ASSESSING SITUATIONAL DYSPHORIA IN BORDERLINE PATIENTS: DEVELOPMENT AND PRELIMINARY VALIDATION OF THE SITUATIONAL DYSPHORIA SCALE (SITDS)

Alessandra D'Agostino, Antonella Aportone, Mario Rossi Monti, Vladan Starcevic

Abstract

Objective: According to recent phenomenological literature, dysphoria is the psychopathological core of borderline personality disorder (BPD). It is a complex emotional state that consists of persistent tension, irritability, discontent and unhappiness, which is difficult to modulate and is associated with impulsivity. Under certain circumstances, this basic "kind" of dysphoria ("background dysphoria") can be experienced differently, as "situational dysphoria". The latter is a sense of pressure, an urge to act and a feeling of quasi-explosion that is mostly related to interpersonal triggers. The aim of this study was to present the process of developing a questionnaire for measuring situational dysphoria in BPD (the Situational Dysphoria Scale, SITDS) and test its psychometric properties.

Method: The sample consisted of 105 borderline patients recruited from adult psychiatric outpatient services and residential inpatient communities. The SITDS was developed over several stages, with the initial version consisting of 58 items. In order to test convergent and discriminant validity, the SITDS was administered with four self-report instruments (Nepean Dysphoria Scale, Cynical Distrust Scale, Inventory of Interpersonal Problems-47 and Empathy Quotient) and one semi-structured interview (Borderline Personality Disorder Severity Index-IV).

Results: The final version of SITDS, consisting of 24 items, was derived after conducting two factor analyses, a hierarchical cluster analysis and further refinement of the scale. It is divided into three clusters (Personal Events, Interpersonal Events and Environmental Events) and rated on three subscales (Internal Pressure, Urge to Act and Quasi-Explosion). This version of the SITDS demonstrated excellent internal consistency (Cronbach's alpha value = .91) and a solid degree of convergent and discriminant validity.

Conclusions: The study provides preliminary support for use of the SITDS in BPD. Further studies of psychometric properties of the SITDS are needed to support it as a tool for routine clinical practice.

Key words: dysphoria, situational dysphoria, psychometric properties, borderline personality disorder

Declaration of interest: none

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Introduction

Dysphoria is as an emotional state that is the psychopathological core of borderline personality disorder (BPD) (Rossi Monti 2012, Stanghellini and Rosfort 2013, Rossi Monti and D'Agostino 2014). It consists of a combination of tension, irritability, discontent and unhappiness that persists and is associated with a growing impulsivity (Starcevic 2007). This emotional constellation is a centrifugal force that can fragment the borderline person's representations of oneself and of others, inducing a painful experience of incoherence and inner emptiness, a feeling of uncertainty and inauthenticity in relationships, along with a sense of futility and inanity of the whole life (Stanghellini and Rosfort 2013). Considering that this emotional experience is so fundamental for BPD, it is referred to as "background dysphoria".

The characteristics of dysphoria change in certain circumstances, with the predominant sense of pressure, an urge to act and experience of a quasi-explosion. This is usually related to the environmental and interpersonal context, represents the here-and-now experience of individuals with BPD (Rossi Monti and D'Agostino in press) and is referred to as "situational dysphoria". It is often experienced as impatience and intolerance that can lead to outbursts of anger and violent behaviour. In addition, situational dysphoria is characterised by a feeling of being "on edge" and heightened anxiety and vigilance. Considering that situational dysphoria occurs in response to situational triggers, it represents a temporary, but repetitive experience of borderline patients.

Taking into account these perspectives, background dysphoria and situational dysphoria are very important for understanding both the basic and transient experience of borderline patients. However, assessing adequately these two forms of dysphoria has been difficult. In fact, while a self-report instrument for background dysphoria already exists (Nepean Dysphoria Scale; Berle and Starcevic 2012) and has been translated and validated into Italian language (D'Agostino et al. 2016), a scale for situational dysphoria did not exist until recently. This article aims to explain the development of a questionnaire for assessment of situational dysphoria in BPD (the Situational Dysphoria Scale) and test its psychometric properties.

