Received: 16 March 2022 | Accepted: 1 May 2023

DOI: 10.1002/pmh.1586

RESEARCH ARTICLE

Personality and Mental Health

The Clinical Interview for Borderline Personality Disorder for Adolescents (CI-BOR-A): Development, acceptability and expert panel evaluation

Diogo Carreiras[1,2] | **Marina Cunha**[1,2] | **Carla Sharp**[3] | **Paula Castilho**[1]

[1]Faculty of Psychology and Educational Sciences, Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC), University of Coimbra, Coimbra, Portugal

[2]Miguel Torga Higher Institute, Coimbra, Portugal

[3]University of Houston, Houstan, Texas, USA

Correspondence
Diogo Carreiras, Faculty of Psychology and Educational Sciences, Center for Research in Neuropsychology and Cognitive and Behavioral Intervention (CINEICC), University of Coimbra, Coimbra, Portugal.
Email: diogocarreiras1@gmail.com

Funding information
This study was supported by the Fundação para a Ciência e Tecnologia through a PhD grant awarded to the first author (grant number: SFRH/BD/129985/2017).

Abstract

Borderline personality disorder (BPD) is a severe mental disorder with marked impulsivity, instability, emotional dysregulation and self-harm. These features tend to develop over time and can be identified in adolescence. Early diagnosis is the first step to prevent the development of these features to a personality disorder. The purpose of this study was to develop the Clinical Interview for BPD for Adolescents (CI-BOR-A), a new instrument based on a sound clinical interview for BPD in youth (CI-BPD). We tested its acceptability with 43 adolescents and its content validity with the quantitative and qualitative evaluation of 23 experts in mental health. The CI-BOR-A is a hybrid semi-structured interview that considers both categorical and dimensional approaches of personality disorders of DSM-5-TR, including 16 items, decision tables for diagnosis, and an appendix to explore self-harm history further. Adolescents accepted the interview, and none refused to complete the assessment. The expert panel considered the interview relevant, clear, accurate and complete. Important feedback was provided in terms of structure and content to improve the CI-BOR-A quality. In general, the CI-BOR-A is a rigorous interview to assess BPD in adolescents and adds an important contribution to early detection in clinical and community settings.

INTRODUCTION

According to the 5th edition (text revision) of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR; American Psychiatric Association [APA], 2022), borderline personality disorder (BPD) is defined as a personality disorder with a pervasive pattern of instability in interpersonal relationships, self-image and affect, marked impulsivity, recurrent suicidal behaviour or self-mutilating behaviours, chronic feelings of emptiness and difficulty in controlling anger. This disorder is associated with functional impairment, overuse of health services (Andrew E. Skodol et al., 2002) and suicide rates ranging between 4% and 10% (Paris, 2009). The prevalence of BPD in adults from the general population ranges between 1.6% and 5.9% (APA, 2022). In adolescents, the prevalence of BPD is similar, ranging between 1% and 5% (Johnson et al., 2008; Lewinsohn et al., 1997; Sharp & Fonagy, 2015). In clinical context, the prevalence of BPD in adolescent outpatients raises by around 22% (Chanen et al., 2008), and in inpatients, it may reach 50% (Grilo et al., 1996).

Given the developmental nature of BPD and considering that dysfunctional cognitive, affective and behavioural patterns are manifested under the age of 18 (Crick et al., 2005), early detection of borderline features is crucial. Furthermore, recognizing adolescents with full criteria of BPD and referring them at earlier

ages may lead to more effective interventions because there is a shorter history of dysfunctional symptoms (Chanen et al., 2017). According to DSM-5-TR (APA, 2022), clinicians may diagnose a person with BPD under the age of 18 because there is an evident and recurrent pattern of symptoms, at least for a year.

Categorical and dimensional approaches of personality disorders (DSM-5-TR)

The DSM-5-TR (APA, 2022) incorporated two parallel approaches to classify personality disorders: the categorical and dimensional approaches. The first approach represented in Section II of the DSM-5-TR has a long history, accompanying the medical tradition of classifying pathologies as present or absent. Through this lens and taking BPD as an example, a person either has the disorder or does not, according to the number of criteria met. From this perspective, it seems that personality disorders are qualitatively distinct and discrete clinical syndromes (Trull & Durrett, 2005). This approach presents advantages, such as simplifying the assessment and clinical decisions about appropriate treatments, as well as simplifying communication and conceptualization (Stein, 2012; Trull & Durrett, 2005). For diagnosing someone with BPD, the clinician should assess whether the person meets the general criteria for personality disorder and then evaluate if at least five of the nine criteria for BPD are present (APA, 2022).

