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What bridges the gap between self-harm and suicidality? The role of forgiveness, resilience and attachment

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ABSTRACT

Self-harm is the most robust risk for completed suicide. There is a lack of understanding of why some people who self-harm escalate to suicidal behaviour when others do not. Psychological factors such as attachment, self-forgiveness and self-appraisal may be important. To determine whether factors from the Interpersonal Theory and Schematic Appraisals models are useful to identify suicidal behaviour in populations that self-harm. Specifically we investigate whether resilience factors of secure attachment, self-forgiveness and positive self-appraisals significantly influence suicidality in people who self-harm. A cross-sectional online study of 323 participants recruited from self-harm support forum. Validated self-report measures were used to assess appraisals, relationships, self-forgiveness, attachment style, suicidality and self-harm. Emotion coping and support seeking self-appraisals and self-forgiveness were negatively associated with suicidality in participants with a history of self-harm. Dismissing attachment was positively associated with suicidality. The perceived ability to cope with emotions, the perceived ability to gain support and self-forgiveness may protect against suicide in people who self-harm. Conversely the presence of dismissing attachment may increase the risk of suicidality. Findings provide therapeutic targets to reduce risk of suicidality in this high risk group.

1. Introduction

Self-harm may be defined as "self-poisoning or self-injury, irrespective of the apparent purpose of the act" (National Collaborating Centre for Health, 2004). Self-harm is intrinsically linked to suicide given that self-harm represents the most prevalent risk factor for completed suicide. Suicide may be defined as "the act of deliberately killing oneself" and suicidality is an overarching term encompassing suicidal ideation and behaviour (Majid et al., 2015).

Self-harm behaviour is increasing, such that by the age of 15 years, 19% of adolescents will have self-harmed at least once (Mars et al., 2014). More than half the individuals who die as a result of suicide have a history of self-harm (Hamza et al., 2012; Turner et al., 2013; Whitlock et al., 2013), and 1% of people who have self-harmed will go on to die by suicide within the subsequent 12 months (Bebbington et al., 2010). However, the majority of people who self-harm will not complete suicide, nor do they self-harm in the context of an attempt to end life. Ten to 25% of community samples and 30–70% of clinical samples of adolescents and adults report histories of both self-harm and suicidal ideation (Asarnow et al., 2011; Bebbington et al., 2010; Nock et al., 2006; Wilcox et al., 2012).

In addition, in any single act, there may also be a mixture of motivations, such that acts of self-harm and acts of suicidality co-occur in some individuals (Hamza et al., 2012; Victor and Klonsky, 2014). From a clinical perspective, suicide risk assessment within self-harm populations is challenging because motivations and precipitants to suicidality are complex and multi-factorial. Risk factors for suicide include mental illness, personality traits, sociocultural, physical, biological, and genetic factors, all of which may also predispose to self-harm (Brent and Mann, 2005; Haw et al., 2013; Hawton et al., 2013).

There is clear evidence of identifiable psychological factors that influence suicidality (Cox et al., 2012). Individuals who are at highest risk are those whose have perceived burdensomeness or thwarted and the capability to harm themselves (Andover et al., 2012; Joiner, 2009). The Interpersonal Theory of Suicidal Behaviour states that an individual is at risk of suicide if they have both the desire to die by suicide and the ability to do so. Perceived burdensomeness and social alienation are proposed to be key factors in driving the desire to die by suicide (Joiner, 2009). Individuals with a history of self-harm may have an increased ability to die by

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suicide due to the acquired capability via habituating the fear and pain associated with harming oneself (Hamza et al., 2012; Hamza and Willoughby, 2013; Joiner, 2009).

Conversely, the Schematic Appraisals Model of Suicidal Behaviour states that protective (resilience) factors, including positive self-appraisals, self-forgiveness and attachment, may be important for buffering suicidal thoughts and behaviours, potentially providing key targets for interventions (Johnson et al., 2010b). These protective factors may not be simply inversely related to suicidality but may also moderate the impact of other risk factors, such as mental illness or trauma, on suicidality (Panagioti et al., 2014). In populations with a history of self-harm it may be that these appraisals are less prevalent, as they would also protect against self-harm. Alternatively, they may continue to be present, providing a buffer against the step from self-harm to suicidal behaviour.