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Method

Participants

The sample consisted of 105 patients with BPD (54.3% female; mean age = 36.31 years; *SD* = 7.02). They were recruited from adult psychiatric outpatient services (75%) and residential inpatient communities (25%) in the north (Lombardy), central (Marche) and south (Puglia) of Italy. After describing the study to participants, they signed an informed consent. The study was approved by the local ethics committees.

Individuals between the age of 18 and 65 years who met the diagnostic criteria for BPD were included in the study. The presence of BPD was determined by means of the Structured Clinical Interview for DSM-IV Axis II Disorders (SCID-II), also used for the DSM-5 diagnosis of BPD, given that there were no changes to the Personality Disorders Section between DSM-IV and DSM-5; (First et al. 1997, Mazzi et al. 2003).

The following were the exclusion criteria: a) lifetime diagnoses of schizophrenia, other psychotic disorders and bipolar affective disorder, as assessed by the Structured Clinical Interview for DSM-IV Axis I disorders (SCID-I; First et al. 1996, Mazzi et al. 2000); b) current (previous 6 months) substance use disorder or eating disorder, as assessed by the SCID-I; c) intellectual disability (i.e., mental retardation) and neurocognitive disorders (i.e., cognitive impairment and dementias); d) insufficient knowledge of Italian language.

Instruments

The SCID-I (First et al., 1996) and SCID-II (First et al. 1997) are semi-structured, clinician-administered interviews for making the major DSM-IV Axis I and Axis II diagnoses, respectively. Both the SCID-I and SCID-II showed very good psychometric properties (First et al. 1996, First et al. 1997), as did their Italian versions (Mazzi et al. 2000, Mazzi et al. 2003).

In addition to the SCID-I and SCID-II, several instruments were administered to test the convergent and discriminant validity of the Situational Dysphoria Scale (SITDS). They include four self-report instruments (Nepean Dysphoria Scale [NDS], Cynical Distrust Scale [CynDis], Inventory of Interpersonal Problems-47 [IIP-47] and Empathy Quotient [EQ]) and one semi-structured, clinician-administered interview (Borderline Personality Disorder Severity Index-IV Edition (BPDSI-IV). Correlations between the SITDS, NDS and BPDSI-IV were used to test the convergent validity of the SITDS, while correlations between the SITDS, CynDys, IIP-47 and EQ were used to test the discriminant validity of the SITDS.

The *Nepean Dysphoria Scale* (NDS; Berle and Starcevic 2012) has been developed to measure the severity of dysphoria. It consists of 24 items, which are rated for frequency on a five-point Likert scale, from 0 ("not at all") to 4 ("always"). A total score is obtained by calculating the mean of the scores on all items. The NDS also provides separate scores on four subscales of dysphoria, as follows: irritability, discontent, surrender and interpersonal resentment. Every item (except for items 2, 4, 13 and 24) starts with the phrase: "Have you felt…" and is followed by a specific feeling (e.g., "… discontent?", "…on edge?", "…cranky?"). The NDS showed excellent psychometric properties (Berle and Starcevic 2012, Starcevic et al. 2015), as did its Italian translation (D'Agostino et al. 2016).

The *Cynical Distrust Scale* (CynDis; Julkunen et al. 1994) is a measure of hostile distrust, the cognitive component of hostility. It was factor-analytically derived from the Cook-Medley Hostility Scale (Cook and Medley 1954) and consists of eight items such as: "I think most people would lie to get ahead", "Most people inwardly dislike putting themselves out to help other people" or "It is safer to trust nobody". Response options were altered from the original true-false format of the Cook-Medley Hostility Scale to a four-point Likert scale from 1 ("completely disagree") to 4 ("completely agree"). A total score is obtained by adding up item scores. CynDis showed good psychometric properties (Julkunen et al. 1994), as did the Italian version (Emiliani et al. 2011).

