

Suicidal Imagery in a Previously Depressed Community Sample

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This study sought to replicate previous findings of vivid suicide-related imagery in previously suicidal patients in a community sample of adults with a history of depression. Twenty-seven participants were interviewed regarding suicidal imagery. Seventeen participants reported prior suicidal ideation or behaviour in the clinical assessment, and the vast majority of these also reported experiencing suicide-related imagery when at their most depressed and despairing, in many cases in the form of flash-forwards to imagined future suicidal acts. Interestingly, five of the 10 participants who did not report suicidal ideation or behaviour in the clinical interview also described prominent imagery related to themes of death and suicide, but in several cases, these images were associated with meanings that seemed to act to reduce the likelihood of subsequent suicidal acts. Severity of prior suicidality was associated with lower levels of imagery-related distress and higher levels of imagery-related comfort. These findings support the idea that suicide-related imagery is an important component in the phenomenology of depression and despair and hint at potentially important differences in the meaning associated with such imagery between those individuals who report experiencing suicidal ideation or behaviour when depressed and those who do not. The findings are consistent with Joiner's model of acquired capability for suicide through habituation to pain and fear of suicide and suggest that it may be useful to tackle such imagery directly in the treatment of suicidal patients. Copyright © 2011 John Wiley & Sons, Ltd.

Key Practitioner Messages:

- Individuals who experience depression often report vivid suicide-related imagery.
- Those with more severe suicidality report experiencing greater comfort and less distress associated with suicidal imagery at times of crisis.
- Therapy for individuals with depression would benefit from directly addressing suicide-related imagery.

Keywords: Depression, Suicide, Imagery, Comfort, Flash-Forwards

INTRODUCTION

Suicide is a leading cause of death, particularly among young adults, with over 5700 people dying by suicide in the UK in 2008 (Samaritans, 2010) and one in seven people in the UK population reporting that they have considered suicide at some point in their lives (Office for National Statistics, 2006). Although there is increasing evidence that cognitive-behavioural therapy (CBT) and dialectical-behaviour therapy can be applied effectively to reduce risk of subsequent suicidal ideation and behaviour in at-risk adults (Tarrier, Taylor, & Gooding, 2008), these problems remain challenging and the effectiveness of psychosocial treatments in reducing risk of suicide is less

clear (Crawford, Thomas, Khan, & Kulinskaya, 2007). Most suicidal behaviour occurs in the context of a depressive illness and once a person has experienced suicidal ideation or behaviour during one episode of depression, they are more likely to experience it again, should depression recur (Williams, Crane, Barnhofer, Van Der Does, & Segal, 2006). Suicidal ideas can also emerge very rapidly. A recent study of suicide attempters reported that around half made their attempt within 10 minutes of their 'first current and persisting' thought of suicide (Diesenhammer et al., 2009). This makes intervention by others during acute suicidal crises difficult and highlights the necessity of teaching patients skills that enable them to deal with their own suicidal urges in a way that minimizes harm. In order to do this, it is important to understand as much as possible about the phenomenology of suicidal experiences.

One topic, which has received recent research attention, is the role of mental imagery in suicidality (Holmes,

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Crane, Fennell, & Williams, 2007; Holmes, Geddes, Colom, & Goodwin, 2008). These studies suggest that in addition to experiencing suicidal ideas in the form of verbal thoughts, patients often experience vivid mental imagery related to death and suicide at times of crisis. The presence of mental imagery in suicidal patients is potentially important for a number of reasons. First, research in other domains suggests that mental imagery promotes action. When people are asked to imagine engaging in an act, for example, voting in an election, this increases the likelihood that they will actually subsequently do so (Libby, Shaeffer, Eibach, & Slemmer, 2007). Imagined events are also rated as more probable than those which have not been imagined (Gregory, Cialdini, & Carpenter, 1982; Pham & Taylor, 1999), possibly because mental rehearsal enables individuals to identify barriers and generate cues to action. If suicidal imagery ('flash-forwards') functions in the same way as other forms of mental imagery, then its presence should be a particular cause for concern, since this would imply that it would increase the likelihood that an individual would go on to engage in suicidal behaviour.

Experimental research suggests that imagery more readily elicits an emotional response than verbal information of the same content (Holmes & Mathews, 2005), and it is plausible that when suicidal ideas take the form of imagery, they may more powerfully evoke feelings of distress than would be the case if suicidal thinking remained in a verbal form. However, experiencing mental imagery related to suicide may also, over time, function to reduce the fear associated with thoughts of suicide through habituation. Joiner's (2005) Interpersonal-Psychological Theory of Suicide suggests that in order for a person to engage in a highly lethal suicidal act, they must first develop an 'acquired capability' through habituation to painful or provocative events. Although there are a number of ways in which this habituation might occur (e.g., through past suicidal behaviour, substance abuse, risk taking), it is conceivable that repeated experiencing of suicidal imagery may be one such route, functioning in a similar way to imaginal exposure in the treatment of anxiety disorders (Hackmann & Holmes, 2004; Speckens, Ehlers, Hackmann, & Clark, 2006).

