

SELF-INJURIOUS THOUGHTS AND BEHAVIORS QUESTIONNAIRE-NONSUICIDAL (SITBQ-NS): DEVELOPMENT AND VALIDATION OF A REVISED VERSION OF THE SELF-INJURIOUS THOUGHTS AND BEHAVIORS INTERVIEW (SITBI) FOR THE SELF-ASSESSMENT OF NONSUICIDAL SELF-INJURY

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Abstract

Objective: Despite the fact that nonsuicidal self-injury (NSSI) has become an important issue among clinicians and researchers all over the world, in Italy there is still a lack of instruments able to assess it. The objective of this study is to develop and validate the Self-Injurious Thoughts and Behaviors Questionnaire-Nonsuicidal (SITBQ-NS), a self-report measuring the whole NSSI spectrum, that is, from ideation to act.

Method: SITBQ-NS was administered to 51 adult patients recruited from public mental health services together with the Millon Clinical Multiaxial Inventory (MCMI-III), the Beck Hopelessness Scale (BHS), the Deliberate Self-Harm Inventory (DSHI), and the Nepean Dysphoria Scale (NDS-I).

Results: SITBQ-NS demonstrated excellent internal consistency ($\alpha=0.983$). NSSI thoughts were present in 56.9% of participants, and NSSI behaviors were present in 49% of participants. Similar NSSI functions were found among participants, except for "To end suicidal ideation," which was more common among those having NSSI thoughts (34.1%) than those exhibiting NSSI behaviors (21.6%). There were strong positive correlations between the scores of SITBQ-NS and the scores of BHS, DSHI and NDS-I. Also, there were weak to strong positive correlations between the scores of SITBQ-NS and some MCMI-III scales.

Conclusions: The SITBQ-NS shows very good psychometric properties, being a useful and easy-to-handle instrument for measuring the whole NSSI spectrum. Further research in clinical samples is needed.

Key words: NSSI, self-injurious ideation, self-injurious behavior, clinical diagnosis

Declaration of interest: none

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Introduction

Non-suicidal self-injury (NSSI) is the "deliberate destruction of one's body tissue without suicidal intent and for purposes not socially sanctioned" (Klonsky et al. 2013, p. 231). The NSSI is extremely widespread among the clinical and nonclinical population. Estimated rates among the adult population show that approximately 4-6% of the nonclinical population engages in self-injury behaviors (Klonsky 2011), while the rates reach 19-25% among the clinical population (Briere and Gil 1998). The age of onset is usually around 13-14 years old; NSSI shows its maximum diffusion during adolescence (Klonsky and Muehlenkamp 2007): 13.9% of the nonclinical adolescent population engage in self-harming behaviors (Ross and Heath 2002), and the percentage reaches 50.6% among the clinical adolescent population (Nock and Prinstein 2004). Moreover, recent studies highlight that an early onset of NSSI could be indicative of a more severe disorder (Ammerman et al. 2018).

The most used method of self-harming is cutting, observed in 70% of patients (Klonsky and Muehlenkamp 2007). Other methods are burning, self-hitting, scratching to the point of bleeding, and skin picking (Hamza et al. 2012). It is a common thought that self-

injury is more widespread among female adolescents; however, the rates seem to be similar between males and females (Klonsky and Muehlenkamp 2007). Rather, the gender difference seems to be related to the methods: females are more likely to cut themselves, males to hit or burn themselves (Klonsky and Muehlenkamp 2007).

Clinicians have long considered NSSI only a criterion for diagnosing borderline personality disorder (BPD). Scholars have been evaluating the creation of a separate category for NSSI; however, research in this direction has begun only recently (Zetterqvist 2016, Selby et al. 2012) and NSSI still needs further study in the DSM-5 (APA 2013). One of the greatest obstacles in the study of NSSI is the variety of phenomena included under the NSSI common denominator, thus making their classification and assessment very difficult.

In an attempt to classify them, Nock (2010) recently proposed the inclusion of all those phenomena under the category of "self-injurious thoughts and behaviors" (SITB) (Nock 2010). SITBs can be divided into suicidal thoughts and behaviors (with intent to die) and non-suicidal thoughts and behaviors (with no explicit intent to die). Suicidal SITBs include three types of phenomena: suicidal ideation, i.e. the thought of killing oneself; suicidal plan, related to the consideration of a specific way of ending one's life; and suicidal attempt

(Nock 2010). Non-suicidal SITBs also include three categories: suicidal gesture, which consists of making someone believe that one wants to die without actually having the intent to; self-injurious thoughts, related to the thought of hurting oneself; and self-injurious behaviors, divided into mild, moderate and severe (Nock 2010).

These different types of self-injury, thoughts or behaviors, are conceptualized as different points on the same continuum. The assumption is that there is a link between suicide and NSSI both on the level of thought and behavior, forming a basis for what can be called the self-injurious spectrum. From this theoretical basis, a semi-structured interview has been created for the evaluation of self-injurious thoughts and behaviors, called the Self-Injurious Thoughts and Behaviors Interview (SITBI) (Nock et al. 2007). The SITBI is the only instrument currently used to measure NSSI as a psychopathological spectrum, from ideation to behavior, from presence to frequency, from motivation to development and maintenance of behaviors and ideation (Nock et al. 2007). The aim of this study is to test the psychometric properties of a modified version of the SITBI for the evaluation of the NSSI spectrum: the Self-Injurious Thoughts and Behaviors Questionnaire-Nonsuicidal (SITBQ-NS) (D'Agostino et al. 2016, D'Agostino et al. 2017).