The *Inventory of Interpersonal Problems-47* (IIP-47; Pilkonis et al. 1996) is a measure of chronic interpersonal problems associated with personality disorders. It is composed of five subscales: Interpersonal Sensitivity, Interpersonal Ambivalence, Aggression, Need for Social Approval and Lack of Sociability. It consists of 47 items, including the following: "I am too sensitive to rejection", "It is hard for me to ignore criticism from other people" and "I feel too anxious when I am involved with another person". Responses are rated on a five-point scale ranging from 0 ("not at all") to 4 ("extremely distressing"). A total score is obtained by calculating the sum of scores on all items. The IIP-47 also provides separate scores on five subscales, with scores on the Interpersonal Sensitivity subscale being particularly relevant for this study. The IIP-47 showed very good psychometric properties (Pilkonis et al. 1996), as did its Italian version (Ubbiali et al. 2011).

The *Empathy Quotient* (EQ; Baron-Cohen and Wheelwright 2004) is a measure of the cognitive and affective aspects of empathy. It was designed to assess empathy in relation to psychopathology in order to be used in clinical settings. It was also designed to detect subtle individual differences in empathy in the general population. A previous factor analysis identified three subscales of EQ: Cognitive Empathy, Emotional Reactivity and Social Skills (Lawrence et al. 2004). The EQ consists of 60 items, with 40 questions tapping empathy (e.g., "I find it hard to know what to do in a social situation", "I can tell if someone is masking their true emotion" and "I find it easy to put myself in somebody else's shoes") and 20 filler items included to distract respondents from the focus on empathy. Responses are given on a four-point Likert scale. Scores can range from 0 to 80 (with a cut-off score of less than 30 indicating adults with autism spectrum disorders). The EQ showed acceptable psychometric properties (Baron-Cohen and Wheelwright 2004), as did the Italian version of this instrument (Preti et al. 2011).

The *Borderline Personality Disorder Severity Index-IV Edition* (BPDSI-IV; Arntz et al. 2003) was developed to assess the frequency and severity of BPD manifestations during the previous three months. It consists of 70 items, divided into nine subscales representing the nine DSM BPD criteria (Abandonment, Interpersonal Relationships, Identity, Impulsivity, Parasuicidal Behavior, Affective Instability, Emptiness, Outbursts of Anger and Dissociation and Paranoid Ideation). For each item, the frequency is rated on an eleven-point scale, from 0 ("never") to 10 ("daily"). Identity disturbance items form an exception and are rated on a five-point Likert scale, from 0 ("absent") to 4 ("dominant, clear and well-defined not knowing who he/she is"), multiplied by 2.5. The total score is the sum of the nine criteria scores (range 0–90). The BPDSI-IV

showed excellent psychometric properties (Arntz et al. 2003, Giesen-Bloo et al. 2010), as did its Italian version (Madeddu et al. 2005).

General Study Procedures

The development and validation of the SITDS was a four-stage process, as suggested by Furr (2011): I) Articulate construct and context; II) Choose response format and assemble initial item pool; III) Collect data from respondents; IV) Examine psychometric properties and quality.

Firstly, situational dysphoria was defined as a state of internal pressure, an urge to act and a feeling of quasi-explosion, strongly dependent on situational triggers that can pertain to different domains (personal, interpersonal and environmental), but especially the interpersonal one. Thus, the three subscales of the SITDS representing the main components of situational dysphoria were derived: Internal Pressure, Urge to Act and Quasi-Explosion. All SITDS items were rated using a five-point Likert scale from 1 ("Not at all") to 5 ("Very much").

Secondly, a preliminary over-inclusive pool of 58 items of the SITDS was created. Items reflected minor events that could happen during the week (such as "was ignored by others", "argued with spouse or girlfriend/boyfriend", or "had a minor accident"). They were largely derived from the Daily Stress Inventory (Brantley and Jones 1989) and the Weekly Stress Inventory (Brantley et al. 1997). According to Furr's (2011) guidelines for "ad hoc scales" (i.e., scales created to measure specific constructs), independent raters were recruited to evaluate the degree to which each item reflected situational dysphoria.

Two mains scores were derived from SITDS: a) *Total score*, by summing up total scores for each item; b) *Subscale-specific score*, by summing up the scores on each subscale of situational dysphoria (Internal Pressure, Urge to Act and Quasi-Explosion) across the scale items. The scale assessing situational dysphoria (**figure 1**) was subsequently administered to individuals with BPD.

