Psychiatry Research 275 (2019) 304–309

Contents lists available at ScienceDirect

Psychiatry Research

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

Do suicide attempters and suicide ideators differ in capability for suicide?

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ARTICLE INFO

Keywords:
Interpersonal theory of suicide
Suicide ideation
Suicide attempt
Capability for suicide
Ideation-to-action

ABSTRACT

Suicide ideation is a prerequisite for suicide attempts. However, the majority of ideators will never act on their thoughts. It is therefore crucial to understand what differentiates those who consider suicide from those who attempt suicide. The aim of this study was to investigate the role of different aspects of capability for suicide (fearlessness about death, subjective pain tolerance, objective pain persistence) in differentiating suicide ideators from suicide attempters, single attempters from multiple attempters and recent attempters from distant attempters. A total of 308 psychiatric inpatients (53.6% female; age: $M = 36.92$, $SD = 14.30$) suffering from suicide ideation with or without lifetime suicide attempts were compared regarding fearlessness about death, subjective pain tolerance and objective pain persistence (assessed with a pressure algometer). No differences in fearlessness about death, subjective pain tolerance and objective pain persistence were found in suicide ideators vs. attempters, single vs. multiple attempters and recent vs. distant attempters. It might be presumed that fearlessness about death, subjective pain tolerance and objective pain persistence do not offer useful information for the differentiation between suicide ideators and attempters, however, there are several limitations to take into account. Further effort is needed to understand more clearly what differentiates suicide ideators from suicide attempters.

1. Introduction

Suicide ideation and behavior is highly prevalent in clinical populations (Bernal et al., 2007). Though suicide ideation is a prerequisite for suicide attempts, the majority of ideators will never act on their thoughts. It is therefore crucial to identify factors that differentiate those who consider suicide from those who attempt suicide. Indeed, Klonsky and May (2014) argued that an "ideation-to-action" framework should guide all suicide theory and research.

The first ideation-to-action-model of suicidal behavior that has established a considerable empirical foundation is the Interpersonal Psychological Theory of Suicide (IPTS; Chu et al., 2017; Joiner, 2005). The theory states that suicidal ideation emerges when individuals simultaneously experience thwarted belongingness (i.e., loneliness and lack of reciprocal care) and perceived burdensomeness (i.e., perceived liability to others and self-hate) and are hopeless that there is any possibility of improvement with regard to these states (e.g. Van Orden et al., 2010; Hagan et al., 2015). The theory further posits that suicidal behavior occurs only when suicidal ideation is present within the context of acquired capability. Acquired capability for suicide is said to comprise two dimensions: elevated pain tolerance as well as fearlessness of death and dying. Joiner (2005) proposes that the most direct route to acquire capability for suicide is by engaging in suicidal behavior (e.g. suicide attempts); however, one can also become less fearful of pain, injury and death through other painful and provocative events (e.g. combat exposure, childhood abuse). Chu et al. (2017) recently suggested to shift from the idea that capability for suicide is solely acquired to a broader concept which also considers potential genetic factors (cf. Smith et al., 2012). Therefore, subsequently we will refer to capability for suicide rather than acquired capability for suicide.

Other suicide theories (Klonsky and May 2015; O'Connor, 2011) agree on the importance of fearlessness about death and pain tolerance as a differentiating factor between individuals contemplating suicide and individuals attempting suicide or dying by suicide. Nonetheless, findings on differences in capability between suicide ideators and suicide attempters are heterogeneous: On the one hand, studies have found

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https://doi.org/10.1016/j.psychres.2019.03.038
Received 30 August 2018; Received in revised form 22 March 2019; Accepted 22 March 2019
Available online 23 March 2019
0165-1781/

that individuals with a history of suicide attempts exhibit higher levels of suicide capability than suicide ideators (Dhingra et al., 2018, 2015; Klonsky and May 2015; Smith et al., 2010), and that multiple attempters report higher capability than single attempters (Van Orden et al., 2008). On the other hand, recent studies found no evidence that suicide ideators and suicide attempters would differ regarding their capability – neither in a small online sample (Forrest and Smith, 2017), in a sample of patients suffering from psychosis (Heelis et al., 2016), nor in large student samples (Burke et al., 2018; Ren et al., 2018). Furthermore, depressed suicide attempters did differ from suicide ideators regarding their capability for suicide in the study by Smith et al. (2010), however, there were no differences found between healthy controls and suicide ideators or controls and suicide attempters regarding their suicide capability. Finally, non-attempters reported higher capability for suicide than psychiatric inpatients who attempted suicide within the last ten years in another study (Kene and Hovey, 2014).