Method

Participants

The SITBQ-NS was administered to a total of 51 patients (27 men and 24 women; mean age=36.31; SD=11.83) recruited from residential or semi-residential treatment facilities and mental health services. The inclusion criteria were the following: a) age between 18 and 65 years old and b) current or past stay in a facility or program with therapeutic aim (mental health services, residential or semi-residential facilities). Individuals with medical and/or neurological conditions, acute psychotic symptoms, episodes of acute self-injury that required immediate and urgent psychiatric intervention, mental disability (I.Q. < 80), current alcohol or drug dependence, or poor knowledge of the Italian language have been excluded.

All participants voluntarily participated in the study and gave written informed consent. The study has been approved by the Local Ethics Committee.

Measures

A total of 5 self-report instruments have been administered: the Self-Injurious Thoughts and Behaviors Questionnaire-Nonsuicidal (SITBQ-NS), the Millon Clinical Multiaxial Inventory-III (MCMI-III), the Deliberate Self-Harm Inventory (DSHI), the Beck Hopelessness Scale (BHS), and the Nepean Dysphoria Scale-Italian (NDS-I).

SITBQ-NS (D'Agostino et al. 2016, D'Agostino et al. 2017) is a modified version of SITBI (Nock et al. 2007) that measures nonsuicidal self-injurious ideation and behavior. The instrument is composed of 28 items divided into two modules of 14 items each. The two modules investigate the same dimensions, i.e. the presence of thoughts and/or self-injurious behaviors, the onset, the most recent episodes, the concurrent use of alcohol or drugs during the act or ideation, the probability of engaging in or repeating self-injurious behaviors, the methods and the motivations. The

SITBQ-NS provides 3 scores: Self-Injurious Thoughts (SIT), Self-Injurious Behaviors (SIB), and Self-Injurious Spectrum (SIS).

MCMI-III is a self-report questionnaire created by Millon (1994) to investigate personality disorders and clinical syndromes in psychiatric populations. It is composed of 175 true/false items that form a total of 28 scales: 11 Personality Disorder Scales, 3 Severe Personality Pathology Scales, 7 Clinical Syndrome Scales coordinated with DSM-IV Axis I disorders, 3 Severe Syndrome Scales, and 4 Correction Scales (Millon 1994). The scales use base-rate scores that vary from 0 to 115. The internal consistency of scales varies in a range of .66 for the Compulsive Scale to .99 for the Major Depression Scale. Twenty scales show scores higher than .80 (Millon 1994). The Italian version also shows good psychometric properties (Zennaro et al. 2008).

DSHI (Gratz 2001) is a self-report instrument for measuring self-harm on the behavioral level. It is composed of 17 items, each one measuring frequency, severity and duration related to a specific self-harming method. The original instrument provides two scores: a dichotomous variable, related to the presence/absence of self-harming behavior, and a continuous variable, related to the frequency of self-harming behaviors. The internal consistency with Cronbach's alpha has been calculated with respect to the dichotomous variable, and it shows a result of .82 (Gratz 2001). During the application of DSHI in the Italian context, the dichotomous variable has been replaced with the score related to the number of self-harming behaviors (Cerutti et al. 2012). The internal consistency of the Italian version is lower than the original one ($\alpha=.68$), but still adequate (Cerutti et al. 2012).

BHS (Beck et al. 1974) is an instrument containing 20 true/false items that aims to measure hopelessness, the cognitive component of depression. The questionnaire is used to evaluate suicidal ideation and has proved to be a valid predictor of future suicidal attempts (King et al. 2014). The total score varies from 0 to 2; a high score identifies patients with a negative attitude towards the future (Huth-Bocks et al. 2007). The internal consistency of the instrument is excellent ($\alpha=.93$). The Italian version was developed by Pompili and colleagues (2007), and it shows good psychometric properties, with Cronbach's alpha equal to .73.

NDS-I is a self-report questionnaire originally developed by Berle and Starcevic (2012) to measure the severity of dysphoria. The 24 items are rated on a 5-point Likert scale. The points are given on the basis of 4 subscales obtained from factor analysis: irritability, discontent, interpersonal resentment, surrender, and a point for total dysphoria. The instrument has excellent internal consistency ($\alpha=.91$) (Berle and Starcevic 2012). The Italian version of the test has been administered to a sample of university students and shows excellent internal consistency ($\alpha=.949$) (D'Agostino et al. 2016).

Procedure

The SITBQ-NS validation procedure has been carried out in 2 steps: In the first step, we analyzed the translation of SITBI and the development of the revised version (SITBQ-NS), and, in the second step, we analyzed the psychometric validation of SITBQ-NS.