More recently, there has been a growing recognition that discreet categories are not supported by factor analytic work and that the categorical approach may not fully capture the complexity and variability of mental health conditions. Instead, there has been a shift towards a dimensional approach, which has gained empirical support from both empirical (Haslam, 2020; Haslam et al., 2020; Skodol et al., 2014) and clinical perspectives (Hörz-Sagstetter et al., 2021; Milinkovic & Tiliopoulos, 2020; Schmeck et al., 2022). Some of the arguments supporting the dimensional approach are that patients diagnosed with the same disorder may present relatively different clinical displays and personality disorders tend to be comorbid with each other and with other mental illnesses. Moreover, 'other specified' or 'unspecified' diagnostics are occasionally more correct and accurate, although less informative (APA, 2022; Brown & Barlow, 2005). The dimensional approach recognizes that personality exists along a continuum and that there are varying degrees of dysfunction within each domain of personality functioning as well as across traits. So, it provides a coherent understanding of the heterogeneity of symptoms and considers the difficulty in establishing clear boundaries between diagnoses. Moreover, it allows capturing subclinical traits and symptoms (Trull & Durrett, 2005). Nevertheless, the dimensional approach also presents relevant drawbacks, for example, added difficulty of communication in everyday practice and the excessive complexity for clinical use (Bach, 2015; Brown & Barlow, 2005; Herpertz et al., 2017). According to the Alternative Model for Personality Disorders (AMPD) in Section III of the DSM-5-TR, assigning a personality disorder diagnosis involves three steps. Firstly, the clinician assesses Criterion A (general personality functioning) across two domains: self (identity and self-direction) and interpersonal relationships (empathy and intimacy). Secondly, the clinician assesses the severity in maladaptive trait domains (Criterion B). These include negative affectivity, detachment, antagonism, disinhibition and psychoticism. Finally, in a third step, the clinician uses the information gained from the assessment of Criteria A and B and maps that onto the description of the six retained personality disorders in Section III. In the case of BPD, the trait facets that describe the disorder include emotional lability, anxiousness, separation insecurity, depressivity, impulsivity and hostility. Clinicians should also guarantee that a pervasive pattern over time and across a broad range of situations is present, and it is not better explained by other mental disorders, medical conditions or sociocultural environment (APA, 2022).

Because both approaches can be used in the clinical context, with recognized advantages and disadvantages, we considered it relevant that the CI-BOR-A would cover these different perspectives, allowing clinicians to choose between using one of them or both when assessing BPD in adolescents.

Clinical assessment of BPD in adolescents

The SCID-5-PD (First et al., 2015) and the SCID-5-AMPD Module III (First et al., 2018) are valid and reliable clinical interviews for assessing personality disorders categorically or dimensionally; however, they were not specifically created to assess personality disorders in adolescents. Based on our literature review, the Childhood Interview for DSM-IV Borderline Personality Disorder (CI-BPD; Zanarini, 2003) was the first semi-structured clinical interview specifically designed for youth BPD. Although other adult interview-based measures had been used previously in adolescents (see Sharp & Fonagy, 2015, for a review), the CI-BPD was specifically designed for use in adolescents. This version was based on the borderline module of the Diagnostic Interview for Personality Disorder (Zanarini et al., 1996). Additionally, language was simplified, two types of impulsivity were

removed (it did not seem applicable to ask children about promiscuity behaviours and reckless driving) and it was more structured. The final version included nine criteria of BPD symptoms, and the rating scale was 0 for *absent*, 1 for *probably present*, and 2 for *definitely present*. Nonetheless, there was no study specifically designed to examine the psychometric properties of the CI-BPD.

Years later, Sharp et al. (2012) tested the factorial structure, convergent and concurrent validity and reliability of the CI-BPD in a sample of 245 adolescent inpatients. Results supported a unidimensional factor structure of the nine criteria, showing a coherent combination of BPD symptoms in adolescents. The CI-BPD presented adequate convergent and concurrent validity, good internal consistency and high interrater reliability. In Portugal, we are not aware of any clinical interview developed or validated to assess BPD in adolescents.