Against the background of the theoretical and therapeutic significance of the distinction between ideators and attempters, further studies are required. Especially since the informative value of previous studies is limited by the following issues: (1.) various studies did not use a validated measure to assess capability for suicide (Kene and Hovey, 2014; Smith et al., 2010), (2.) pain tolerance was not recorded at all (Burke et al., 2018; Dhingra et al., 2015; Forrest and Smith, 2017; Smith et al., 2010) or only with single items (Ren et al., 2018), (3.) no study assessed objective pain tolerance or pain persistence and (4.) the group of suicide attempters was defined differently (e.g., lifetime suicide attempter vs. suicide attempts within the past 12 months).

The current study compared inpatients suffering from lifetime suicide ideation (*suicide ideators*) with inpatients who attempted suicide (*suicide attempters*). Furthermore, single and multiple attempters were compared as well as recent and distant attempters. Suicide ideation, fearlessness about death, subjective pain tolerance, objective pain persistence as well was painful and provocative events were chosen for group comparisons. Pain persistence, i.e. an individual`s willingness to persist from the onset of pain (pain threshold) to the maximum intensity of pain one can tolerate (pain tolerance), was chosen as an outcome measure, based on the notion that the ability to persist through pain to achieve a particular goal has pronounced relevance to the capability for suicide (Law et al., 2017).

On the background of the IPTS (Joiner, 2005), we expected suicide attempters to score higher on all of these measures - except for suicide ideation -, than suicide ideators. We also expected multiple attempters to score higher than single attempters on all of these measures due to the IPTS statement that suicidal behavior, particularly suicide attempts, lead to an increased capability for suicide. Given recent evidence on the relative stability of fearlessness about death and pain tolerance (Bryan et al., 2016; Velkoff and Smith, 2018) we finally explored the possibility that recent attempters, i.e. patients who attempted suicide within the last month, score higher on all of the above mentioned measures than distant suicide attempters, i.e. patients who attempted suicide > 1 month prior to the current inpatient stay (cf. Kene and Hovey, 2014).

2. Methods

2.1. Participants

The sample comprised 308 inpatients (53.6% female; age: $M = 36.92$, $SD = 14.30$) being admitted to a hospital due to severe suicide ideation or a recent suicide attempt. All patients, admitted to the seven participating hospitals in the period from September 2016 to February 2018 either following a suicide attempt or due to acute suicide ideation, were asked by a research assistant to participate in the study. One hundred fifty-one (28.4%) of the 531 inpatients who were addressed for participation declined to participate. The main reason for refusal of participation was that 79 (52.3%) inpatients saw themselves as too psychologically charged, to take part in the study. Thirty-five patients were excluded due to language problems or cognitive impairment and 37 patients missed their appointment, mostly because they were discharged.

The most common diagnoses according to the International Classification of Diseases (ICD-10; WHO, 1992) were affective disorders ($n = 154$; 65.81%), as well as neurotic, stress-related and somatoform disorders ($n = 40$; 17.09%) and disorders of adult personality and behavior ($n = 24$; 10.26%). Sixty-four (21.2%) patients reported current suicide ideation in the absence of lifetime suicide attempts, one hundred and ninety-one (62.0%) reported at least one lifetime suicide attempt. One hundred and ten (57.6%) patients reported multiple attempts ($M = 6.76$, $SD = 13.28$, Range: 2 to 100). Forty-seven patients (15.6%) reported either aborted or interrupted suicide attempts (cf. Posner et al., 2014) and were excluded from further analysis. This excluded group did not differ in age, $F(1296) = 2.21$, $p = 0.14$, gender, $\chi^2 = 3.48$, df $= 1$, $p = 0.06$, or primary diagnosis, $\chi^2 = 42.04$, df $= 44$, $p = 0.56$.

Prior to assessments, participants were informed about the purpose of the study, the voluntary nature of their participation, data storage and security. They gave written informed consent before participating. The study was approved by the responsible Ethics Committees.

2.2. Procedures

Data were collected in seven psychiatric hospitals in Germany. If patients had agreed to participate, the Self-Injurious Thoughts and Behaviors Interview (SITBI; Nock et al., 2007) and the “Diagnostisches Interview bei psychischen Störungen – Short version” (MINI-DIPS), a structured clinical interview with well-established reliability, validity, and patient acceptance (Margraf et al., 2017) were conducted by trained clinical psychologists. Afterwards questionnaires were presented in a paper-pencil version. Finally, pain persistence was assessed using a pressure algometer (see below). All participants already received professional help. Therefore, participants were informed to turn to the respective therapist in charge in case of acute suicide ideation.