Research in other clinical disorders suggests that mental imagery contains a combination of recollections of real events, and elaborations or distortions of these events and elements of fantasy. In social phobia, for example, mental imagery may incorporate images of oneself being humiliated in ways which have not actually occurred in real life, although prior experiences of humiliation may also feed into the imagery a person experiences. Similarly, Holmes et al. (2007) found that while around a third of participants reported experiencing images of prior suicidal behaviour, when asked about the image, which had been most significant at times of distress or crisis, most

described an imagined future act of suicide, a 'flash-forward'. Interestingly, reflecting the fact that suicidal states are associated with ambivalence and struggle (McAuliffe, Arensman, Keeley, Corcoran, & Fitzgerald, 2007), significant images were also reported by patients to have been associated with equivalent mean levels of comfort and distress at the time of crisis.

Holmes et al. (2007) explored the presence and nature of suicidal imagery in a sample of 15 patients who all had a history of depression and suicidal ideation or behaviour, and who had been treated with mindfulness-based cognitive therapy (MBCT). Since MBCT is explicitly designed to increase awareness and acceptance of mental events, it is possible that these participants would have been more able to describe their suicidal images than those who had not received such treatment. Additionally, because the sample was comprised of people who had actively sought treatment for suicidal depression, their experiences may not be representative of the broader population of individuals in the community with a history of depression. Finally, although the sample consisted of people who were well at entry to the trial, their mean level of depressive symptoms, as assessed on the Beck Depression Inventory - II (BDI-II), was still in the mildly depressed range. The current study represents an attempt to replicate and extend the findings of Holmes et al. to a community sample with a history of depression who were in complete remission. In particular, we were interested to examine whether images related to death or suicide were also reported by individuals with a history of depression, who did not endorse prior suicidality in a structured clinical interview, and to elucidate the relationship between imagery-related comfort and distress and severity of prior suicidal ideation or behaviour.

METHOD

Procedure

Participants were recruited from the community through posters and announcements on a local community website. Volunteers were requested who had been depressed in the past, but were now well, and those who expressed an interest were given further information about the study. No reference was made to suicidality. The participant information sheet stated that individuals would be asked in detail about prior episodes of depression and the symptoms experienced during these episodes, but no reference was made to mental imagery specifically. Participants were invited to the Department of Psychiatry, following telephone or email screening for initial eligibility. All participants had received an information sheet in advance of their appointment and its content was reviewed at this first session. The fact that all elements of the study protocol were voluntary, and that

the participant was free to withdraw at any time, were emphasized before individuals gave their written informed consent to participate. The study session involved the completion of a structured clinical interview, the suicidal cognitions interview and several additional questionnaires. Participants were fully debriefed and paid £10 for participating in the study session. The study received ethical approval from the University of Oxford, Central University Research Ethics Committee.¹

Participants

In total, 27 individuals were eligible for inclusion in the current study. The final sample included eight males and 19 females with a mean age of 28.00 years (standard deviation [SD] = 10.64). The majority of the sample was white people and well educated. All participants met criteria for one or more past episode of major depression and all were in recovery at the time of participation.

Measures and Materials

Clinical Interview

Recovery was assessed using the National Institute of Mental Health (NIMH) recovery criteria (Keller, Shapiro, Lavori, & Wolfe, 1982) and defined as no more than 1 week of minimal symptoms of depression in the past 8 weeks. Having established that participants were in recovery, they were interviewed using the Mini International Neuropsychiatric Interview (MINI; Sheehan et al., 1998) in order to assess the presence of prior major depression, suicidality and other current or past axis I disorders. The MINI is a structured interview that derives Diagnostic and Statistical Manual of Mental Health, 4th edition (DSM-IV) diagnoses and has been validated against the Structured Clinical Interview for DSM-III-R

(SCID-III-R) (Sheehan et al., 1998). It has the advantage of being quicker to administer than the Structured Clinical Interview for DSM-IV (SCID), making it more appropriate for use in experimental studies. Clinical interviews were conducted by CC, a post-doctoral research psychologist. Audiotapes of a random sample of eight interviews were reviewed by an experienced clinical psychologist who was instructed to note any inconsistencies between the symptoms reported by participants and the decisions reached by the interviewer. Diagnoses derived by both raters were consistent in all cases. EH and CC jointly conducted a number of the suicidal cognitions interviews to ensure consistency with Holmes et al. (2007).

Beck Scale for Suicide Ideation Worst-Ever (BSSw) (Based on the Beck Scale for Suicide Ideation, Beck & Steer, 1993)

The BSSw assesses patients' plans, thoughts and intent to die by suicide at the time during their lives when they have felt at their most down and depressed. It is a 21-item scale; the first five items are used as a screener and if patients indicate that at their worst they experienced either a weak to moderate desire to kill themselves or that they would have taken a chance on life and death then they are instructed to complete the remaining items. This questionnaire is a modified version of Beck Scale for Suicide Ideation (BSS; Beck & Steer, 1993) and is worded in the past tense, representing a questionnaire-based version of the worst point scale for suicide ideation interview (Beck, Brown, Steer, Dahlsgaard, & Grisham, 1999). Internal reliability was excellent in the current sample, both for the scale as a whole, Cronbach's alpha = 0.94, and for the five screening items, Cronbach's alpha = 0.88.

