Behaviour Research and Therapy 47 (2009) 164–169

Contents lists available at ScienceDirect

Behaviour Research and Therapy

journal homepage: www.elsevier.com/locate/brat

Shorter communication

Self-regulation of unattainable goals in suicide attempters: The relationship between goal disengagement, goal reengagement and suicidal ideation

Rory C. O'Connor [a,*], Louisa Fraser [a], Marie-Claire Whyte [a], Siobhan MacHale [b], George Masterton [c]

[a] Suicidal Behaviour Research Group, Department of Psychology, University of Stirling, Stirling FK9 4LA, UK
[b] Beaumont Hospital, Dublin, Ireland
[c] Royal Infirmary of Edinburgh, Edinburgh, UK

ARTICLE INFO

Article history:
Received 15 July 2008
Received in revised form
18 October 2008
Accepted 4 November 2008

Keywords:
Goal adjustment
Suicidal
Self-regulation
Self-harm
Prospective

ABSTRACT

There is growing interest in models of adaptive self-regulation. Recent research suggests that goal disengagement and goal reengagement (i.e., goal adjustment) are implicated in the self-regulation of emotion. This study extends the self-regulation research to investigate the utility of goal adjustment in understanding suicidal risk. To this end, two hundred adults hospitalised following a suicidal episode completed a range of clinical and psychological measures in hospital and were followed up approximately 2.5 months after discharge (Time 2). Hierarchical regression analyses showed that goal reengagement predicted suicidal ideation at Time 2. In addition, the lack of goal reengagement was especially pernicious when reported concomitantly with high disengagement. These predictive effects were independent of baseline mood, attempt status and suicidal intent. The theoretical and clinical implications are discussed.

Introduction

> "Goals give meaning to people's lives, [that] understanding the person means understanding the person's goals" (Carver, 2004, p. 14)

In recent decades there has been considerable interest in understanding self-regulation (e.g., Baumeister & Vohs, 2004; Carver & Scheier, 1998, 1981; Heckhausen & Schulz, 1995; Hoyle, Kernis, Leary, & Baldwin, 1999), defined as "the many processes by which the psyche exercises control over its functions, states and inner processes" (Vohs & Baumeister, 2004, p. 1). Indeed, one of the processes thought to be central to adaptive self-regulation is goal pursuit, one's ability to identify, pursue and attain goals (Carver & Scheier, 1998; O'Connor & Cassidy, 2007; O'Connor & Forgan, 2007; Sheldon, Ryan, Deci, & Kasser, 2004). More recently, however, adaptive self-regulation has been extended to include the opposite of goal pursuit, namely one's capacity to relinquish unattainable personal goals (Wrosch, Scheier, Carver, & Schulz, 2003;Wrosch, Scheier, Miller, Schulz, & Carver, 2003). The rationale for this extension is straightforward: it is a burden on resources if we continue to direct effort at a target goal which is unattainable (Carver & Scheier, 1998; Wrosch & Scheier, 2003). As a result, Wrosch et al. proposed that there are more benefits to disengaging from unattainable goals (goal disengagement) and re-directing attention toward other attainable goals (goal reengagement; Wrosch, Scheier, Carver et al., 2003; Wrosch, Scheier, Miller et al., 2003). Consistent with this standpoint, in a series of studies, Wrosch, Scheier, Miller et al. (2003) demonstrated that not only were goal disengagement and goal reengagement associated with high subjective well-being but that goal disengagement and goal reengagement could have interactive effects. For example, in a sample of undergraduates, goal reengagement was particularly associated with subjective well-being when the students had difficulties disengaging from unattainable goals (Wrosch, Scheier, Miller et al., 2003, Study 2). Conversely, though, Wrosch, Scheier, Miller et al. (2003, Study 2) also found that disengagement from unattainable goals was deleterious among older people if they had difficulties re-engaging in new goals. In short, they concluded that if older adults have few alternative new goals, it may be better for them to continue to pursue an unattainable goal than to have no active goal pursuit (Wrosch, Scheier, Miller et al., 2003, Study 2).