Understanding what differentiates people that self-harm who do and do not show risk for future suicide is of significant clinical importance for monitoring risk and delivery of interventions (Brausch and Gutierrez, 2010; Hamza et al., 2012; Muehlenkamp and Gutierrez, 2007; Whitlock et al., 2013). The aim of this study was to extend the empirical evidence of potential psychological risk and protective factors of suicidality in a population with a history of self-harm. Specifically, we investigated psychological constructs of positive self-appraisals, attachment and self-forgiveness.

2. Method

2.1. Participants and procedure

Participants were recruited through websites and self-help forum offering support for individuals who self-harm. Website organisers were asked to post a link to the online survey. Inclusion criteria were a current or past experience of self-harming, and being 16 years of age or over. The websites approached offered support for people who self-harm, were often user-led and were all non-statutory organisations. For reasons of confidentiality, websites cannot be named. 15 website organisers were approached and 7 agreed to participate.

Participants read an information sheet and provided consent before completing the anonymous questionnaire. Ethics approval was obtained by the University of Birmingham Ethical Committee (rERN_14-0112). No compensation was offered.

2.2. Measures

The clinical information collected via targeted questions included self-report of lifetime diagnosis of mental illness, current treatment for mental illness, current medication use, alcohol consumption and lifetime history of illicit substance use. Details of all questions are provided as online supplement (Spl 1).

Regular alcohol use was defined as >21 units per week. Regular illicit substance use was defined as > weekly consumption. Self-harming behaviours were indexed on the Deliberate Self-harm Behaviours Questionnaire (DSHBQ; Harris and Roberts, 2013). This measure was designed for online use and includes 22 items, 5 of which chart the frequency and history of lifetime self-harm. These include: 'Have you ever self-harmed' and 'Do you currently self-harm? ", both of which are answered yes/no; 'How often do you self-harm', with eight answer options ranging from more than once per day to once per year; 'When you self-harm/self-harmed, what do/did you usually do? ' (with answer options of cut, burn, scald, bang body parts, pull your hair, scratch, prevent wounds healing, ingest toxic substances, break bones, other); 'How old were you when you first started self-harming? '. Please see online supplement.

Suicidal behaviour was measured on the Suicidal Behaviours Questionnaire-Revised (SBQ-R; Osman et al., 2001). The SBQ-R has four domains which address lifetime suicidality (including thoughts, plans and attempts); suicide ideation in the past year; communication of intent to commit suicidal behaviour; and likelihood of future suicide attempts. Each domain can be assessed individually or the total score provides an indication of overall suicidality, with possible scores ranging from 3 to 18. Higher scores represent greater levels of suicidality risk. The SBQ-R has a Cronbach's alpha of 0.73, suggesting good reliability. (Osman, 2001). A bivariate grouping of suicidal behaviour (yes/no) was defined as those who did or did not report a history of any act of attempted suicide on the SBQ-R.

Attachment style was measured on the Relationship Questionnaire (RQ; Bartholomew and Horowitz, 1991), which assesses four attachment styles: secure, dismissing, preoccupied, and fearful. The measure is designed to gauge general attachment style by using participants' perceptions of how they behave and feel in relationships. Respondents read four short paragraphs describing each style, and then rate how each style corresponds to their general relationships using a 7-point Likert scale ranging from 1 (disagree strongly) to 7 (agree strongly). The RQ has a Cronbach's alpha is 0.91 (Bartholomew and Horowitz, 1991).