Step 1. From the cross-cultural adaptation process of the SITBI to the development of the SITBQ-NS

The SITBI, in its original form, has been translated

and adapted following the steps described in the guidelines for cross-cultural validation of instruments suggested by Beaton and colleagues (2002). Firstly, the SITBI was fully translated by two Italian native speaker translators (*forward translation*). One translator had medical or psychological background knowledge, while the other was a native translator. Two different Italian versions (T1 and T2) of the instrument were formulated. There was a consensus meeting in which the two translators synthesized the results of the two versions, formulating a third one (T12). This T12 version was translated again into English by two native speaker translators (*back translation*) without medical or psychological background knowledge. The next phase was the quality check, in which an expert committee discussed critical points and differences among the translation versions. The last phase was the pre-test, in which the final version was tested on a representative sample with the aim of verifying its comprehensibility.

Step 2. Analysis of the psychometric properties of the SITBQ-NS

Statistical analysis was carried out with the aim of establishing the psychometric properties of the instrument: internal consistency has been established through Cronbach's coefficient α , and the convergent validity was measured using the Spearman Brown non-parametric correlation coefficient and calculated on the SITBQ-NS scores and other self-report instruments. All statistical analysis was conducted using SPSS for iOS, version 21.0.

Results

Step 1. From the cross-cultural adaptation process of the SITBI to the development of the SITBQ-NS

No specific problems were found during the cross-cultural adaptation of the SITBI. The translation was easily carried out, as the English formulations were extremely simple and direct, and no critical issues have emerged. The preliminary version was administered to a sample group of 30 students aged between 15 and 21 ($M=19.18$), with the aim of verifying the comprehensibility of the test. This specific age range was chosen because it was similar to the one used by Nock and colleagues (2007), i.e. 12-19. The questionnaire was administered to the participants, who also answered some questions on their comprehension of the items. After examining the comments of the participants, no critical issues emerged and the final version of the SITBI has been sent to the authors for final approval.

Remarkable difficulties emerged during the administration phase. Most of the directors of the services made some objections related to the straightforward nature of the questions, and to the fact that we recruited both adolescent and adult participants. Those reasons led to the decision to convert the instrument into a self-report questionnaire. However, self-report instruments for measuring suicidal thoughts and behaviors such as the BHS (Pompili et al. 2007) are already available in Italy, and there are no similar instruments for NSSI; only the SITBI part referring to nonsuicidal self-injurious thoughts and behaviors was retained and adapted.

The final version of the SITBQ-NS consists of a 28-item instrument divided into two modules: the first

one investigates nonsuicidal self-injurious thoughts and the second one analyzes nonsuicidal self-injurious behaviors. The modules, as in the SITBI, are to be filled completely only if the answer to the first question is affirmative ("Have you ever had thoughts of purposely hurting yourself without wanting to die?" for the self-injurious thoughts part; "Have you ever actually engaged in NSSI?" for the self-injurious behaviors part). Some of the items have gone through reformulation to syntactically fit in the answer options; others have been modified and some have been enriched. Open-ended questions have been removed. The answers refer to the Likert scale, point range 3 to 5. The nonsuicidal self-injurious thoughts section explores the frequency, at present and over the lifetime, the intensity, the concomitant use of drugs, the duration of the thoughts, the influence of friends, and the probability of turning thoughts into acts. The nonsuicidal self-injurious behaviors section investigates the same areas and verifies if the patient received medical treatment for the injuries. Both modules provide a list of 10 self-harm methods generally used by patients and 30 functions drawn by different theoretical explanations of self-injury (Klonsky 2007, Nock and Prinstein 2004, Rossi Monti and D'Agostino 2009). The administration of the SITBQ-NS in its complete form (i.e. if both modules are completed) takes approximately 15/20 minutes.

Step 2. Analysis of the psychometric properties of the SITBQ-NS

Regarding nonsuicidal self-injury, 56.9% of the participants thought of purposely hurting themselves without the intent to die at least once in their life, while 49% actually engaged in NSSI at least once in their life. Consequently, 7.9% of the participants have only thought of hurting themselves without engaging in NSSI.

The most common motivations related to NSSI thoughts are the following: "to calm down" (41.2%), "to express anger towards myself or others (partner, family, etc.)" (39.2%), "to alleviate the emotional pressure I feel inside me at certain times" (37.2%), "to alleviate anxiety, frustration, anger, or other oppressive feelings" (35.3%), "to end suicidal thoughts" (31.4%), and "to express emotional distress I am experiencing" (31.3%).

The most common motivations related to NSSI behaviors are the following: "to calm down" (35.3%), "to express anger towards myself or others (partner, family, etc.)" (33.4%), "to alleviate the emotional pressure I feel inside me at certain times" (33.3%), "to alleviate anxiety, frustration, anger, or other oppressive feelings" (31.4%), "to express emotional distress I am experiencing" (31.4%), and "to punish myself" (29.4%). The motivation "to end suicidal thoughts," which is the fifth most reported motivation within the thought module, is lower in the behaviors section (21.6%).