Non-suicide self-injury (NSSI), suicide ideation and BPD in adolescence

NSSI is the intentional self-inflicted damage to the body tissue with no suicidal intention, and it is mainly present in adolescence (Brown & Plener, 2017). An identified risk factor for NSSI in adolescents is the presence of cluster B personality disorders (Brown & Plener, 2017) and a consistent body of evidence showed an association between NSSI and BPD (Brown et al., 2009; Groschwitz et al., 2015; Zanarini et al., 2008). Gratz et al. (2016) reported that adolescents who have a history of borderline features are more likely to present NSSI. Indeed, 95% of adolescents diagnosed with BPD and hospitalized in the past report engaging in self-harm behaviours (Goodman et al., 2017). Individuals with BPD use self-harming behaviours primarily for emotional regulation but also for other purposes such as dissociation blocking, self-punishment and sensation-seeking (Sadeh et al., 2014). Because emotion dysregulation is a fundamental borderline personality characteristic, it has been proposed that NSSI can serve as a valuable indicator for detecting and monitoring the emergence of BPD symptomatology in adolescence (Reichl & Kaess, 2021).

Notwithstanding the consistent association between NSSI and BPD, suicide ideation should also be considered on this topic. Although NSSI represents self-harm without the intention to die, it seems that this type of behaviour can occur with suicidal ideation, as well as a suicide attempt (Cheung et al., 2013). In fact, adolescents with a history of suicide attempts report more severe NSSI (Tanner et al., 2015). Suicide ideation is a significant predictor of borderline features in youth (Carreiras et al., 2022), and adolescents with BPD seem to have an increased risk for suicidal behaviours (Yen & Spirito, 2013). For these reasons, assessing NSSI and suicide ideation is crucial in the context of adolescent BPD.

Aims of the current study

The current study's main aim was to develop a new clinical interview based on a sound interview already developed (CI-BPD; Sharp et al., 2012; Zanarini et al., 1996), with important implications for research and clinical practice. This new instrument is a hybrid clinical interview that evaluates BPD in adolescents, utilizing both categorical and dimensional approaches according to the DSM-5-TR (APA, 2022). Moreover, given the relevance of NSSI in personality disorder as described above, it encompasses an appendix to delve deeper into NSSI. In this article, we intended (a) to present the development of the CI-BOR-A, (b) to examine its acceptability among adolescents and (c) subsequently test its content validity by submitting the interview to the quantitative and qualitative evaluation of a panel of experts in mental health, particularly with people with borderline symptoms.

METHODS

Procedures

The current study is part of a PhD research project about the evolution of borderline features in adolescents from the general population. After being contacted and informed about the research, some schools in the centre region of Portugal agreed to collaborate. The adolescents and their parents provided informed written consent after being aware of the study aims, confidentiality and voluntary participation. The adolescents were assessed with the CI-BOR-A in a private room at school and provided information about how they accepted the interview.

Based on the information provided by the adolescents, minor changes agreed by the authors were made to the interview. Then, mental health professionals were invited to participate in the current study online (snowball sampling). The inclusion criteria were being a clinical psychologist or psychiatrist and having at least 3 years of experience in mental health settings with people with borderline symptoms. Experts were asked about their years of experience in BPD, and those who had less than 3 years were excluded. These professionals were invited to critically evaluate the CI-BOR-A items on four aspects: relevance, clarity of language to the adolescent population, accuracy and completeness. They used a 5-point Likert scale for each of the four aspects, ranging

between 0 = *not relevant/clear/accurate/complete* and 4 = *extremely relevant/clear/accurate/complete*. Besides, experts were encouraged to give suggestions and comments, to improve the interview quality, especially if an item was rated with two points or less. In the end, there were six general questions about the interview: organized format, understandable instructions, flexible structure, depth of content, usefulness and general accurateness. These items were rated from 0 to 100. The CI-BOR-A in digital format and the access link to the online questionnaire were sent to the experts via e-mail. The online questionnaire was created in the LimeSurvey platform, an online statistical survey tool for research institutes and universities.

Development and content of the CI-BOR-A

The CI-BOR-A assesses BPD from the categorical approach very similar to the CI-BPD (Sharp et al., 2012; Zanarini, 2003). The CI-BPD was translated to Portuguese by a clinical psychologist proficient in English. Then, another clinical psychologist back-translated it to English. Finally, considering the original interview and the back-translation, the group of researchers agreed on a final version. The language was also adapted to the Portuguese adolescent population, and additional statements were included to explore some of the criteria further. Considering that the CI-BPD was developed according to the DSM-IV and the APA released the DSM-5-TR in 2022, we opted to consider the latest version of the manual. We included the possibility to assess BPD according to the dimensional approach. Therefore, several aspects were added such as seven new items, additional questions and a second rating scale to assess impairment. Certain criteria can be assessed in both approaches using information gathered with the same item. One example is that the personality trait 'emotional lability' (AMPD) and criterion 6 affective instability (categorical approach) can be assessed based on the same information gathered in one single item of CI-BOR-A. The same happens for the personality trait 'hostility' (AMPD), which can be assessed with the same sort of information as the criterion 8 inappropriate and intense anger (categorical approach).

