.ac.uk.*

Understanding Suicidal Behaviour

by **Rory O'Connor** and **Noel Sheehy**

ISBN 1 85433 290 2; £13.95pb

is available from **BPS Books**

Tel: **0116 252 9582**

or e-mail: **loubai@bps.org.uk**

References

- Abramson, L. Y., Alloy, L. B., Hogan, M. E., Whitehouse, W. G., Cornette, M., Akhavan, S., & Chiara, A. (1998). Suicidality and cognitive vulnerability to depression among college students: a prospective study. *Journal of Adolescence*, *21*, 473-487.
- Adey, E., & O'Connor, R. C. (2000). *The role of perfectionism and future directed thinking in hospital parasuicide*. Manuscript in preparation.
- Beck, A. T. (1976). *Cognitive theory and the emotional disorders*. New York: International Universities Press.
- Beck, A. T., Brown, G., & Steer, R. A. (1989). Predictions of eventual suicide in psychiatric inpatients by clinical ratings of hopelessness. *Journal of Consulting and Clinical Psychology*, *57*, 309-310.
- Beck, A. T., Weissman, A., Lester, D., & Trexler, L. (1974). The measurement of pessimism: The hopelessness scale. *Journal of Consulting and Clinical Psychology*, *42*, 861-865.
- Dean, P. J., & Range, L. M. (1999). Testing the escape theory of suicide in an outpatient clinical population. *Cognitive Therapy and Research*, *23*, 561-572.
- Durkheim, E. (1952). *Suicide: A study of sociology* (J. A. Spaulding & C. Simpson, Trans.). London: Routledge and Kegan Paul. (Original work published 1897)
- Evans, J., Williams, J. M. G., O'Loughlin, S., & Howells, K. (1992). Autobiographical memory and problem solving strategies in parasuicide patients. *Psychological Medicine*, *22*, 399-405.
- Evans, K., Tyrer, P., Catalan, J., Schmidt, U., Davidson, K., Dent, J., Tata, P., Thornton, S., Barber, J., & Thomson, S. (1999). Manual-assisted cognitive therapy (MACT): A randomized controlled trial of a brief intervention with bibliotherapy in the treatment of recurrent deliberate self-harm. *Psychological Medicine*, *29*, 19-25.
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, *60*, 456-470.
- House, R., & Scott, J. (1996). Problems in measuring problem-solving: The suitability of the means-end problem solving (MEPS) procedure. *International Journal of Methods in Psychiatric Research*, *6*, 243-251.
- Kelly, D., & France, R. (1987). *A practical handbook for the treatment of depression*. Carnforth: Parthenon.
- Kreitman, N., & Foster, J. (1991). The construction and selection of predictive scales with particular reference to parasuicide. *British Journal of Psychiatry*, *159*, 185-192.
- Leenaars, A. A. (1996). Suicide: A multidimensional malaise. *Suicide and Life-threatening Behavior*, *26*, 221-235.
- MacLeod, A. K., Rose, G. S., & Williams, J. M. G. (1993). Components of hopelessness and the future in parasuicide. *Cognitive Therapy and Research*, *17*, 441-445.
- MacLeod, A. K., Pankhania, B., Lee, M., & Mitchell, D. (1997). Parasuicide, depression and the anticipation of positive and negative future expectations. *Psychological Medicine*, *27*, 973-977.
- MacLeod, A. K., Tata, P., Evans, K., Tyrer, P., Schmidt, U., Davidson, K., Thornton, S., & Catalan, J. (1998). Recovery of positive future thinking within a high-risk parasuicide group: Results from a pilot randomized controlled trial. *British Journal of Clinical Psychology*, *37*, 371-379.
- McClure, G. M. G. (2000). Changes in suicide in England and Wales, 1960-1997. *British Journal of Psychiatry*, *176*, 64-67.
- Nekanda-Trepka, C. J., Bishop, S., & Blackburn, I. M. (1983). Hopelessness and depression. *British Journal of Clinical Psychology*, *22*, 49-60.
- O'Connor, R. C., & Sheehy, N. P. (2000). *Understanding suicidal behaviour*. Leicester: BPS Books.
- O'Connor, R. C., Sheehy, N. P., & O'Connor, D. B. (1999a). The classification of completed suicide into sub-types. *Journal of Mental Health*, *8*, 629-637.
- O'Connor, R. C., Sheehy, N. P., & O'Connor, D. B. (1999b). A thematic suicide note analysis: Some observations on depression and previous suicide attempt. *CRISIS - Journal of Crisis Intervention and Suicide Prevention*, *20*, 106-114.
- O'Connor, R. C., Connery, H., & Cheyne, W. (2000a). Hopelessness: The role of depression, future directed thinking and cognitive vulnerability. *Psychology, Health and Medicine*, *5*, 155-161.
- O'Connor, R. C., Sheehy, N. P., & O'Connor, D. B. (2000b). Fifty cases of general hospital parasuicide. *British Journal of Health Psychology*, *5*, 83-95.
- Pacht, A. R. (1984). Reflections on perfection. *American Psychologist*, *39*, 386-390.
- Peterson, C., Semmel, A., von Baeyer, C., Abramson, L., Metalsky, G., & Seligman, M. (1982). The Attributional Style Questionnaire. *Cognitive Therapy and Research*, *6*, 287-299.
- Petrie, K., Chamberlain, K., & Clarke, D. (1988). Psychological predictors of future suicidal behaviour in hospitalized suicide attempters. *British Journal of Clinical Psychology*, *27*, 247-258.
- Platt, J., Spivack, G., & Bloom, W. (1975). *Manual for the Means-End Problem-solving Procedure (MEPS): A measure of interpersonal problem-solving skill*. Philadelphia: Hahnemann Medical College and Hospital, Department of Mental Health Sciences, Hahnemann Community MH/MR Center.
- Pokorny, A. D. (1983). Suicide prediction revisited. *Suicide and Life-threatening Behaviour*, *23*, 1191-1201.
- Pokorny, A. D. (1993). Prediction of suicide in psychiatric patients: Report of a prospective study. *Archives of General Psychiatry*, *40*, 249-257.
- Pollock, L. R., & Williams, J. M. G. (1998). Problem solving and suicidal behavior. *Suicide and Life-threatening Behavior*, *28*, 375-387.
- Sidley, G. L., Calam, R., Wells, A., Hughes, T., & Whitaker, K. (1999). The prediction of parasuicide repetition in a high-risk group. *British Journal of Clinical Psychology*, *38*, 375-386.
- Vohs, K. D., Bardone, A. M., Joiner, T. E., & Abramson, L. Y. (1999). Perfectionism, perceived weight status, and self-esteem interact to predict bulimic symptoms: A model of bulimic symptom development. *Journal of Abnormal Psychology*, *108*, 695-700.
- Williams, J. M. G. (1997). *Cry of pain*. Harmondsworth: Penguin.
- Williams, J. M. G., Teasdale, J. D., Segal, Z. V., & Soulsby, J. (2000). Mindfulness-based cognitive therapy reduces overgeneral autobiographical memory in formerly depressed patients. *Journal of Abnormal Psychology*, *109*, 150-155.
- Williams, J. M. G., & Broadbent, K. (1986). Autobiographical memory in attempted suicide patients. *Journal of Abnormal Psychology*, *95*, 144-149.