The internal consistency of SITBQ-NS is excellent ($\alpha=.983$). Regarding correlations, SITBQ-NS scores correlate with the other self-report instruments as follows (**table 1**): All three scores show moderate, positive and significant correlations with the BHS score (SIT: $\rho=0.594$, $p<0.01$; SIB: $\rho=0.548$, $p<0.01$; SIS: $\rho=0.585$, $p<0.01$). All scores show strong, positive and significant correlations with the score "number of self-injurious behaviors" (SIT: $\rho=0.755$, $p<0.01$; SIB: $\rho=0.799$, $p<0.01$; SIS: $\rho=0.768$, $p<0.01$) and with the score "frequency of self-injurious behaviors" (SIT: $\rho=0.783$, $p<0.01$; SIB: $\rho=0.787$, $p<0.01$; SIS: $\rho=0.775$, $p<0.01$) of the DSHI.

Table 1. Correlations between SITBQ-NS and DSHI, BHS, and NDS-I

	Spearman-Brown's Correlation		
	Self-Injurious Thoughts SITBQ-NS	Self-Injurious Behaviors SITBQ-NS	Self-Injurious Spectrum SITBQ-NS
1. Number of Self-Injurious Behaviors DSHI	.76**	.80**	.77**
2. Frequency of Self-Injurious Behaviors DSHI	.78**	.79**	.78**
3. Beck Hopelessness Scale BHS	.59**	.55**	.59**
4. Irritability NDS-I	.63**	.65**	.63**
5. Discontent NDS-I	.60**	.62**	.60**
6. Interpersonal Resentment NDS-I	.52**	.58**	.54**
7. Surrender NDS-I	.58**	.63**	.59**
8. NDS Total NDS-I	.64**	.68**	.65**

Note. N=51. * $p < .05$; ** $p < .01$

Regarding the NDS-I, the SITBQ-NS scores show moderate to strong, positive and significant correlations with the "Irritability" factor (SIT: $\rho=0.626$, $p < 0.01$; SIB: $\rho=0.650$, $p < 0.01$; SIS: $\rho=0.629$, $p < 0.01$), "Discontent" factor (SIT: $\rho=0.603$, $p < 0.01$; SIB: $\rho=0.623$, $p < 0.01$; SIS: $\rho=0.602$, $p < 0.01$), and "NDS Total" factor (SIT: $\rho=0.640$, $p < 0.01$; SIB: $\rho=0.677$, $p < 0.01$; SIS: $\rho=0.647$, $p < 0.01$). Moderate, positive and significant correlations exist among the three SITBQ-NS scores and other NDS-I scales, such as "Interpersonal Resentment" factor (SIT: $\rho=0.518$, $p < 0.01$; SIB: $\rho=0.577$, $p < 0.01$; SIS: $\rho=0.539$, $p < 0.01$) and the "Surrender" factor (SIT: $\rho=0.580$, $p < 0.01$; SIB: $\rho=0.628$, $p < 0.01$; SIS: $\rho=0.590$, $p < 0.01$).

Regarding the MCMI-III, significant correlations have been observed between the SITBQ-NS scores and some MCMI-III Personality Disorder Scales (table 2). Particularly, results show moderate to strong, positive and significant correlations between SITBQ-NS scores and the Borderline Scale (SIT: $\rho=0.734$, $p < 0.01$; SIB: $\rho=0.681$, $p < 0.01$; SIS: $\rho=0.737$, $p < 0.01$). There are weak, positive and significant correlations among SITBQ-NS scores and other personality scales, such as

Avoidant, Depressive, Dependent, Passive-Aggressive, and Self-Defeating scales (see table 2 for more details).

Furthermore, moderate, negative and significant correlations have been observed between SITBQ-NS scores and the MCMI-III Compulsive-Obsessive Scale (SIT: $\rho=-0.570$, $p < 0.01$; SIB: $\rho=-0.577$, $p < 0.01$; SIS: $\rho=-0.573$, $p < 0.01$). Also, there are weak, negative and significant correlations between the SITBQ-NS and the Histrionic Scale (SIT: $\rho=-0.332$, $p < 0.05$; SIB: $\rho=-0.299$, $p < 0.05$; SIS: $\rho=-0.307$, $p < 0.05$).

Moreover, there are moderate to strong, positive, significant correlations between the three SITBQ-NS scores and some MCMI-III Clinical Scales (Table 3), particularly with the Thought Disorder Scale (SIT: $\rho=0.672$, $p < 0.01$; SIB: $\rho=0.651$, $p < 0.01$; SIS: $\rho=0.664$, $p < 0.01$). Moderate, positive, significant correlations have been observed between SITBQ-NS and other clinical scales, such as Major Depression, Dysthymia, and Post-traumatic Stress Disorder scales (see table 3 for more details). Finally, weak, positive, significant correlations have been noticed among SITBQ-NS scores and the Drug Dependence Scale (SIT: $\rho=0.327$, $p < 0.05$; SIB: $\rho=0.410$, $p < 0.01$; SIS: $\rho=0.341$, $p < 0.05$).