An exploratory factor analysis (principal factor axis in SPSS with Promax rotation) was performed on the preliminary over-inclusive pool of 58 items of the SITDS in order to only retain the items loading on the same factor for all three subscales. Factor structure was "cleaned" following Costello and Osborne's (2005) recommendations for best practices in exploratory factor analysis: acceptable item loadings were those above .30, no cross-loadings were allowed and there could be no factors with fewer than three items.

A second exploratory factor analysis (principal factor axis in SPSS with Promax rotation) was then conducted on the derived pool of 28 items of the SITDS in order to ascertain how many factors to retain. The analysis was repeated with different extraction/rotation methods (i.e., maximum likelihood and principal axis with Varimax or Promax rotation). The issue of a strong common factor (Factor 1) dominating the other factors (Factors 2, 3 and 4) (see **table 2** for more details) was addressed empirically using a hierarchical cluster analysis (Ward's method), as per Reise et al. (2000). The coefficients of internal consistency (Cronbach's α value) for the whole SITDS and for each subscale were also calculated.

The convergent and discriminant validity of the SITDS was examined by means of parametric Pearson's correlations between the scores on the SITDS and its subscales and scores on one conceptually related instrument (NDS and BPDSI-IV) and scores on conceptually unrelated instruments (CynDis, IIP-47 and EQ), respectively. All statistical analyses were conducted using the SPSS for Windows, version 19.0.

Results

The first exploratory factor analysis performed on the original pool of 58 items of the SITDS resulted in elimination of 30 items not loading on the same factor across all three subscales (**table 1**). Thus, the pre-final scale consisted of 28 items.

The second exploratory factor analysis conducted on the 28-item SITDS showed one factor having a much higher number of items compared to the other factors. Subsequent factor analyses repeated with different extraction/rotation methods confirmed this result (**table 2**). Depending on the extraction/rotation method, Factor 1 had a number of items between 13 and 18, while Factors 2, 3 and 4 had a number of items between 2 and 5. This apparent imbalance in favour of Factor 1 could be due to the presence of "nested" or "clustered" groups of items in the scale that an exploratory factor analysis might not have been able to detect.

A hierarchical cluster analysis conducted on the 28-item SITDS confirmed this hypothesis, identifying three internally consistent and independent clusters of items cutting the brunches of the tree at 8.5 (**figure 2**). This allowed a more precise grouping of items, thus improving the overall coherence of the scale.

Cronbach's α value calculated for the 28-item

Figure 1. *Image of SITDS format with instructions, scores and the first item*

Situational Dysphoria Scale (SITDS)

Below is a list of various events that may happen. Think carefully about each of them and please indicate whether that event happened to you **during the past week**. If the event did not happen this week, put an **X** in the corresponding box. If the event did happen, please score **from 1 to 5** whether the event:
a) Made you feel pressured;
b) Made you have a strong urge to do something;
c) Made you feel as if you were about to explode.

Please, use the guide below to make your evaluations.

1 = Not at all or minimally 2 = Slightly 3 = Moderately 4 = Quite a bit 5 = Very much

		Not happened	Made me feel pressured	Made me have a strong urge to do something	Made me feel as if I was about to explode
1.	Was interrupted while talking		1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

Table 1. *Disposition of the 58 items of SITDS in factors and subscales (red-shaded items were excluded, whereas green-shaded items were retained)*