Structure

The CI-BOR-A first page comprises the instructions for the interviewer, initial/background questions, four sections of symptoms (affect, self, relationships and impulsivity) with 16 items, decision tables for diagnosis and an NSSI appendix. The time frame for the assessment is the last year. Considering that the CI-BOR-A allows assessing BPD independently according to the categorical and dimensional approach, the items needed for the categorical assessment were slightly shaded with grey colour, so the clinician would visually understand which of the 16 items would have to be used if they decided to follow this approach. To assess BPD according to the dimensional approach, we recommend using all 16 items.

Instructions and information for clinicians

The interview has a first page with information and instructions for the clinicians. It includes important information about the BPD assessment in youth and provides instructions about how to use the CI-BOR-A.

Initial questions

An optional section was added with open questions after initial sociodemographic questions (e.g., age, gender and grade). Some examples are 'How do you describe yourself as a person?', 'What do you do in your free time?', 'If you could change anything about your personality, what would it be?'. We consider this part helpful to break the ice and establish a sense of ease for the adolescent. Also, we view this component as a constructive way of initiating a more profound dialogue and gathering additional insights.

Rating scales

All items are rated on an absent/present rating scale (0 = *absent*, 1 = *probably present*', 2 = *definitely present*) and in terms of impairment (the DSM-5-TR Section III impairing scale) with a 5-point Likert scale (0 = *Little or no impairment*; 4 = *Extreme impairment*). Regarding the categorical scoring, the clinician will only utilize the absent/present scale as the BPD diagnosis depends on the existence of at least five out of the nine criteria. On the other hand, for the dimensional scoring, both scales will be employed since criterion A assesses impairments in self and interpersonal functioning, whereas criterion B relates to the presence of pathological personality traits (APA, 2022).

BPD criteria sections

There are 16 items divided into four criteria sections. The first section was named *Affect* and includes five items related to emotions and feelings. Depressive symptoms, anxiety, rage/irritation, separation anxiety and emotional lability are assessed in this section. The section *Self* comprises four items about identity, feelings of emptiness, self-criticism, dissociation and self-direction. In the *Relationships* section, we can find four items related to relationships with other people around the adolescent. Lack of empathy, relationships/intimacy instability, paranoid ideation and feelings of abandonment are assessed. The

last section of criteria was named *Impulsivity* and assesses difficulties in controlling the impulse with three items, including self-harm and risk behaviours (e.g., drug and alcohol use, binge eating, reckless driving and illegal actions).

Decision tables

After the 16 items, two decision tables facilitate the clinicians to decide about the BPD diagnosis. The clinician can transpose the scores given before to the decision tables and determine whether the subject presents a complete BPD diagnosis, a subclinical diagnosis or no BPD diagnosis.

NSSI appendix

Considering the strong association between borderline features and NSSI, we attached an appendix to explore self-harm behaviours in detail. The clinician can decide whether to use the appendix or not, but it is recommended to use it if the subject reported having previously engaged in NSSI (item 15). A note was added to item 15 explaining that the interviewer could move forward to the appendix to explore NSSI further and then return to proceed with the interview. Only using item 15 allows the assessment of the NSSI criterion; nevertheless, the use of the appendix is recommended to collect essential information regarding this sort of behaviour. This optional appendix assesses the frequency of self-harm behaviours and the motivation and function of those behaviours. Some adolescents might engage in NSSI for emotional regulation and self-punishment; to avoid suicide, communication and emotional expression; and to block dissociation or prevent aggression from others. In the appendix, we can also assess suicide ideation and intention, when applied.

Participants

The sample of adolescents was composed of 43 youth from the general population, of which 25 were females (58%) and 18 males (42%). Their mean age was 15.98 years ($SD = 0.86$) and ranged between 13 and 18. The years of education ranged from 8th to 12th grade.

The expert panel was composed of 23 mental health professionals, of which 15 were clinical psychologists (65.2%), and eight were psychiatrists (34.8%). Of these experts, 10 only had experience with adolescents (43.5%), four only with adults (17.4%) and nine with both adolescents and adults (39.1%) with borderline symptoms. The current expert sample presented an average of 14.91 years of experience ($SD = 8.61$), ranging between 3 and 30 years.