Table 2. Correlations between SITBQ-NS and MCMI-III Personality Disorders Scales

	Spearman-Brown's Correlation		
	Self-Injurious Thoughts SITBQ-NS	Self-Injurious Behaviors SITBQ-NS	Self-Injurious Spectrum SITBQ-NS
1. MCMI-III Schizoid	.11	.06	.08
2. MCM-III Avoidant	.36**	.29*	.34*
3. MCMI-III Depressive	.44**	.42**	.43**
4. MCMI-III Dependent	.35*	.31*	.32*
5. MCMI-III Histrionic	-.33*	-.30*	-.31*
6. MCMI-III Narcissistic	-.22	-.17	-.20
7. MCMI-III Antisocial	.19	.25	.20
8. MCMI-III Aggressive (Sadistic)	.09	.10	.09
9. MCMI-III Compulsive	-.57**	-.58**	-.57**
10. MCMI-III Passive Aggressive	.31*	.29*	.33*
11. MCMI-III Self-Defeating	.41**	.35*	.40**
12. MCMI-III Schizotypal	.30*	.26	.29*
13. MCMI-III Borderline	.73**	.68**	.74**
14. MCMI-III Paranoid	.26	.22	.27

Note. N=51. * $p < .05$; ** $p < .01$

Table 3. Correlations between SITBQ-NS and MCMI-III Clinical Syndromes Scales

Spearman-Brown's Correlation			
	Self-Injurious Thoughts SITBQ-NS	Self-Injurious Behaviors SITBQ-NS	Self-Injurious Spectrum SITBQ-NS
1. MCMI-III Anxiety	.25	.26	.26
2. MCM-III Somatoform	.34*	.30*	.32*
3. MCMI-III Bipolar: Maniac	.20	.23	.22
4. MCMI-III Dysthymia	.55**	.52**	.53**
5. MCMI-III Alcohol Dependence	.17	.20	.19
6. MCMI-III Drug Dependence	.33*	.41**	.34*
7. MCMI-III Post-Traumatic Stress Disorder	.49**	.50**	.50**
8. MCMI-III Thought Disorder	.67**	.65**	.66**
9. MCMI-III Major Depression	.58**	.52**	.57**
10. MCMI-III Delusional Disorder	.26	.21	.27

Note. $N=51$. * $p < .05$; ** $p < .01$

and the Somatization Scale (SIT: $\rho=0.337$, $p < 0.05$; SIB: $\rho=0.299$, $p < 0.05$; SIS: $\rho=0.322$, $p < 0.05$).

Discussion

This study was intended to develop and validate the SITBQ-NS, a revised version of the Self-Injurious Thoughts and Behaviors Interview (SITBI) for self-assessment of the nonsuicidal self-injurious spectrum, that is, from ideation to act. The SITBQ-NS shows an excellent Cronbach's alpha, which proves the high reliability of the instrument.

The most interesting result is that 7.9% of participants have thought of hurting themselves but never engaged in self-injury. This suggests that, firstly, the presence of self-injurious thoughts does not always lead to the act and, secondly, that self-injurious thoughts and behaviors only partially show shared characteristics. It is important to notice that the frequency of self-injurious behaviors in our sample is higher than the one reported in the literature, which shows that 19-25% of the clinical population hurt themselves (Briere and Gil 1998). This difference may be due to the nature of our sample, which includes individuals coming from services that deal with severe psychopathology.

Another interesting aspect emerges from the comparison of the frequencies of self-injurious thoughts and behaviors motivations. The top five most frequent motivations of both modules are very similar, with the exception of "to end suicidal thoughts," which ranks fifth in patients with self-injurious thoughts (31.4%) and is less frequent in patients who exhibit self-injurious behaviors (21.6%). The literature provides an in-depth description of the anti-suicidal function of self-injurious behaviors. Some authors think that patients engage in self-injurious behaviors as a coping strategy to resist the impulse of a suicidal gesture (Klonsky, 2007). Those data might suggest that the self-injurious thought has an even stronger anti-suicidal function than the self-injurious behavior. This hypothesis has important implications on the clinical level and deserves to be investigated through further specific studies. Furthermore, results suggest that self-injurious thoughts and behaviors might be characterized by shared, but still separate, aspects on the function level.

Regarding the validity of the instrument, results are encouraging. The strong correlations between SITBQ-NS scores and the DSHI prove the convergent validity of the instrument. The BHS measures hopelessness,

which is identified in the literature as one of the strongest predictors of future suicidal attempts (King et al. 2014). The presence of self-injurious behaviors also represents a strong risk factor for engaging in suicidal behaviors (Roley-Roberts et al. 2016, Glenn et al. 2017). The moderate, positive, significant correlation between SITBQ-NS scores and the BHS supports the divergent validity of the instrument, as it shows that the constructs share just partial aspects.

The same is true for the correlation between SITBQ-NS scores and NDS-I factors. Dysphoria is common among patients that engage in self-injurious behaviors, and, as Rossi Monti and D'Agostino (2009) state, the regulation of dysphoria function is one of the principal "meaning-organizers" related to self-injury. The moderate to strong correlations, in this case too, support the divergent validity of the instrument, as the constructs probably co-occur but do not overlap.

The correlations between the SITBQ-NS and the MCMI-III scales provide further support to the SITBQ-NS validity and suggest interesting points of view. As expected, higher positive correlations between the MCMI-III and the SITBQ-NS appear with the Borderline Scale, thus confirming data shown by literature where the percentage of self-injurious behaviors in patients with BPD fluctuates between 69% and 90% (Reitz et al. 2015).