2.3. Measures

2.3.1. Self-Injurious thoughts and behaviors interview (SITBI; Nock et al., 2007)

The SITBI is a structured interview that assesses the presence, frequency, and characteristics of a wide range of self-injurious thoughts and behaviors. Within the current analysis, the following items were used to assess a lifetime history of suicide attempts: “Have you ever made an actual attempt to kill yourself in which you had at least some intent to die?” (Item 36) and "How many suicide attempts have you made in your lifetime?" (Item 40). Good interrater- and retest-reliability as well as good convergent validity have been shown for the German version of the SITBI (Fischer et al., 2014).

2.3.2. Beck scale for suicide ideation (BSSI)

The BSSI (Beck and Steer, 2016) is a 21-item self-report measure that surveys suicidal symptoms within the last week on a 3-point severity scale. To assess suicide ideation the total sum of items 1 to 19 is used with higher scores indicating greater severity of suicide ideation. The BSSI has good internal consistency and convergent and discriminant validity (Beck and Steer, 2016). Internal consistency (Cronbach's alpha) in the present study was $\alpha = 0.86$.

2.3.3. German capability for suicide questionnaire (GCSQ)

The GCSQ (Wachtel et al., 2015, 2014) is an 11-item self-report measure based on the original version of the Acquired Capability for Suicide Scale (ACSS; Joiner et al., 2009). The GCQS comprises two scales; the first scale assesses fearlessness about death (GCSQ_FAD) with five items (e.g., “I am very much afraid to die”), the second scale assesses subjective pain tolerance (GCSQ_PT) with five items (e.g., “When

in pain, I clench my teeth and carry on."). Furthermore, the GCSQ contains a perceived capability item (GCSQ_PC: "I could kill myself, if I wanted to."). Items are answered on a Likert scale ranging from 1 (*I fully agree*) to 5 (*I do not agree at all*), with higher scores indicating greater fearlessness and/or pain tolerance. Internal consistency (Cronbach's alpha) was good for fearlessness about death $\alpha = 0.87$ and acceptable for pain tolerance $\alpha = 0.73$.

2.3.4. Painful and provocative events scale (PPES)

The German version of the PPES (Teismann et al., 2015) comprises two subscales assessing *passive* painful and provocative events (i.e. physical and sexual abuse) with 4 items and *active* painful and provocative events (e.g. rock climbing, gun shooting) with 8 items. All items are rated on a 5-point Likert scale ranging from 1 (n*ever*) to 5 (m*ore often than 20)*. Internal consistency was $\alpha = 0.69$ for passive PPE and $\alpha = 0.67$ for active PPE.

2.3.5. Pain algometer

To assess pain persistence (the difference between pain tolerance and pain threshold) a Wagner Force Ten FDX Compact pressure algometer was used. The pressure algometer was applied on the nail of the index finger of the dominant hand and pressed with a constant pressure level of 4 kgs. Participants were instructed to say "pain" when they first experienced pain (*pain threshold*) and to say "stop" when the pain was too intense to continue (*pain tolerance*). At that point, the study assistant immediately released the pressure. The study assistant stopped the assessment after four minutes, if participants did not experience pain or did not want to end the pressure by themselves. *Pain persistence* was calculated by subtracting pain threshold (in seconds) from pain tolerance (in seconds), thereby indexing how long each individual was willing to tolerate the pressure after the point at which they first identified the sensation as pain.

2.4. Statistical analyses

Statistical analyses were conducted using the statistical analysis program IBM SPSS Statistics 24 (IBM Corp, 2016). Differences between groups (lifetime suicide ideators vs. attempters; single vs. multiple attempters; recent attempters vs. distant attempters) were analyzed using one-way ANOVAs. Assuming a medium-sized effect, an alpha error level of 5%, two groups, and a (minimum) sample size of $n = 190$, the test power was $1 - \beta \geq 0.92$.