Taking the findings from the younger and older samples together illustrates (i) the utility of studying goal disengagement and goal reengagement (i.e., goal adjustment) in the context of emotional self-regulation and (ii) highlights that the role of goal reengagement and goal disengagement is population-specific. Therefore, in the present study, we aimed to extend the existing self-regulation evidence base by investigating the utility of goal adjustment in predicting emotional outcome in a sample of suicide

* Corresponding author. Tel.: +44 01786 467673; fax: +44 01786 467641.
E-mail address: ro2@stir.ac.uk (R.C. O'Connor).

0005-7967/$ – see front matter © 2008 Elsevier Ltd. All rights reserved.
doi:10.1016/j.brat.2008.11.001

attempters. Our rationale for extending the goal adjustment paradigm to suicide attempters is also informed by a previous study conducted by our group (O'Connor & Forgan, 2007) and by the research evidence on positive future thinking (MacLeod, Pankhania, Lee, & Mitchell, 1997; MacLeod, Rose, & Williams, 1993; MacLeod et al., 1998; O'Connor, Connery, & Cheyne, 2000; O'Connor, Fraser, Whyte, MacHale, & Masterton, 2008; O'Connor et al., 2007). In the former study, we yielded evidence from a cross-sectional study of college students that goal reengagement was an important construct in the suicidal process (O'Connor & Forgan, 2007); specifically that it was a proximal predictor of suicidal ideation.

In respect of the positive future thinking literature, it is now generally accepted that suicidal individuals differ from non-suicidal individuals in terms of their capacity to generate future thoughts of positive valence: a number of research groups have now shown that suicidal ideation and behaviour are characterised by impaired positive future thinking rather than a preponderance of negative future thinking (Hunter & O'Connor, 2003; MacLeod et al., 1993, 1997, 1998; O'Connor et al., 2000, 2007, 2008; Williams, Van der Does, Barnhofer, Crane, & Segal, 2008). Indeed, if one integrates the future thinking and adaptive self-regulation literatures, it is reasonable to suggest that positive future thoughts and goal reengagement may represent different operationalisations of the same construct (i.e., future personal goals). Based on this rationale, we hypothesised that low levels of goal reengagement (rather than goal disengagement) would be particularly pertinent in understanding suicidal risk. However, the negative impact of low goal reengagement is likely to be more pernicious when experienced concomitantly with high levels of disengagement. Such a view is consistent with Carver and Scheier's concept of complete disengagement: "…if an acceptable substitute goal is lacking, people sometimes take steps to disengage more quickly and more completely. This may be the essence of the impulse to commit suicide." (Carver & Scheier, 1998, p. 351). To our knowledge, this is the first study to directly test Carver & Scheier's postulation.

The present study

In the present investigation, we recruited suicidal patients who completed a range of clinical and psychological measures within 24 h of a suicidal episode and then followed them up again, on average, 2.5 months later. As the suicidal intent of a self-harm episode is a better predictor of repeat suicidal behaviour and completed suicide than seriousness of the attempt, we did not include non-suicidal self-harmers (Hawton, 2000; Skegg, 2005). Given the empirical focus of this study, we chose a relatively short follow-up period (i.e., 2.5 months) to minimise participant attrition but at the same time to allow for a significant change in our outcome variable (i.e., suicidal ideation) between Time 1 and Time 2 (similar to O'Connor et al., 2008; Spirito, Valeri, Boergers, & Donaldson, 2003).

Aims

In the light of previous research, we formulated two research hypotheses. First, we hypothesised that goal reengagement would be a stronger predictor of suicidal ideation at Time 2 than goal disengagement and second, we hypothesised that the interaction between goal disengagement and goal reengagement would be especially deleterious. Specifically, consistent with complete disengagement (Carver & Scheier, 1998), we hypothesised that high levels of goal disengagement concomitant with low levels of goal reengagement would predict elevated suicidal thinking 2.5 months following a suicidal episode.