Beck Depression Inventory—II (BDI-II; Beck, Steer, & Brown, 1996).

The BDI-II is a widely used clinical scale made up of 21 items, which measures current symptoms of depression in adults. It has good reliability and validity with clinical severity scores ranging 14–19 (mild depression), 20–28 (moderate depression) and 29–63 (severe depression). Internal reliability in the current sample was good, Cronbach's alpha = 0.79.

Suicidal Cognitions Interview

Based on the Suicidal Cognitions Interview used in Holmes et al. (2007), we asked participants about any mental imagery they had experienced related to suicide, when at their most despairing. An example was used to describe to participants the difference between a mental image (example given of an image of the interview situation including the visual appearance of the room, the sounds of the interviewer talking as well as possible smells and other sensory information) and a verbal thought (relating to the interview situation, e.g., thinking 'the interviewer is asking so many questions'). Participants

¹The suicidal cognitions interview was explained to participants and they were asked whether they were willing to complete these detailed questions on styles of thinking at times of distress, in addition to the questions on prior experience of various psychiatric conditions. Those who expressed an interest in doing so were interviewed using the suicidal cognitions interview, after other questions on prior experience of suicidality contained in the MINI, whereas those who were not willing moved straight to the questionnaires. Those participants who completed the study session (with or without the suicidal cognitions interview), were invited to attend a second session, involving the completion of several cognitive tasks. Data drawn from this second session has been reported elsewhere (Crane, Barnhofer, Visser, Nightingale, & Williams, 2007). Seven participants declined to complete the suicidal imagery section of the interview, but participated in the remainder of the study, and the sample in the current study therefore represents a subsample of Crane et al. Participants who declined the suicidal cognitions interview were significantly older, $p < 0.05$, but contained a similar proportion of males ($n = 3$) and females ($n = 4$) to those who took part. All participants who declined to participate in the interview reported suicidality in the past, five reporting suicidal ideations and two reporting suicidal behaviours.

Table 1. Percentage of participants reporting each type of image at times of despair and distress comparing participants who acknowledged suicidal ideation or behaviour in clinical interview/while completing the Beck Scale for Suicide Ideation Worst-Ever ('suicidal') compared with those who did not ('non-suicidal')

An image of . . .	'non-suicidal' n = 10 (%)	'suicidal' n = 17 (%)
A time you tried to harm yourself in the past	30	35
Planning/preparing to harm yourself or make a future suicide attempt	20	77
What might happen to you if you died	30	71
What might happen to other people if you died	40	77
Things you were escaping from	90	35
Another distressing event that happened to you (non-suicide related)	60	29
Something that made you feel safe or better	70	41
Things that were fleeting/unclear	30	41
Any other type?	40	35

were then asked to give an example of a verbal thought and a mental image related to a neutral topic, going shopping, to check comprehension. Following these explanations, participants were told that they were to be asked some questions about 'their way of thinking at times when they had been at their most down or despairing. A nine-item checklist was used to capture different types of imagery experienced at times of distress or crisis. For each item, participants were asked whether they had never, sometimes or often experienced the imagery described (see Table 1 for the nine categories of image). Participants were then asked to rate how much of the time they spent thinking in images at times of crisis (1 = not at all, 5 = half the time, 9 = all the time) and the degree of imagery realism (1 = not at all real, 5 = half real, 9 = as if it was reality). Those who described any suicidal imagery were then asked to describe in as much detail as possible, the image that is or was most important or significant to them when at their most despairing, as if they were a film director. Participants were given a number of prompts to aid the description: what is the image of; how did the image make you feel; what (if anything) did the image mean to you; what (if anything) did the image make you want to do; anything else about this image. Participants then rated the image described for the degree of associated comfort and distress at the time it was initially experienced each on a nine-point scale (1 = not at all comforting/distressing, 5 = moderately comforting/distressing and 9 = extremely comforting/distressing).

RESULTS

Clinical History

Mean BDI-II score in the sample was 3.48 (SD = 4.04) indicating that participants were not depressed at the point of participation in the study. Information on history of suicidal ideation or behaviour was obtained both from

the MINI and from the BSSw Questionnaire, and this information was combined to classify participants as having experienced no suicidality, suicidal ideation or suicidal behaviour. According to the MINI, eight participants had experienced suicidal ideation during their worst episode of depression and a further eight had engaged in suicidal behaviour (five on a single occasion, and three on five or more occasions). In line with Holmes et al. (2007), we additionally classified people who reported a weak/no wish to live in conjunction with a weak/moderate to strong wish to die on the BSSw as suicide ideators. This identified one further participant. In total, 10 participants were classified as non-suicidal during past episodes, nine as suicide ideators and eight as suicide attempters on the basis of the combined information obtained in the clinical assessment. The median number of prior depressive episodes experienced by participants was two. Seven participants had experienced one previous episode of depression, seven had experienced two and 13 had experienced three or more episodes. The following disorders were present in the sample: mild social phobia (1), agoraphobia (1), mild obsessive-compulsive disorder (1), alcohol dependence in partial remission, substance dependence (3) and bulimia (1).