Item	IP	UA	QE	Item	IP	UA	QE
1	Factor 2	Factor 2	Factor 2	30	Factor 2	Factor 2	Factor 2
2	1	1	1	31	3	4	3
3	3	4	3	32	0	5	5
4	1	1	1	33	1	1	1
5	4	4	4	34	1	1	1
6	2	2	2	35	1	1	1
7	2	3	2	36	1	1	1
8	0	5	0	37	1	1	1
9	1	1	1	38	1	1	1
10	2	2	2	39	3	4	3
11	2	1	2	40	2	0	0
12	4	3	4	41	1	1	1
13	0	3	0	42	1	1	1
14	4	3	0	43	2	3	2
15	5	5	5	44	2	3	2
16	0	0	0	45	2	2	2
17	1	1	1	46	1	1	1
18	5	5	5	47	0	0	0
19	0	0	2	48	1	0	1
20	4	0	0	49	5	5	5
21	4	0	4	50	3	4	2
22	0	5	0	51	0	0	0
23	2	1	1	52	5	5	5
24	3	4	3	53	0	0	3
25	3	4	3	54	1	1	1
26	1	1	1	55	1	1	1
27	4	3	0	56	1	1	1
28	0	0	0	57	2	2	2
29	0	0	0	58	1	2	3

Note. IP = Internal Pressure; UA = Urge to Act; QE = Quasi Explosion; 0 = no factor loading above .30.

Figure 2. *Dendrogram using Ward's method and showing the clustering of SITDS*

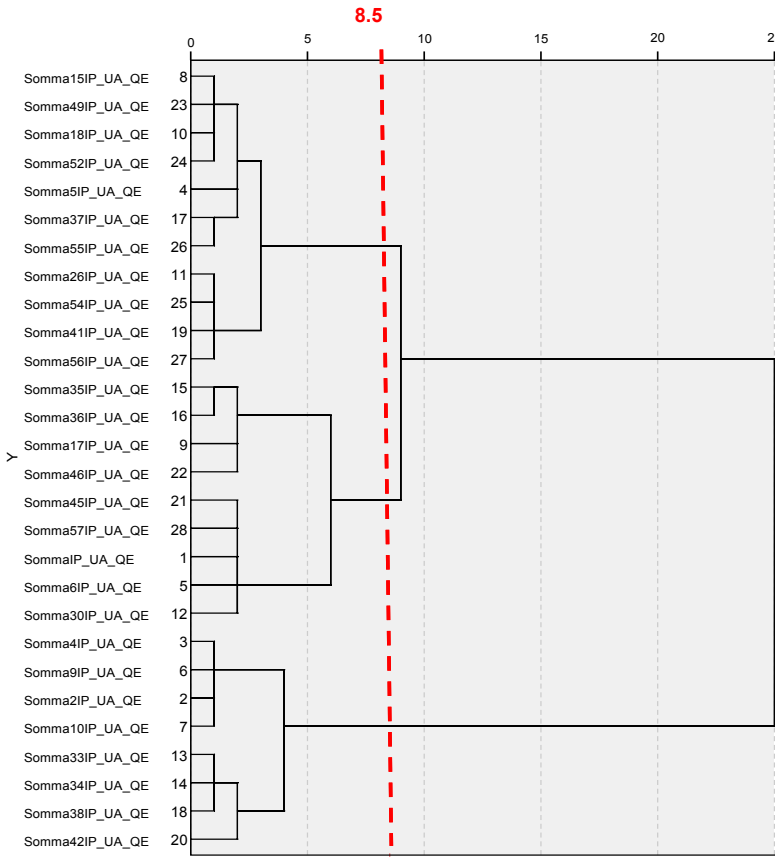

Table 2. *Disposition of the 28 items of SITDS in factors across different factor extraction/rotation methods*

Item	ML with Promax				ML with Varimax				PA with Varimax				PA with Promax			
	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4
1			X				X			X				X		
2	X				X				X				X			
4	X				X				X				X			
5	0	0	0	0	0	0	0	0				X				X
6			X				X			X			X			
9	X				X				X				0	0	0	0
10			X				X		X				0	0	0	0
15	0	0	0	0	0	0	0	0			X		X			
17	X				X				X						X	
18				X				X			X		X			
26	X				X				X					X		
30			X				X			X			X			
33	X				X				X				X			
34	X				X				X				X			
35		X				X			X				X			
36		X				X			X				X			
37		X				X			X				X			
38	X				X				X				X			
41	X				X				X				X			
42	X				X				X				X			
45			X				X			X				X		
46	X				X				X				X			
49				X				X			X				X	
52				X				X			X				X	
54	X				X				X				X			
55		X				X			X				X			
56	X				X				X				X			
57	0	0	0	0	0	0	0	0				X				X
Tot.	**13**	**4**	**5**	**3**	**13**	**4**	**5**	**3**	**18**	**4**	**4**	**2**	**18**	**3**	**3**	**2**

Note. ML = Maximum Likelihood; PA = Principal Axis; F1 = Factor 1; F2 = Factor 2; F3 = Factor 3; F4 = Factor 4; 0 = no factor loading above .30.