3. Results

Descriptive statistics for each measure as well as group comparisons are presented in Table 1. Suicide ideators did not differ from suicide attempters in age, $F(1251) = 0.787$, $p = 0.37$, gender, $\chi^2 = 1.380$, df = 1, $p = 0.24$, or primary diagnosis, $\chi^2 = 44.810$, df = 39, $p = 0.24$. Suicide ideators and suicide attempters did not differ regarding any of the capability for suicide variables or their intensity of suicidal ideation (see Table 1), except for the perceived capability item: Suicide attempters reported higher perceived capability than suicide ideators. Furthermore, suicide attempters reported more experience with passive painful and provocative events than suicide ideators.

Single attempters did not differ from multiple attempters regarding age, $F(1186) = 1.738$, $p = 0.19$, gender, $\chi^2 = 1.853$, df = 1, $p = 0.17$, or primary diagnosis, $\chi^2 = 36.849$, df = 33, $p = 0.30$. Multiple attempters reported more experiences with passive painful and provocative events (such as physical or sexual abuse) and more suicidal ideation than single attempters (see Table 1). However, both groups did not differ regarding any of the other variables.

Recent attempters and distant attempters did not differ in age, $F(1185) = 0.345$, $p = 0.56$, gender, $\chi^2 = 3.530$, df = 1, $p = 0.06$, or primary diagnosis, $\chi^2 = 37.249$, df = 33., $p = 0.28$. Recent attempters reported less fearlessness about death than distant attempters (see

Table 1
Group differences in acquired capability factors and suicide status.

	Suicide Ideators ($n = 64$)	Suicide Attempters ($n = 191$)[a]	*F*-Statistics	Single Attempters ($n = 80$)[a]	Multiple Attempters ($n = 110$)[a]	*F*-Statistics	Recent Attempters ($n = 118$) [a]	Distant Attempters ($n = 71$) [a]	*F*-Statistics
Variable	*M* (*SD*)	*M* (*SD*)		*M* (*SD*)	*M* (*SD*)		*M* (*SD*)	*M* (*SD*)	
BSSI	13.16 (8.82)	15.00 (9.95)	$F(1247) = 1.69$	12.41 (9.58)	17.00 (9.85)	$F(1184) = 10.14^{**}$	13.50 (10.40)	17.57 (8.76)	$F(1183) = 7.41^{**}$
GCSQ_FAD	15.86 (5.69)	16.31 (6.23)	$F(1247) = 0.25$	16.38 (6.11)	16.32 (6.34)	$F(1184) = 0.00$	15.46 (5.93)	17.82 (6.52)	$F(1183) = 6.35^{*}$
GCSQ_PT	17.48 (4.42)	17.77 (4.68)	$F(1247) = 0.18$	18.24 (4.58)	17.39 (4.76)	$F(1184) = 1.49$	18.05 (4.78)	17.24 (4.55)	$F(1183) = 1.26$
GCSQ_PC	3.71 (1.41)	4.08 (1.23)	$F(1247) = 3.99^{*}$	4.12 (1.20)	4.06 (1.27)	$F(1184) = 0.09$	4.08 (1.23)	4.12 (1.23)	$F(1183) = 0.03$
Active_PPE	16.01 (5.61)	15.57 (6.01)	$F(1246) = 0.26$	15.13 (5.53)	15.90 (6.37)	$F(1183) = 0.74$	15.21 (5.55)	16.16 (6.77)	$F(1182) = 1.07$
Passive_PPE	7.74 (3.39)	9.16 (4.39)	$F(1246) = 5.45^{*}$	7.41 (3.23)	10.49 (4.69)	$F(1183) = 25.15^{***}$	8.79 (4.15)	9.71 (4.71)	$F(1182) = 1.92$
Pain Persistence	67.14 (67.40)	67.02 (65.77)	$F(1194) = 0.00$	63.86 (66.00)	69.33 (65.90)	$F(1145) = 0.25$	63.01 (65.75)	73.67 (64.75)	$F(1144) = 0.83$

Note: BSSI_Sum = Beck Scale for Suicide Ideation; GCSQ-FAD = German Capability for Suicide Questionnaire – Fearlessness about death; GCSQ-PT = German Capability for Suicide Questionnaire – Pain Tolerance; GCSQ-PC = German Capability for Suicide Questionnaire – Perceived Capability; Active_PPE: Active Painful and Provocative Events; Passive_PPE: Passive Painful and Provocative Events;.
$p < 0.001^{***}$, $p < 0.01^{**}$, $p < 0.05^{*}$.
[a] Information on lifetime suicide attempts and date of last suicide attempt was missing from one/two participant/s. Therefore, sample sizes differ in the different group comparisons.