Prior Treatment

Four participants had received inpatient treatment for depression. Twenty-one participants reported prior psychotherapy, with six reporting prior CBT. Nine of the participants were treated with antidepressants during their last depressive episode and four were taking antidepressant medication at the time of participation in the study.

Severity of Worst-Point Suicidal Ideation

The mean total screening score on the BSSw (maximum = 10) for the whole sample was 4.07 (SD = 3.63). This is lower than that of Holmes et al. (2007) who reported a

mean score of 7.40 (SD = 2.95), the result of inclusion of non-suicidal participants in this study. Seventeen people completed the whole BSSw, yielding a mean score of $M = 19.53$ (SD = 8.39). Again, this is somewhat lower than the mean score in Holmes et al. (22.34, SD = 6.59), but still above the cut-off score of 16 used to identify high-risk patients (Beck et al., 1999).

Presence of Images Specifically Related to Suicide

Participants were asked to report the amount of time spent experiencing images specifically related to suicide at times of crisis on a scale from 1 to 9. Across the sample, as a whole, the mean was 3.78 (SD = 2.21). When the sample was split according to suicide history, the mean was, as expected, low for the non-suicidal group ($M = 1.85$, SD = 1.20), moderate for the suicide ideators ($M = 4.67$, SD = 2.06) and highest for suicide attempters ($M = 5.19$, SD = 1.67), who, as a group, reported spending approximately half the time experiencing images directly related to suicide when at their most depressed and despairing.

Content of Suicidal Imagery

Participants were asked about the presence of seven categories of imagery at times of crisis as well as the presence of fleeting or unclear images and 'other' images. Four of these categories related directly to death or suicide (images of a time you tried to harm yourself in the past, an image of planning or preparing to harm yourself or make a suicide attempt, an image of what might happen to you if you died and an image of what might happen to others if you died). Among those participants who reported no suicidality in the clinical assessment, 50% ($n = 5$) nevertheless reported one or more of these types of images at times of distress. Among those who reported prior suicidal ideation, 78% ($n = 7$) reported one or more of these types of images and among suicide attempters, the figure rose to 100% ($n = 8$).

Table 1 shows the number (and percentage) of participants reporting each category of suicide-related mental imagery at times of crisis, separated into those who did or did not report suicidality in the clinical assessment. Mann-Whitney U tests conducted to explore significant differences between these groups indicated that previously suicidal individuals reported a greater incidence of images related to 'planning or preparing to harm yourself or make a future suicide attempt' (77% versus 20%), $U = 37.00$, $Z = -2.80$, $p = 0.015$, with a trend towards an excess of images of 'what might happen to you if you died' (71% versus 30%), $U = 50.50$, $Z = -2.01$, $p = 0.08$, but fewer images of 'things that you were escaping from' (30% versus 90%), $U = 38.50$, $Z = -2.71$, $p = 0.02$.

Most Significant Imagery

Table 2 details the images described by participants as having been most significant during periods of crisis, the associated affect and the reported personal meaning of the images. As can be seen, there was considerable variability from person to person in the detail in which images were described as well as in their content and significance. Five participants (four female and one male; two non-suicidal, one ideator and two attempters) declined to describe their most significant image, although one provided data on the properties of the image. Three male participants (two non-suicidal, one ideator) reported that they had not experienced any imagery at times of crisis. This left image descriptions for 19 participants and data on comfort and distress for 20 participants. Here we describe several examples that illustrate different emerging themes.

A 'Flash Forward' to Future Suicidal Behaviour

Participant 35, who had a history of suicidal behaviour, describes a very detailed image of himself dying by suicide through a combination of overdose and hanging. The imagery is highly elaborated and multi-sensory including details of the surroundings, imagined motor actions (tying and tightening a noose) and auditory imagery of music playing. Interestingly, the participant describes how at the end of the imagined suicide there is a 'cinematic cut' to an image of his body hanging, undiscovered 6 months later, the meaning attached to this being that ultimately nobody cared. The participant reported that the images as a whole made him feel 'brilliant', that there was an end to suffering and that he came close to enacting the imagined attempt. Participants 3, 4, 11, 17, 21, 23, 27, 28 and 40 all describe images of imagined future suicidal acts, or the anticipation of such acts—'flash-forwards' to suicidal behaviour.

An Image Inspired by a Past Episode of Self-Harm

Participant 6 describes a flash-forward to an imagined overdose: being surrounded by pill packets, crushing up tablets and injecting them. This flash-forward resembled a prior suicide attempt in which he had injected in the same manner. He reported that the suicidal imagery he experienced made him feel bad, but also that the images made him feel that there was an option of what he could do if things got really bad and that he wanted an easy solution.