All SITBQ-NS scores show positive, significant correlations with all MCMI-III measures related to depression, such as the Depressive, Dysthymia, and the Major Depression scales. The relationship between self-injury and depression is widely discussed in the literature. Turner and colleagues (2015) report that in a sample of self-injurers without BPD diagnoses, 91.7% have or have had mood disorders during their lifetime (no bipolar disorders were reported; all the participants experienced symptoms related to the depressive pole).

The correlations between the SITBQ-NS and the Avoidant Scale partly confirm what was already discovered by Nock and colleagues (2006) in one of the few studies about self-injury and personality disorders other than BPD. The authors highlight that the adolescent sample contained a significant percentage of patients with avoidant and paranoid personality disorders (Nock 2006). Our data, however, do not confirm the same association with paranoid personality disorder.

The weak, positive, significant correlations of SITBQ-NS with other MCMI-III personality disorder scales such as the Dependent Scale, the Passive-

Aggressive/Negativistic Scale, the Self-Defeating Scale, the Schizotypal Scale, the Histrionic Scale, and the Obsessive-Compulsive Scale highlight that NSSI is not a phenomenon exclusively related to BPD, as DSM-5 (2013) stresses categorizing NSSI as a clinical disorder. However, further studies are required to advance a specific hypothesis on the relationship between NSSI and these specific dimensions from a clinical point of view.

Other expected correlations of MCMI-III clinical scales and self-injury scores occur with the PTSD scale and the Drug Dependence Scale. Regarding the PTSD scale, the nature of the association is probably linked to the anti-dissociative function of self-injury (Klonsky 2007). Regarding drug dependence, it is known that the self-injurious phenomenon is widely spread among individuals who engage in drug abuse. Among self-injurious patients, 53.6% of patients diagnosed with BPD and 20% without BPD experience or have experienced drug dependence (Victor et al. 2012).

Surprisingly, there is a moderate to strong, positive, significant correlation with the Thought disorder scale. Psychotic individuals in the acute phase show a tendency to engage in self-injurious behaviors known as Self-Mutilative Behaviors (SMB), a basically irreversible behavior regarding the removal of body parts (Rossi Monti and D'Agostino 2009). However, the MCMI-III specifies that the patients with high scores on this scale are sometimes classified as schizophrenic, schizophreniform or as experiencing a brief reactive psychosis (Zennaro et al. 2008). Therefore, this scale detects patients with a schizophrenia diagnosis, as well as individuals that occasionally show inadequate affectivity, hallucinations of different kinds and delusions (Zennaro et al. 2008, p. 44).

The study presents some limits. The problematic issues are mostly related to the sample. Firstly, the number of participants is too small, and data should be collected from a larger sample. Secondly, the participants come from facilities that deal with severe psychopathology. Only medium to severe psychopathology is represented; there is no representation of the clinical population in general. It would be useful to administer the SITBQ-NS to individuals with more diversified psychopathology levels. Finally, a specific instrument for the evaluation of discriminant validity should be introduced, such as an instrument assessing coping strategies, as other studies show that a productive coping strategy or problem-focused strategy were negatively associated with NSSI behaviors (Guerreiro et al. 2015).

Acknowledgments

The authors would like to thank Dr. Federica Mordini for translating the manuscript and providing linguistic advice.

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APPENDIX A

Self-Injurious Thoughts and Behaviors Questionnaire-Nonsuicidal (SITBQ-NS)

Il seguente questionario indaga i suoi pensieri e i suoi comportamenti relativi al ferirsi volontariamente in vario modo senza avere intenzione di morire (es., tagliarsi o bruciarsi). Le chiediamo di leggere attentamente le domande e rispondere il più accuratamente possibile, mettendo una X sull'opzione che ritiene più appropriata per lei. Grazie.

Parte I. Pensieri di autolesionismo non suicidario

- 1) Ha mai pensato di ferirsi volontariamente senza avere intenzione di morire (per esempio, tagliandosi o bruciandosi)?
 No Sì
 Se ha risposto NO, passi direttamente alla domanda 15. Altrimenti prosegua con la domanda successiva.
- 2) Quando è stata la prima volta che ha avuto pensieri di questo tipo?
 Molto tempo fa (es, più 10 anni fa) Qualche tempo fa (es, 4-5 anni fa) Recentemente (es, quest'anno)
- 3) Quando è stata l'ultima volta che ha avuto pensieri di questo tipo?
 Molto tempo fa (es, più 10 anni fa) Qualche tempo fa (es, 4-5 anni fa) Recentemente (es, quest'anno)
- 4) Quante volte nel corso della vita ha avuto pensieri di questo tipo?
 Quasi mai Qualche volta Quasi sempre
- 5) Quante volte ci ha pensato nell'ultimo anno?
 Quasi mai Qualche volta Quasi sempre
- 6) Quante volte ci ha pensato nell'ultimo mese?
 Quasi mai Qualche volta Quasi sempre
- 7) Quante volte ci ha pensato nell'ultima settimana?
 Quasi mai Qualche volta Quasi sempre
- 8) Quando ha avuto pensieri di questo tipo, che intensità massima hanno raggiunto questi?
 Molto bassa Bassa Media Alta Molto alta
- 9) Quante volte ha pensato di ferirsi volontariamente sotto l'effetto di alcool o droghe?
 Quasi mai Qualche volta Quasi sempre
- 10) Quando ha avuto pensieri di questo tipo, quanto sono durati di solito?
 Qualche secondo Qualche minuto Qualche ora Uno-due giorni Più di due giorni
- 11) Quando ha avuto pensieri di questo tipo, quanto è stato influenzato da pensieri simili dei suoi amici?
 Per nulla Poco Abbastanza Molto Moltissimo
- 12) Con che probabilità pensa di ferirsi volontariamente in futuro senza intenzione di morire?
 Molto bassa Bassa Media Alta Molto alta