Table 1). Controlling for the number of lifetime suicide attempts did not change this result: $F(1181) = 5.971$, $p = 0.02$. Finally, recent attempters reported less suicidal ideation than distant attempters.

Finally, an extreme group comparison was conducted comparing suicide ideators with multiple attempters. Suicide ideators and multiple attempters did not differ in age, $F(1171) = 0.085$, $p = 0.77$, gender, $\chi^2 = 2.536$, df $= 1$, $p = 0.11$, or primary diagnosis, $\chi^2 = 37.912$, df $= 32.$, $p = 0.22$. Groups did not differ regarding all of the capablity for suicide constructs: fearlessness about death, $F(1166) = 0.223$, $p = 0.64$, pain tolerance, $F(1166) = 0.013$, $p = 0.91$, pain persistence, $F(1132) = 0.034$, $p = 0.85$ and they also did not differ concerning their perceived capability, $F(1166) = 2.756$, $p = 0.10$ and their experiences with active painful and provocative events, $F(1166) = 0.013$, $p = 0.91$. However, multiple suicide attempters reported more suicidal ideation, $F(1166) = 6.410$, $p = 0.01$ and more experiences with passive painful and provocative events, $F(1166) = 16.344$, $p = 0.00$.

4. Discussion

The current study examined group differences in capability for suicide among suicide ideators and suicide attempters. In various psychological models, suicide capability is considered significant for the question of whether a person puts suicide ideation into action (Joiner, 2005; Klonsky and May 2015; O'Connor, 2011). Contrary to expectations, however, there were no differences regarding fearlessness about death, subjective pain tolerance and objective pain persistence between (1.) suicide ideators and suicide attempters, (2.) single and multiple attempters as well as (3) suicide ideators and multiple attempters. Recent attempters and distant attempters did not differ in subjective pain tolerance and objective pain persistence; however, they reported less fearlessness about death than distant attempters. If one follows Joiner`s (2005) assumption that there should be an incremental increase in suicide capability depending on suicidal behavior, a difference in all of the aforementioned variables could have been expected.

A moderate difference between suicide ideators and suicide attempters was found exclusively with regard to perceived capability (cf. Wachtel et al., 2014). As such, suicide attempters answered more affirmatively to the item “I could kill myself, if I wanted to” than suicide ideators. In a similar vein, Wachtel et al. (2014) as well as Rimkeviciene et al. (2017) found the “perceived capability” item to be the sole predictor of sucide attempt status (lifetime suicide attempts vs. non lifetime attempts) in a community and a student sample. Since attempters already acted on their thoughts, this finding does not seem overly surprising. Nonetheless, it might be an important question to consider in suicide risk assessments. Furthermore, the predictive relevance of the “perceived capability” for future suicide attempts should be examined in prospective studies. Differences between (multiple) suicide attempters and suicide ideators as well as between multiple and single attempters were furthermore found regarding passive painful and provocative events, i.e. childhood physical or sexual abuse. This finding is consistent with a large number of studies showing a close association between childhood maltreatment and suicidal behavior (Zatti et al., 2017) and results of a meta-analysis by May and Klonsky (2016) who found that sexual abuse history was somewhat more common among suicide attempters compared to sucide ideators. Of note, however, all statistically significant differences found in the current study were of relatively small magnitude.

In contrast to what one might expect, recent attempters exhibited less suicide ideation and less fearlessness of death than distant attempters. A cathartic effect of attempted suicide has regularly been suggested (e.g. Safarti et al., 2003) and might underlie lower suicide ideation scores in recent attempters compared to distant attempters in the current study. Furthermore, lower fearlessness scores in recent attempters might be explained in terms of a transient sensitization following a potentially painful and fearsome suicide attempt (cf. Bill et al., 2012). However, these are speculations that require detailed investigation in future studies.