Preventative Images in Participants Without a Reported History of Suicidal Ideation or Behaviour

Several participants described imagery which appeared to act to reduce their desire to actually engage in self-harm or suicidal behaviour. These images were common in people who did not endorse suicidal ideation or

Table 2 (overleaf). Table showing most significant images at times of distress including associated affect and associated meaning

ID	Group	Gender	Content of image	Associated affect	Associated meaning/other information
2	Ideation	Female	Declined to describe most significant image		
3	Ideation	Female	In a 5 storey house, imaging getting onto the terrace, [jumping] I hit road and concrete, I imagine my brain splitting open like a pumpkin, seeing myself doing that, seeing myself flying down, hair and clothes flying backwards, head breaking into pieces, making a sound like a watermelon, a pop sound. The traffic stops and people scream, my mother comes out screaming, mother is crying, father is in shock, face so shattered that it is unrecognisable.	Made me feel that I was finally getting back at my parents Made me want to act on that image. Guilt	I experienced quite a lot of guilt at the time, it lasted a while. It [the image] started off rough, seeing myself jumping. It gradually got more and more detailed to the extent it was perfectly planned. I discussed it with my boyfriend at the time but it is quite a while since I imagined it.
4	Attempt	Female	Sitting in a lesson, watching myself running through the school gates, towards the cliffs, or thinking of different ways (to die by suicide)—I could get the train. Imagining afterwards how family would feel, seeing a picture in my mind's eye of how upset my family would be.	Hopeless and guilty. I wanted to do it but felt really bad that I should do. So unhappy—a way of escaping—I didn't want to kill myself but I didn't want to be here.	I just wanted it to be over, either to feel better, or not to be there anymore.
6	Attempt	Male	I picture just driving along and crashing the car, looking forward from my perspective, driving, traffic coming from the other way, turning the steering wheel into the oncoming traffic. Compared to how I feel now it's like a different person [imagining that]. A second one was picturing taking out pills—an image of me doing it and being surrounded by pill packets, crushing them up and injecting them. I imagined finding some kind of drug that would be there and could. . . .	Fuelled cycle of feeling bad and guilty, thinking about being gone, that it would be a waste but I didn't know how to get out of the cycle.	I didn't want suicide to hurt, that there was this option there if it got really bad. I wanted to find drugs, an easy solution. If I could find some sleeping pills or painkillers, it was tempting to use drugs It's similar to how I actually took an overdose—i.e. I injected in the same manner. I am surprised how I remember the details as it doesn't pop back into my mind now, I haven't told my counsellors.
8	No suic	Female	Declined to describe most significant image		
11	No suic	Female	Imagining the back of my wrist with cuts on it	Feeling like self-harming but knowing it wouldn't be helpful.	It was a reminder. It came back a few times, 2–3 times only.
12	No suic	Male	No imagery		
15	Attempt	Female	Walking down the street seeing my boyfriend with new girlfriend and walking through them because I am dead, a ghost	Happy	I loved him, it doesn't matter if he knew it or not Want to die Came back a few times, not a huge thing.

Table 2 (overleaf). (Continued)

ID	Group	Gender	Content of image	Associated affect	Associated meaning/other information
17	Ideation	Female	Very simple—me taking tablets washing them down with strong cider—several handfuls—on bed in bedroom, seeing my whole self and also within my body seeing myself lying on the bed, dead, but then thinking but what about, picturing someone finding me and trying to wake me up and who would ring [999].	Even more depressed and selfish, I'd get angry with myself—'you can't even kill yourself'. Self loathing	I cut myself or burned myself to punish myself 'you're bad', cutting hurt and took the whole thing [image] away, a form of distraction. I would have to do it in a painless way.
18	No suic	Female	Feeling image of parents, father comforting mother	Really sad and incredibly guilty	Image of them being supportive of one another It meant I should make sure that [suicide] doesn't happen
19	Ideation	Male	No imagery		
20	Attempt	Female	Didn't want to talk about imagery as too distressing		
21	Ideation	Female	Saw someone [me?] walking out into the sea, the moon in the sky, looking at the back of myself, then a piece of clothing floating on the water. Often when I walked across a bridge in town I imagined jumping, seeing a person jumping, not looking like me, just someone jumping.	Mixture of peaceful and panicky.	I might have seen it [the image of the sea] somewhere before—perhaps in the film 'The Piano'? It didn't have a particular meaning to me. I didn't want to act on it but I made very rash decisions at the time, anything was worth a try, I made irrational decisions, if I experienced suicidal thoughts I would make a rash decision to do something to make things real so as not to get into those thoughts. There was lots of acting out during those teenage years as a means of escape a way of getting away for a couple of hours.
22	No suic	Male	No imagery		
23	Ideation	Female	It's at a local railway station, a little station in X, not many people there, it's windy and cold. I wait there all day contemplating everything, I know at some point that day I am going to do it [jump]. It's like I am looking from behind me so I see my back. It's a still image, with people getting on and off the train.	Calming because I know it's nearly all over. That was my escape It made me want to be on my own, made me consider a different way of killing myself, e.g. hoarding pills. I never actually went to the railway [at that time].	The reason I was just sitting there was to find the best time to do it. So less people would be there and less people would see it. I didn't want to upset them

Table 2 (overleaf). (Continued)