Self-forgiveness was measured by the Heartland Forgiveness Scale (HFS) (Hansen, 2013; Thompson et al., 2005). This is a six item self-report measure that assesses an individual's ability to forgive themselves for perceived transgressions. Respondents rate each item on a 7-point Likert scale based upon the extent to which it describes them ('almost always false of me' to 'almost always true of me'). Previous research has found the HFS-Self Forgiveness subscale to have acceptable internal consistency (α=.72; Thompson et al., 2005).

Resilience was indexed on the Resilience Appraisal Scale (RAS; Johnson et al., 2010a), a 12 item self-report measure that assesses an individual's positive self-appraisals. Responses are rated on a five point scale from 'strongly disagree' to 'strongly agree'. It consists of three subscales. The first subscale examines an individual's perceived ability to cope with negative emotions ('I can control my emotions'). The second investigates an individual's perceived ability to problem solve ('I can generally solve problems that occur'). The third subscale reflects an individual's perceived ability to gain social support ('If I were in trouble, I know of others who would be able to help me'). The RAS has a Cronbach's alpha of α=0.86 for the emotion coping subscale, α=0.89 for the problem solving coping subscale and α=0.87 for the support seeking subscale (Johnson et al., 2010a).

2.3. Statistical analyses

Participants with and without a lifetime history of suicidal behaviour (index by any act of harm with suicidal intent as rated on the SBQ-R) were compared on clinical and demographic variables using chi-square tests of association or independent *t*-tests. Pearson's correlations were employed to assess associations between suicidality, attachment, self-forgiveness and resilience factors. In order to determine the most significant predictors for suicidality in this population, significant demographic and clinical variables, together with our target variables of interest (self-forgiveness, attachment style and resilience factors) were entered into a forward stepwise linear regression model.

3. Results

A total of 464 participants took part in the study between May and June 2014. Cases where the survey had not been fully completed (n=132) or if respondents reported never engaging in self-harm (n=9) were omitted, resulting in a total of 323 responses retained for analyses.

3.1. Demographic and clinical characteristics

Demographic and clinical characteristics of the sample are presented in Table 1. Of the 323 participants, 88.2% were female (n=285). Age range was 16–62 years (M = 22.86, SD = 7.62, median = 21.00). 63.7% (n=206) reported current self-harm and 48.9% (n=158) reported having a history of any act of attempted suicide. A psychiatric diagnosis was self-reported by 63.8% (n=206) of the sample; of these participants, 38.7% (n=125) were receiving treatment from mental health services. Of the participants with a diagnosis, 104 (50.5%) reported depression, 28 (13.6%) anxiety, 6 (2.9%) psychosis, 26 (12.6%) personality disorder, 19 (9.2%) bipolar disorder and 23 (11.2%) 'other' diagnosis. 45.8% (n=148) of the total sample reported being on prescribed medication. 71.2% (n=230) of the sample reported no current regular alcohol consumption and 88.2% (n=285) reported no current regular use of illicit substances. Significant differences were found between participants with and without a history of suicidal behaviour: participants with a history of suicidal behaviour were older, more likely to report a psychiatric diagnosis, and regularly use illicit substances.

The sample as a whole reported mean attachment scores of: dismissing 3.69 (SD=1.94); preoccupied 4.03 (SD=2.03); fearful 5.48 (SD=1.75); and secure 2.79 (SD=1.87). Mean self-forgiveness was 17.87 (SD=7.2). Mean resilience factors were 13.01 (SD=4.10) for support seeking; 9.44 (SD=3.96) for emotion coping; and 12.31(SD=3.61) for problem solving. There were significant differences between those with and without a history of suicidal behaviour on self-forgiveness, emotion coping and problem solving (see Table 1).

3.2. Correlations

Preliminary zero-order correlations were conducted to assess the association between suicidal behaviour (as indexed as a continuous score of the SBQ-R), attachment, self-forgiveness and positive self-appraisal scores. These are displayed in Table 2. Secure attachment showed a significant small to moderate association with suicidality ($r=-0.23$, $p<0.001$). Dismissing ($r=0.09$, $p<0.04$) and fearful ($r=0.12$, $p<0.01$) attachment scores showed small associations with suicidality.