SITDS was .89, suggesting a very good internal consistency. Cronbach's α values calculated for each cluster were also very good (Cluster 1 Cronbach's α value = .79; Cluster 2 Cronbach's α value = .84; Cluster 3 Cronbach's α value = .95). However, Cronbach's α values for subscales of the SITDS were questionable ("Internal Pressure" Cronbach's α value = .66; "Urge to Act" Cronbach's α value = .67; "Quasi-Explosion" Cronbach's α value = .68).

Exclusion of items 5 ("Was forced to socialize"), 26 ("Worried about another's problems"), 54 ("Was stared at") and 55 ("Ran out of food/personal articles") as conceptually less relevant improved Cronbach's α values for the 24-item SITDS (.91), Cluster 1 (.81) and all SITDS subscales ("Internal Pressure" Cronbach's α value = .71; "Urge to Act" Cronbach's α value = .73; "Quasi-Explosion" Cronbach's α value = .73). Therefore, we decided to use the 24-item SITDS as the final version of the instrument.

Inspection of the items in each of the three clusters indicated that Cluster 1 could refer to "Personal Events" (including items such as "Did something I am unskilled at", "Performed poorly at sport/game" and "Hurried to meet a deadline"); Cluster 2 could refer to "Environmental Events" (including items "Was interrupted while talking", "Had car trouble" and "Experienced illness or physical discomfort"); and Cluster 3 could refer to "Interpersonal Events" (including items "Was ignored by others", "Argued with spouse, boyfriend/girlfriend, etc." and "Someone

Table 3. *SITDS clusters correlations matrix*

	Pearson's correlations		
	1. Personal Events	2. Environmental Events	3. Interpersonal Events
1. Personal Events	1	.06	-.12 **
2. Environmental Events	.06	1	.45 **
3. Interpersonal Events	-.12 **	.45 **	1

Note. N=105. * $p < .05$; ** $p < .01$.

spoiled my completed task").

Correlations among the three clusters are reported in **table 3**. They show a moderate positive correlation between the "Environmental Events" cluster and the "Interpersonal Events" cluster (*r*s = .45) and a very weak but still significant negative correlation between the "Personal Events" cluster and the "Interpersonal Events" cluster (*r*s = -.12). This suggests that the three clusters are related to situational dysphoria. In particular, Environmental Events and Interpersonal Events pertain to similar kinds of events, both depending on external triggers, while Personal Events pertain to events that depend on internal triggers.

Correlations among the three subscales of the SITDS are reported in **table 4**. They show very strong positive correlations (*r*s = .98), thus suggesting that they are representative of situational dysphoria.

The final version of SITDS consisted of 24 items (divided into three clusters: Personal Events, Interpersonal Events and Environmental Events), with each item rated on three subscales (Internal Pressure, Urge to Act and Quasi-Explosion).

Table 5 shows the mean scores for each item of the final 24-item version of SITDS. The most relevant items in terms of the severity of situational dysphoria in BPD sample seemed to be those belonging to Interpersonal Events, with item 6 ("Argued with another person, such as a colleague, a client, a neighbour, an urban watcher"; mean score = 4.26), item 3 ("Was ignored by others"; mean score = 3.91), and item 5 ("Argued with spouse,

Table 4. *SITDS subscales correlations matrix*

Pearson's correlations			
	1. Internal Pressure	2. Urge to Act	3. Quasi-Explosion
1. Internal Pressure	1	.98 **	.98 **
2. Urge to Act	.98 **	1	.98 **
3. Quasi-Explosion	.98 **	.98 **	1

Note. N=105. * $p < .05$; ** $p < .01$.