ID	Group	Gender	Content of image	Associated affect	Associated meaning/other information
26	No suic	Female	Looking at my self in a hospital bed. People who were close to me around my bed. Dying. Who would be at the funeral, who would come? One of my ex- boyfriends hearing about the fact that I had died.	Gratification, getting revenge.	Wanting to escape from [physical] self, mounds of fat. Me being able to hurt everyone else in my life, to let them know that I was hurting and they could experience the same.
27	No suic	Female	[I imagined] what blood looked like, texture, how it felt when I did it [self-harmed]. Focus on whichever area I was cutting at the time, finding my knife testing it—watching out of own eyes, seeing blade drag across skin—how quickly blood would come out, thinking about actual sensation of blade & adrenalin to a much lesser degree. Really noisy in my head, cut my self—all went quiet—all noise released & rushed away, visual gratification—[this happened to a] much lesser degree in real life. [The imagery was] not enough to dispel new stuff [We think this means not enough to stop her from self-harming again]. Look of blood, looking at hands how it [the blood] dripped. What if I did do it badly enough what would I do?	Felt I deserved it, felt angry, no other way. Sometimes feels like I've given in—'you'll feel better' versus 'not a good thing'. Ashamed—how would mum feel? In some ways not exactly affirmation but reassurance that what I felt was real. Sometimes felt ashamed or annoyed I want to feel stronger.	How people would react, how parents would feel, how quickly. Felt bad, sensible bit of me thought do not think about it, as it will get engraved. If you are going to do this there must be something wrong. Sometimes made me want to do it again.
28	Ideation	Female	Image of having to cross a very busy road. Get off bike walking across road, I would look left, time appeared to slow down. All light & colours drained from image. Imagined melting into a car, bike would crumple into ground, I would hit car, car would stop & I imagined my self lying on car, side view, silent abrupt stop. I would shut self out of it & keep walking. Also I had images of drowning.	Felt very relieved—noise & busyness stressed me out, missing appointments would leave me loopy—it was comforting because noise of road was less & slowed down.	Sleeping—overriding thought was that I want everything to stop & slow down—everything is too fast. That would be an appealing option or the only option, it seemed much easier. When well I felt on top of emotions. Images take you by surprise, they were invasive, intrusive.
29	Attempt	Female	Declined to describe most significant images but provided data on image distress and comfort.		
30	No suic	Female	Image of a friend, I very often see images of friend's suicide, and of her funeral.	Touched a raw wound that I wanted to bolt from. It makes me want to cry. The image is always powerful and upsetting. Paralysed by images, they take over your life.	Suicide now, used to be ideas of my sister. The effect it would have on others—drive to not do it. I wanted to bolt from it, can't deal with it, didn't feel safe.

Table 2 (overleaf). (Continued)

ID	Group	Gender	Content of image	Associated affect	Associated meaning/other information
31	No suic	Male	Seeing my own funeral. My social friends and my family accepting each other & merging with each other and getting on because they are there for the same reason, short video, imagining the funeral telling people about my funeral. Parents would invite people even if they didn't like them because I liked them. Near end of image it gets brighter with more vivid colours. Pouring, raining heavily at the start, near end dry sunny & pleasant.	Quite good.	There must be a way of making that situation happen, must be other things to try there can be a consensus if there is a common purpose. Everyone is different but that brings us all together.
32	Ideation	Male	Dead in bed, looking at myself, dead white, in bedroom in bed. Very static. Predominant image was of dying/ being dead in bed. I am going to die here in one sense or another. Either die in literal sense or that person that I had been would cease to exist.	Depressed. But also comforting. It meant a termination.	Reminded me of only dead person I've seen who died in room in flat he shared with me. Occurred more than once.
35	Attempt	Male	In a deep wood, little chance of being found, fully leaved, summery dense, daytime dusky, see myself climbing the tree, tying rope to a branch above, putting the noose over my head and tightening it. I take huge overdose with alcohol & sit in tree thinking about things—verbal dialogue, hear this rewinding. Smell of woods, life accepting things, end of it, justification. The sun goes down, I fall unconscious, fall & hang. I see image of being there 6 months later, like a film cut, I found nobody cared. Idea—image of utopia—envy—not comforting seeing that others have got their wish. Music.	Brilliant. Peace and an end to suffering—sense of closure, not having to fight to be alive.	I wanted to act on it. Ultimate—no way it can fail. I got close to doing that, I would have done it. The image was very vivid, so vivid I experience it recurrently, not planning that is—no discussion—ultimate, will work, very peaceful.
36	No suic	Male	Declined to describe most significant image		
37	Attempt	Female	Trying to escape humdrum. Alternative to suicide—throw it up in the air Force self to think alternatives to suicide. Smoking & smoking drugs & drinking, go and live in Amsterdam. Imagine in mind eye, see scenes of places in Amsterdam.	Usually made me feel worse—not making it happen—procrastinating	Escape. Made me realise I didn't have to kill myself—[other options] would be less drastic. Thought about this a lot—faced with making choices about career, had respite from 9 to 5, going through—work out next move.
39	Ideation	Female	First world war landscape of trenches, grey & desolate, every footstep dragged by image—feeling of depression came. In the image [I am] 'shot down' look down at feet, because they were being pulled back. (Moving rather than static)	Depressed—fact that I would visualise it was a comfort.	[I tried to] get rid of it I did not try to block it out. Sort of shut down in. I had this image repeatedly.