13) Quando pensa di ferirsi volontariamente, con quale di questi metodi immagina di farlo?

(Indichi, su una scala da 0 a 2, quanto ognuna di queste risposte le sembra rilevante nella sua esperienza seguendo queste indicazioni: 0-mai, 1-qualche volta, 2-spesso)

1. Tagliarsi o incidere la pelle	0	1	2
2. Colpirsi/colpire qualcosa (es. muro, porta) volontariamente	0	1	2
3. Strapparsi i capelli	0	1	2
4. Farsi un tatuaggio	0	1	2
5. Stuzzicarsi le ferite	0	1	2
6. Bruciarsi la pelle(es. con una sigaretta, un fiammifero o un altro oggetto caldo)	0	1	2
7. Inserirsi oggetti sotto le unghie o la pelle	0	1	2
8. Mordersi (es. la bocca o le labbra)	0	1	2
9. Strofinarsi parti del corpo fino al punto di farle sanguinare	0	1	2
10. Graffiarsi la pelle	0	1	2
11. Strofinarsi la pelle fino al punto di farla sanguinare	0	1	2

14) Quali sono i motivi, secondo lei, che la portano a pensare di ferirsi volontariamente senza intenzione di morire?

(Indichi, su una scala da 0 a 2, quanto ognuna di queste risposte le sembra rilevante nella sua esperienza seguendo queste indicazioni: 0-per nulla rilevante, 1-in parte rilevante, 2-molto rilevante)

1. Per calmarmi	0	1	2
2. Per mettere un confine tra me e gli altri	0	1	2
3. Per punirmi	0	1	2
4. Per mettere fine a pensieri suicidari	0	1	2
5. Per sentirmi vivo	0	1	2
6. Per creare un segno di legame con i miei amici o persone care	0	1	2
7. Per far conoscere agli altri l'entità del mio dolore emotivo	0	1	2
8. Per vedere se riesco a sopportare il dolore	0	1	2
9. Per farmi un segno fisico che rappresenti concretamente la mia sofferenza mentale	0	1	2
10. Per impedire a una persona cara di lasciarmi o abbandonarmi	0	1	2
11. Per definire che sono autonomo/indipendente	0	1	2
12. Per alleggerire la pressione emotiva che sento dentro di me in certi momenti	0	1	2
13. Per esprimere la rabbia verso me stesso o qualcun altro (partner, familiari, etc.)	0	1	2
14. Per tenere sotto controllo il mio dolore emotivo	0	1	2
15. Per sentire qualcosa (al contrario di niente) anche se è dolore fisico	0	1	2
16. Per evitare di mettere in atto un suicidio	0	1	2
17. Per cercare cure o aiuto dagli altri	0	1	2
18. Per lasciare sulla pelle traccia indelebile della mia sofferenza	0	1	2
19. Per non sentirmi più sporco o disgustoso	0	1	2
20. Per dimostrare che sono forte	0	1	2
21. Per sentire che il mio dolore emotivo è reale	0	1	2
22. Per vendicarmi o fare del male a qualcuno a me vicino	0	1	2
23. Per dimostrare che non ho bisogno degli altri e posso aiutarmi da solo	0	1	2
24. Per ridurre ansia, frustrazione, rabbia o altre emozioni opprimenti	0	1	2
25. Per non sentirmi vuoto	0	1	2
26. Per non dimenticare eventi, persone, situazioni che mi hanno fatto molto soffrire	0	1	2
27. Per spingere i miei limiti come nel paracadutismo o altre attività estreme	0	1	2
28. Per esprimere il disagio emotivo che sto vivendo	0	1	2
29. Per tornare a sentire di essere padrone della mia vita	0	1	2
30. Per comunicare a qualcuno qualcosa che non riesco a dire con le parole	0	1	2

Parte II. Comportamenti autolesionistici

15) Si è mai ferito volontariamente senza avere intenzione di morire?

No Sì

Se ha risposto NO, il questionario per lei termina qui. Altrimenti prosegua con la domanda successiva.

16) Quando è stata la prima volta che lo ha fatto?

Molto tempo fa (es. più 10 anni fa) Qualche tempo fa (es. 4-5 anni fa) Recentemente (es. quest'anno)

17) Quando è stata l'ultima volta che lo ha fatto?