Table 5. *Mean scores and standard deviations for each item of the final 24-item SITDS*

Item	M	SD
1. Was interrupted while talking	2.26	1.95
2. Did poorly because of others	3.68	1.40
3. Was ignored by others	3.91	1.49
4. I missed an important appointment	2.67	1.90
5. Argued with spouse, boyfriend, girlfriend, etc.	3.86	1.67
6. Argued with another person (colleague, client, etc.)	4.26	.99
7. Did something I am unskilled at	.38	1.04
8. Was late for work/appointment because of an unexpected	1.28	1.57
9. Performed poorly at sport/game	.80	1.45
10. Was interrupted while thinking/relaxing	2.15	1.92
11. Had a minor accident (broke something) because of others	3.33	1.45
12. Had money problems because of others	2.97	1.78
13. Had car trouble	1.69	1.97
14. Drove under bad conditions (traffic, weather)	1.41	1.78
15. Had legal problems	.91	1.49
16. Had unexpected bills (traffic fines, etc) because of others	2.54	1.70
17. Was exposed to a feared situation or object	.58	1.34
18. Someone spoiled my completed task	2.15	1.88
19. Was misunderstood	2.07	1.75
20. Someone "cut" ahead of me in line	1.76	1.89
21. Hurried to meet a deadline	.34	1.00
22. Competed with someone	.58	1.30
23. Did something that I did not want to do	.92	1.53
24. Experienced illness or physical discomfort	1.80	1.74

Note. N=105. Personal Events: item 7, 9, 15, 17, 21, 22, 23; Interpersonal Events: item 2, 3, 5, 6, 11, 12, 16, 18; Environmental Events: 1, 4, 8, 10, 13, 14, 19, 20, 24.

boyfriend/girlfriend, and so on"; mean score = 3.85) receiving highest ratings.

Table 6 summarizes the correlations between scores on the final 24-item SITDS and its subscales and scores on the other instruments. The SITDS total score and scores on its subscales showed medium to strong Pearson's correlations with NDS-I scores (*r*s ranging from .54 to .63) and weak to moderate Pearson's correlations with BPDSI-IV scores (*r*s ranging from .29 to .45), suggesting a relatively solid convergent validity of the SITDS. The correlations with CynDis total score (*r*s ranging from .39 to .65), IIP-47 total score (*r*s ranging from .23 to .51) and EQ (*r*s ranging from -.28 to -.22, excluding Internal Pressure and Urge to Act) were somewhat weaker, but still noteworthy. They provide a limited support to the discriminant validity of the SITDS.

Table 6. *Correlations between scores on the SITDS (24-item version) and its subscales and scores on other measures*

	Pearson's correlations								
	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Internal Pressure (SITDS)	1	.98 **	.98 **	.80 **	.54 **	.39 **	.23 *	-.18	.45 *
2. Urge to Act (SITDS)	.98 **	1	.98 **	.83 **	.55 **	.45 **	.30 **	-.16	.43 **
3. Quasi-Explosion (SITDS)	.98 **	.98 **	1	.83 **	.58 **	.46 **	.30 **	-.22 *	.44 **
4. SITDS	.80 **	.83 **	.83 **	1	.63 **	.65 **	.51 **	-.28 **	.29 **
5. NDS-I	.54 **	.55 **	.58 **	.63 **	1	.53 **	.50 **	-.35 **	.31 **
6. CynDis	.39 **	.45 **	.46 **	.65 **	.53 **	1	.70 **	-.23 *	.10
7. IIP-47	.23*	.30 **	.30 **	.51 **	.50 **	.70 **	1	-.24 *	-.07
8. EQ	-.18	-.16	-.22 *	-.28 **	-.35 **	-.23 *	-.24 *	1	-.09
9. BPDS-IV	.45 **	.43 **	.44 **	.29 **	.31 **	.10	-.07	-.09	1

N Note. N=105. * p< .05; ** p< .01.

Discussion

This study aimed to develop and validate a scale – the Situational Dysphoria Scale (SITDS) – for assessing situational dysphoria in borderline patients.