Table 2 (overleaf). (Continued)

ID	Group	Gender	Content of image	Associated affect	Associated meaning/other information
40	Attempt	Female	Self harming – Looking at arms, couldn't see body (but connected), static image, see cuts on arms, own arms, fresh cuts, not bleeding. Exaggerated image of what I would actually do	Wanted to self –harm.	Self –harm. Repeated image.

behaviour in interview. For example, participant 31 described a detailed series of images of his own funeral, people gathering, being informed about the funeral, the weather in the image changing from rain at the start of the funeral to sunshine at the end. The meaning of the images related to the fact that the funeral brought together family and friends who were in conflict and indicated that consensus was possible through a sense of common purpose. The participant reported that the image made him feel quite good, but also made him feel that there must be some way of achieving this consensus other than through his death. Participants 11, 18 and 30 also describe imagery with meanings which appeared to reduce the desire to engage in suicidal behaviour.

Preventative Images in Participants with a History of Suicidal Behaviour

One participant, 37, reported that at times of crisis, she forced herself to imagine alternatives to suicide, which would provide a sense of escape, and repeatedly experienced imagery related to drug taking and drinking in Amsterdam. Interestingly, she reported that this imagery usually made her feel worse, but did make her realize that she did not have to die by suicide, having engaged in suicidal behaviour in the past.

Image Distress and Comfort at Times of Crisis

Mean levels of comfort, $M = 4.58$ ($SD = 2.53$), and distress, $M = 5.48$ ($SD = 2.60$), associated with suicidal imagery when experienced at times of crisis, were similar and moderate across the sample as a whole. However, comfort and distress ratings were highly negatively correlated, Spearman's $\rho = -0.70$, $p = 0.001$, indicating that image-related comfort and distress did not tend to coexist in the same participant. Indeed, although numbers were too small for statistical analysis, a comparison of means indicated that the relationship between comfort and distress may differ as a function of history of suicidality. Specifically, while those who did not report suicidal ideation or behaviour in the clinical assessment ($n = 6$) had

slightly higher levels of distress, $M = 4.92$, ($SD = 2.78$), than comfort, $M = 4.10$ ($SD = 2.44$), associated with suicide-related imagery, those with a history of suicide ideation ($n = 7$) or attempts ($n = 7$) reported higher levels of comfort (ideators, $M = 6.14$, $SD = 2.48$; attempters, $M = 6.00$, $SD = 2.75$) than distress (ideators, $M = 4.93$, $SD = 2.46$; $M = 3.93$, $SD = 2.67$).

Image Distress and Comfort and Worst-Point Suicidality

We computed the correlation coefficient between BSSw screening score and ratings of comfort and distress. This indicated that higher BSSw screening scores were associated with greater levels of comfort derived from suicidal imagery Spearman's ρ (20) = 0.54, $p = 0.015$, with a trend towards lower levels of distress, Spearman's ρ (20) = -0.38 , $p = 0.10$. For the 15 participants who completed the whole BSSw questionnaire, total BSSw scores were significantly correlated with both lower levels of distress from suicidal imagery, Spearman's ρ (20) = -0.55 , $p < 0.05$, and higher levels of comfort, Spearman's ρ (20) = 0.72, $p = 0.003$.

DISCUSSION

Previous work has suggested that individuals with a history of suicidal ideation or behaviour report the presence of powerful suicide-related mental imagery at times of crisis, referred to as 'flash-forwards' since they share some characteristics with the intrusive memories and flashbacks common in Post Traumatic Stress Disorder (PTSD) (Holmes et al., 2007). Understanding more about the features of such imagery is important since it may be overlooked during assessment of suicide risk and yet have implications for the likelihood that an individual will go on to engage in suicidal behaviour. Suicidal imagery, once experienced, is also likely to increase the future cognitive availability of suicide (Florentine & Crane, 2010) and hence the probability that future crises will become suicidal crises.

The aim of the current study was to replicate and extend the findings of Holmes et al. to a community sample of adults with a history of depression and without the confound of prior MBCT treatment.

The results indicated that the majority of participants had experienced images directly related to death or suicide, including around half of those who had not reported suicidality in the standard clinical assessment. Among those with a history of a suicide attempt, the figure rose to 100%. An analysis of the content of participants' most significant images suggested that more than half took the form of flash-forwards to imagined future suicidal behaviour. In one or two instances, flash-forwards were linked by the participant to actual episodes of self-harm, but more often they represented imagined suicidal acts that had not been attempted, or the contemplation of such acts. Interestingly, and novel to this study, several participants, most of whom did not report suicidal ideation or behaviour in interview, described images, which although related to death, self-harm or suicide, had an associated meaning, which led the images to act as a helpful *deterrent* to suicidal behaviour. The fact that suicide-related images had different meanings for those who did or did not report experiencing significant suicidal ideation or behaviour is particularly interesting and was also reflected in the observation that more severe worst-point suicidality was associated with greater image-related comfort and reduced image-related distress at times of crisis.