Method

Participants and procedure

We recruited patients from a general hospital following a suicidal episode (ICD codes X60-X84) and measured their psychological well-being then and again 2.5 months later. Three hundred and twenty nine patients (16 years of age or older) who were seen by the Liaison Psychiatry service the morning after presenting at the Royal Infirmary of Edinburgh (at the Accident and Emergency department and Combined Assessment Unit Toxicology ward) following acute self-poisoning (90%), physical self-injury (6%) or both (4%) were recruited to the study. Those patients who were unfit for interview (e.g., psychotic), unable to give informed consent (e.g., medically unfit to give informed consent) or unable to understand English were excluded.

Attempt status: Eighty-four participants (25.5%) had never attempted before, 81 (24.6%) were single attempters and 164 (49.9%) were multiple attempters (i.e., history of two or more lifetime attempts). The majority of patients were recruited from the Combined Assessment Unit (89%). The profile of participants recruited from A&E (11%) was similar to that of those recruited from the Combined Assessment Unit. Consistent with other such studies (e.g., MacLeod et al., 1997), this did not represent a consecutive sample; rather it reflects the practical limitations of recruiting via a general hospital. Approximately 10% of participants who were approached declined to take part. There were 189 females (57.4%) and 140 males with an overall mean age of 35.3 years (SD = 13.7, range = 16–84 years). The men ($M = 38.2$, SD = 13.6) were significantly older than the women ($M = 33.2$, SD = 13.4), $t(327) = 3.36$, $p < 0.001$.

Potential participants were approached in the acute receiving ward or Accident and Emergency department and invited to participate in the study. The researcher gave a brief introduction outlining the nature of the assessment and highlighted that participation was voluntary, confidential and refusal would not interfere with their treatment protocol. Ethical approval had been obtained from the Local National Health Services Research Ethics Committee and the University Department.

At Time 1, patients were interviewed in hospital, usually within 24 h of admission. The order of presentation of the clinical and psychological measures was counterbalanced. At Time 2, on average 2.5 months later ($M = 10.1$ weeks, SD = 6.9), patients were contacted again and asked to complete the suicide ideation subscale of the Suicide Probability Scale (Cull & Gill, 1988). The Suicide Probability Scale was included as it is a recognised predictor of suicide risk (e.g., Larzelere, Smith, Batenhorst, & Kelly, 1996; Witte, Fitzpatrick, Joiner, Bradley, & Schmidt, 2005) and it has been shown to be sensitive to changes in suicidal ideation (e.g., O'Connor & Noyce, 2008; Rudd et al., 1996). To maximise follow-up, we made concerted efforts to contact all participants via post, email and telephone.

Of the initial sample, 61% ($n = 200$) completed measures at both time points, at Time 1 (T1) and Time 2 (T2), approximately 2.5 months later, therefore, all forthcoming analyses are circumscribed to these individuals. Our follow-up rate compares favourably to other studies in the field (e.g., Walker, Joiner, & Rudd, 2001; Wingate, Van Orden, Joiner, Williams, & Rudd, 2005). Those who did not complete the T2 measures did not differ significantly from those who did in terms of age, $t(327) = 1.00$, *ns*, marital status, $\chi^2(2) = 1.92$, *ns* and sex, $\chi^2(1) = 0.48$, *ns*. With one exception, they also did not differ significantly in any of the T1 variables (i.e., depression, anxiety or goal adjustment; range: $t(327) = 0.33$–1.26, *ns*): Those who completed T2 were significantly more suicidal at baseline ($M = 21.50$, SD = 6.00) compared to those who did not ($M = 20.00$, SD = 6.12), $t(327) = 2.21$, $p < 0.05$. However, the groups