The results of the study show that the SITDS has a cluster structure consistent with the proposed theoretical concept of situational dysphoria, with these clusters being related to personal, interpersonal and environmental events, but especially to interpersonal events. According to our conceptualisation, situational dysphoria is a temporary, emotionally overwhelming state that is very dependent on situational triggers that can be personal, interpersonal and environmental, and is characterized by internal pressure, urge to act and quasi-explosion, which are assessed by the corresponding subscales. Thus, the SITDS appears to measure situational dysphoria by quantifying the severity of internal pressure, an urge to act and a feeling of quasi-explosion that occur in the context of these situational triggers. An excellent overall internal consistency and a very good internal consistency at the levels of clusters and subscales further support the conceptual coherence of the SITDS.

Although the associations between scores on the SITDS and scores on the measure of background dysphoria (NDS-I) suggest a degree of overlap, results of this study seem to support the notion that situational dysphoria and background dysphoria are distinct constructs. Weak to moderate correlations between the scores on the SITDS and the scores on the measure of BPD manifestations (BPDSI-IV) suggest some relatedness between situational dysphoria and BPD. Weaker but still significant correlations between scores on the SITDS and scores on the measures of hostile distrust (CynDis), chronic interpersonal problems (IIP-47) and empathy (EQ – excluding the subscales of Internal Pressure and Urge to Act) suggest that the concept of situational dysphoria is different from but related to these dimensions, particularly hostile distrust.

A relationship between situational dysphoria and hostile distrust is consistent with previous findings emphasizing the role of dysfunctional beliefs (especially hostile distrust) in mood instability of BPD (Arntz et al. 1999, Barnow et al. 2009, Beck et al. 2004, Bhar et al. 2008). However, further studies of the psychometric properties of the SITDS should include measures of depression and anxiety to better delineate the relationship between situational dysphoria and other constructs.

Results of the present study suggest that a sense of internal pressure, an urge to act and a feeling of quasi-explosion all seem to be important to the concept of situational dysphoria. However, a feeling of quasi-explosion was the only one to be significantly related to all other variables, i.e., background dysphoria, hostile distrust, chronic interpersonal problems, impaired empathy, and BPD manifestations, which indicates that it may be a relatively nonspecific component of situational dysphoria.

The most relevant triggers in relation to situational dysphoria seem to be those pertaining to the interpersonal event domain. This is in line with the most recent literature, according to which interpersonal events (such as rejection, abandonment, disappointment in others, interpersonal offences and betrayals) are the most relevant triggers of momentary BPD symptoms (Berenson et al. 2011, Coifman et al. 2012, Miskewicz et al. 2015, Sadikaj et al. 2013).

By quantifying the severity of feelings of internal pressure, urge to act and quasi-explosion as components of situational dysphoria triggered by specific events, the SITDS can contribute to a better understanding of BPD in terms of "trigger-symptom contingencies" (Furr et al. in preparation). This also suggests new directions in clinical practice with the variability in symptoms of BPD being accounted for by the specific triggers (Miskewicz et al. 2015).

In summary, the present study provides preliminary

support for the use of the SITDS in BPD. This measure may allow practitioners to assess dysphoria in a more nuanced and conceptually coherent way, differentiating between its situational and background manifestations.

Limitations

This study has several limitations.

BPD patients were recruited from adult psychiatric outpatient services and residential inpatient communities, where they received a variety of psychopharmacological and psychotherapeutic treatments. These treatments could decrease the severity of BPD symptoms or modify clinical presentation, thereby also affecting the findings. Future studies of the SITDS should be conducted in samples of individuals with BPD who are not receiving any treatment currently.

Secondly, although co-occurring psychiatric disorders were assessed in the present study, analyses were conducted without controlling for the presence and type of these disorders, which could have also influenced the results.

Finally, considering that this study relied on selected instruments for ascertaining convergent and discriminant validity of the SITDS and the finding of limited discriminant validity of the SITDS, there is a need to include other measures in further studies of the psychometric properties of the SITDS. Such studies should also examine test-retest reliability of this instrument. These efforts would better delineate the relationships between situational dysphoria and other constructs and contribute towards determining the validity of the SITDS.

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