Molto tempo fa (es. più 10 anni fa) Qualche tempo fa (es. 4-5 anni fa) Recentemente (es. quest'anno)

18) Quante volte lo ha fatto nel corso della vita?

Quasi mai Qualche volta Quasi sempre

19) Quante volte lo ha fatto nell'ultimo anno?

Quasi mai Qualche volta Quasi sempre

20) Quante volte lo ha fatto nell'ultimo mese?

Quasi mai Qualche volta Quasi sempre

21) Quante volte lo ha fatto nell'ultima settimana?

Quasi mai Qualche volta Quasi sempre

22) Di solito deve ricorrere a trattamenti medici per le ferite che si è inferto volontariamente?

- Quasi mai Qualche volta Quasi sempre

23) Quante volte si è ferito volontariamente sotto l'effetto di alcool o droghe?

- Quasi mai Qualche volta Quasi sempre

24) Per quanto tempo ha pensato di ferirsi volontariamente prima di farlo davvero?

- Qualche secondo Qualche minuto Qualche ora Uno-due giorni Più di due giorni

25) Quando si è ferito volontariamente, quanto è stato influenzato da comportamenti simili dei suoi amici?

- Per nulla Poco Abbastanza Molto Moltissimo

26) Con che probabilità continuerà a ferirsi volontariamente in futuro?

- Molto bassa Bassa Media Alta Molto alta

27) Quali sono i metodi che di solito usa per ferirsi volontariamente?

(Indichi, su una scala da 0 a 2, quanto ognuna di queste risposte le sembra rilevante nella sua esperienza seguendo queste indicazioni: 0-mai, 1-qualche volta, 2-spesso)

1. Tagliarsi o incidersi la pelle	0	1	2
2. Colpirsi volontariamente/ colpire qualcosa (es. muro, porta)	0	1	2
3. Strapparsi i capelli	0	1	2
4. Farsi un tatuaggio	0	1	2
5. Stuzzicarsi le ferite	0	1	2
6. Bruciarsi la pelle(es. con una sigaretta, un fiammifero o un altro oggetto caldo)	0	1	2
7. Inserirsi oggetti sotto le unghie o la pelle	0	1	2
8. Mordersi (es. la bocca o le labbra)	0	1	2
9. Strofinarsi parti del corpo fino al punto di farle sanguinare	0	1	2
10. Graffiarsi la pelle	0	1	2
11. Strofinarsi la pelle fino al punto di farla sanguinare	0	1	2

28) Quali sono i motivi, secondo lei, che la portano a ferirsi volontariamente senza intenzione di morire?

(Indichi, su una scala da 0 a 2, quanto ognuna di queste risposte le sembra rilevante nella sua esperienza seguendo queste indicazioni: 0-per nulla rilevante, 1-in parte rilevante, 2-molto rilevante)

1. Per calmarmi	0	1	2
2. Per mettere un confine tra me e gli altri	0	1	2
3. Per punirmi	0	1	2
4. Per mettere fine a pensieri suicidari	0	1	2
5. Per sentirmi vivo	0	1	2
6. Per creare un segno di legame con i miei amici o persone care	0	1	2
7. Per far conoscere agli altri l'entità del mio dolore emotivo	0	1	2
8. Per vedere se riesco a sopportare il dolore	0	1	2
9. Per farmi un segno fisico che rappresenti concretamente la mia sofferenza mentale	0	1	2
10. Per impedire a una persona cara di lasciarmi o abbandonarmi	0	1	2
11. Per definire che sono autonomo/indipendente	0	1	2
12. Per alleggerire la pressione emotiva che sento dentro di me in certi momenti	0	1	2
13. Per esprimere la rabbia verso me stesso o qualcun altro (partner, familiari, etc.)	0	1	2
14. Per tenere sotto controllo il mio dolore emotivo	0	1	2
15. Per sentire qualcosa (al contrario di niente) anche se è dolore fisico	0	1	2
16. Per evitare di mettere in atto un suicidio	0	1	2
17. Per cercare cure o aiuto dagli altri	0	1	2
18. Per lasciare sulla pelle traccia indelebile della mia sofferenza	0	1	2
19. Per non sentirmi più sporco o disgustoso	0	1	2
20. Per dimostrare che sono forte	0	1	2
21. Per sentire che il mio dolore emotivo è reale	0	1	2
22. Per vendicarmi o fare del male a qualcuno a me vicino	0	1	2
23. Per dimostrare che non ho bisogno degli altri e posso aiutarmi da solo	0	1	2
24. Per ridurre ansia, frustrazione, rabbia o altre emozioni opprimenti	0	1	2
25. Per non sentirmi vuoto	0	1	2
26. Per non dimenticare eventi, persone, situazioni che mi hanno fatto molto soffrire	0	1	2
27. Per spingere i miei limiti come nel paracadutismo o altre attività estreme	0	1	2
28. Per esprimere il disagio emotivo che sto vivendo	0	1	2
29. Per tornare a sentire di essere padrone della mia vita	0	1	2
30. Per comunicare a qualcuno qualcosa che non riesco a dire con le parole	0	1	2