Although the findings are consistent with previous research, a number of limitations must be borne in mind when considering their significance. Most importantly, although the sample size is larger than that of Holmes et al. (2007) and benefits from the inclusion of participants from the community unselected for history of suicidal ideation or behaviour, and with little experience of CBT, numbers nevertheless remain small for comparisons of imagery between suicidal and non-suicidal groups. As a result, power is limited and the findings must be considered exploratory in nature. Rates of CBT were low, but a considerable proportion of the sample had experienced other forms of psychotherapy. We believe it is unlikely that such psychotherapy would have influenced the actual *experience* of suicidal imagery. However, it is quite possible that it may have increased participants' willingness to discuss their experiences of suicidal depression as well as the clarity with which they were able to delineate aspects of this experience. Although we believe MBCT and CBT may be particularly likely to act in this way, other forms of psychotherapy may have similar effects and it would certainly be of interest to examine differences between imagery in treated and untreated groups matched with respect to other clinical characteristics. The relatively small sample size and over-representation of women in our sample also precluded an analysis of

gender differences in patterns of suicidal imagery. However, given the fact that there are significant gender differences in non-fatal deliberate self-harm and suicide, exploring gender differences in the form that suicidal cognitions take is a potentially important area for future research.

In the absence of a very detailed history of the timing of occurrences of suicidal behaviour, it is not possible to delineate whether the imagery described by participants was experienced prior to or following suicidal acts. Therefore, it cannot be assumed from these cross-sectional data that suicidal imagery increases risk for subsequent suicidal behaviour, simply that the two phenomena appear to be associated. Equally, we did not ask participants to reflect on the origins of the suicidal images they experienced, although occasionally, a participant alluded to this (e.g., ID 21). It is possible that suicidal imagery that is generated spontaneously and without reference to external sources (such as the media or suicidal behaviour of others) may show different properties and patterns of association with other variables and this would be an interesting avenue for future research. We also asked participants to describe only the image that was most important or significant to them, and it is possible that a more comprehensive interview would have revealed multiple suicidal images for a number of participants, as was evident in the descriptions of participants 6, 21 and 28. Finally, in at least one instance (ID 27), it became apparent that a participant who reported that they had not experienced suicidal ideation or behaviour during the clinical assessment nevertheless had a history of habitual self-harm and also described images of self-harming. Definitions of suicidal and non-suicidal self-injury vary, and distinguishing the two is complex. Thus, although in this instance the participant might not have regarded their imagery as suicide related, they reported that while experiencing the image they thought 'what if I *did do it badly enough*, what would I do', which implied that imagery involved the consideration of more serious self-injury, leading us to classify it in this way. Future research would benefit from identifying and examining in more detail the nature of imagery in patients who habitually self-harm, as distinct from those who experience suicidal ideation or suicidal behaviour with clear intent as the imagery properties and functions may vary considerably between these groups.

Indeed, a recent study by Welch, Linehan, Sylvers, Chittams, and Rizvi (2008) investigated the emotional responses of patients with borderline personality disorder as they imagined scripts of previous self-injurious behaviour and suicide attempts. They found decreases in negative emotions following self-injury scripts, but no reductions in negative emotions following scripts of suicide attempts. This latter finding is in contrast to our observation that suicidal imagery tended to have

comforting effects in those participants with a history of more serious suicidality. One possible reason for the discrepancy is that the ratings of comfort and distress in the current study referred to the emotions experienced by participants at the time at which they had spontaneously experienced the suicide-related imagery, whereas the emotions in the Welch et al. study were elicited when participants were instructed to imagine such imagery in an experimental setting. Additionally, Welch et al. guided participants to imagine *actual* consequences of a suicide attempt while the spontaneously occurring imagery in our group might have been more strongly related to *intended* consequences of the attempt. We would hypothesize that if a suicidal image was viewed as comforting in the sense of providing a good escape (rather than only distressing), it may be more likely to promote the associated behaviour.

In this context, it is interesting to note that conversely some participants in our study experienced imagery related to death or suicide that appeared to hold meanings, which discouraged engagement in suicidal behaviour. In several cases, this involved consideration of the social context within which suicide takes place and in particular the suffering of others after a suicide. Such responses in which patients are able to take a wider perspective on the experience of suicidal images are likely to reduce their toxicity and may be achieved therapeutically by using imagery rescripting interventions to make the action more undesirable. However, in cases where suicidal imagery produces comfort by providing an escape from negative emotions, it is likely to be negatively reinforced. In his model of suicide, Joiner (2005) has suggested that in order to engage in lethal suicidal acts, an individual must first habituate to fear of pain and death. Repeatedly experiencing suicide related imagery may provide one such form of habituation and the reduction in distress and increase in comfort noted in participants with more severe worst-point suicidality is entirely consistent with such a model.

Altogether, the findings of the current study provide further evidence that suicidal imagery is prevalent and that its properties are closely associated with severity of suicidal episodes. Future research should be directed towards an examination of change in suicidal imagery and associated affect within patients, over time, in order to better clarify the types of imagery which should indicate greatest cause for concern, and ultimately, how best to ameliorate this.

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