In general, the current findings complement previous studies showing that only few variables distinguish between suicide ideators and suicide attempters (May and Klonsky, 2016; Saffer and Klonsky, 2018; Teismann et al., 2018) and that suicide capability does not differentiate between suicide ideators and suicide attempters (e.g. Burke et al., 2018; Forrest and Smith, 2017; Ren et al., 2018). At the same time, the current findings contrast with other studies where differences in fearlessness about death were found between suicide attempters and suicide ideators (Dhingra et al., 2018, 2015; Klonsky and May 2015; Smith et al., 2010). However, either a non-clinical sample was examined (Dhingra et al., 2018, 2015; Klonsky and May 2015) or an unvalidated measure of acquired capability was used (Smith et al., 2010) in these studies. Future studies on high-risk samples are therefore required. However, it has to be underlined that fearlessness about death and pain tolerance might be important for the differentiation of ideators and attempters; yet perhaps, only in conjunction with other variables, such as suicide intent or access to and familiarity with lethal means (Khazem and Anestis, 2016). Therefore, it might be misleading to conduct group comparisons with regard to individual variables to distinguish ideators from attempters. Attesting this idea, Walsh et al. (2017) achieved good accuracy in predicting suicide attempts using machine learning, a method that can consider hundreds of influencing factors and their interaction at the same time. Furthermore, it may well be that the ability to overcome one´s fear about death and pain about dying is strongly influenced by short-term situational factors (e.g., alcohol consumption, dissociative states; cf. Smith and Cukrowicz, 2010) and less static than originally assumed (cf. Bryan et al., 2016).

Under a clinical perspective, it remains unclear whether the exploration of an individual's capability for suicide is useful to predict if he or she is going to act on the suicidal thoughts or not. Nevertheless, past suicide attempts and experiences with painful and provocative events have to be assessed as part of a suicide risk assessment (Chu et al., 2015). Furthermore, the strategy of means restriction as a central therapeutic strategy in dealing with assumed suicide capability (Joiner et al., 2009) remains an absolutely compelling method in the treatment of suicidal patients. In general, it has to be emphasized that acquired capability enables the implementation of suicidal desires, but is not itself a cause of suicidal behavior: Many people wish to die but do not possess the ability to attempt suicide. Still others have the ability, but not the desire to die. In both cases, suicide attempts and suicides will not occur according to the IPTS. For this reason, the interplay of perceived burdensomeness, thwarted belongingness, hopelessness about both states, capability of suicide and other risk factors and warning signs must always be considered together in risk assessment and treatment of suicidal patients (Chu et al., 2015).

It is important to take into account the study`s limitations. First, the current results stem from a cross-sectional study of nonfatal suicide attempts; thus, neither causality nor generalizability to suicides can be determined. Prospective studies are needed to determine if capability for suicide may predict the transition from ideation to action over time. Second, we failed to capture some components of the capability for suicide. Specifically, Klonsky and May (2015) have suggested that access to lethal means (practical capacity) as well as dispositional capacity may be components of capability for suicide. As such, practical capacity has been found to differentiate between ideators and attempters in two recent studies (Dhingra et al., 2018; Klonsky and May 2015), whereas studies on dispositional capacity, i.e. variables that are driven largely by genetics, represent an understudied area in the context of capability for suicide (cf. Wannemüller et al., submitted). Future studies incorporating all these aspects of capability for suicide are therefore highly warranted. Third, pain persistence was assessed using a rather mild form of pain induction. Guidelines of the responsible ethics committees allowed pain persistence to be tested only in one single trial and to renounce increasing pressure intensities (cf. Law et al., 2017). Therefore, it remains unclear whether the expected group differences

could have been demonstrated, if a different type of pain induction had been used. Fourth, the use of a high risk sample may have limited variability in underlying suicide risk. This point of criticism applies in particular to the comparison of suicide ideators and (multiple) suicide attempters within the current study, whereas it does not apply to the comparison of single and multiple attempters and of recent and lifetime attempters. Fifth, test power of the current study was sufficient to detect medium-sized effects, however it was underpowered to detect small-sized effects. Replication in a larger sample is therefore necessary to be able to detect possible small effects in the expected direction. Finally, as part of a more thorough presentation of the IPTS (Van Orden et al., 2010), it is emphasized that fearlessness about death is particularly relevant for suicidal intent whereas pain tolerance (in combination with suicidal intent) is responsible for lethal or near lethal attempts. In the present analysis, however, all suicide attempts - regardless of their lethality - were taken into account. Future analyses should therefore differentiate more precisely between less lethal and more lethal suicide attempts in order to allow a precise examination of the specific assumptions of the IPTS.

Taken together, our findings suggest that different aspects of the capability for suicide may not distinguish between suicide ideators and suicide attempters. Therefore, further effort is needed to refine the concept of suicide capability and to understand more clearly what differentiates suicide ideators from suicide attempters.

Funding

The study was funded by a grant from the German Research Society (Deutsche Forschungsgemeinschaft, DFG) to Heide Glaesmer (GL 818/3-1), Thomas Forkmann (FO 784/3-1), Tobias Teismann (TE 747/4-1) and Georg Juckel (JU 366/8-1).

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.psychres.2019.03.038.

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