RESULTS

Adolescents' acceptability of the CI-BOR-A

The interview took an average of 30 min to administer (depending on the number of symptoms presented). The adolescents' behaviour throughout the assessment suggested that it was well accepted because none of them refused to complete the interview, and they seemed motivated and attentive. Considering that the adolescents were from the general population, some showed a certain strangeness about some items, such as self-harm or feelings of emptiness. In contrast, a few adolescents with higher scores reported feeling 'well understood'. In the end, they provided suggestions to improve the understandability of the items, for example, replacing or adding words more familiar to them. Considering this feedback, the authors made slight changes in the CI-BOR-A before submitting it to the expert panel evaluation. These changes did not influence the structure or main content of the interview.

Expert panel evaluation

The quantitative evaluation of the expert panel is depicted in Table 1. The experts had access to the latter version of the interview after adolescents' suggestions. The scores of all sections and general questions were above 75% of the highest possible score. The usefulness of the CI-BOR-A was rated 93 out of 100, and the depth of content was 89 out of 100.

The expert panel also provided a qualitative examination in terms of structure (order of questions, space, size of text, verb tenses, wording and phrasing) and content (alter, eliminate or add content and meaning of the items) to improve the CI-BOR-A quality. There was a total of 66 suggestions, most of them about adding sentences to be more accurate and further exploring some criteria. A summary of the qualitative evaluation is presented in Table 2.

CI-BOR-A final version

Considering the adolescents' acceptability and the evaluation of the expert panel, we agreed on a final version. The differences from the initial version are as follows.

Four questions were added in the initial section: (1) asking about school performance and school absenteeism, (2) asking about a current romantic relationship, (3) if the adolescent had psychological or psychiatric treatment in the past and (4) the motive of that treatment.

TABLE 1 Expert panel quantitative evaluation of the CI-BOR-A sections and general questions.

	Highest possible score	Total sample ($n = 23$) *M* (*SD*)	Clinical psychologists ($n = 15$) *M* (*SD*)	Psychiatrists ($n = 8$) *M* (*SD*)
Initial and optional questions	8			
Relevance		6.83 (0.98)	6.93 (0.96)	6.63 (1.06)
Clarity		6.48 (0.67)	6.47 (0.74)	6.50 (0.53)
Accuracy		6.26 (0.92)	6.60 (0.63)	5.63 (1.06)
Completeness		6.04 (1.11)	6.33 (1.05)	5.50 (1.07)
Affect section	20			
Relevance		17.87 (2.22)	18.47 (1.92)	16.75 (2.43)
Clarity		15.70 (2.14)	16.47 (1.80)	14.25 (2.05)
Accuracy		15.83 (2.61)	17.00 (2.20)	13.63 (1.77)
Completeness		15.43 (2.64)	16.47 (2.23)	13.50 (2.33)
Self-section	16			
Relevance		14.04 (1.84)	14.40 (1.80)	13.38 (1.85)
Clarity		12.52 (2.13)	12.87 (2.33)	11.88 (1.64)
Accuracy		12.34 (2.21)	12.80 (2.54)	11.50 (1.07)
Completeness		12.48 (2.02)	12.73 (2.22)	12.00 (1.60)
Relationships section	16			
Relevance		14.26 (1.89)	14.80 (1.61)	13.25 (2.05)
Clarity		12.70 (2.57)	13.73 (1.75)	10.75 (2.82)
Accuracy		12.35 (2.81)	13.33 (2.19)	10.50 (3.02)
Completeness		12.57 (2.48)	13.60 (2.06)	10.63 (2.07)
Impulsivity section	12			
Relevance		10.87 (1.36)	11.07 (1.22)	10.50 (1.60)
Clarity		10.09 (1.65)	10.67 (1.40)	9.00 (1.60)
Accuracy		10.39 (1.44)	10.87 (1.25)	9.50 (1.41)
Completeness		10.30 (1.52)	10.80 (1.32)	9.38 (1.51)
Appendix (NSSI)	36			
Relevance		31.52 (4.61)	33.00 (3.95)	28.75 (4.71)
Clarity		31.35 (4.89)	32.93 (4.28)	28.38 (4.81)
Accuracy		30.39 (4.76)	32.00 (4.24)	27.38 (4.41)
Completeness		30.43 (4.64)	32.00 (4.17)	27.50 (4.21)
General questions				
Organized format	100	79.83 (23.25)	82.07 (24.64)	75.63 (21.29)
Understandable instructions	100	82.87 (15.61)	82.53 (17.62)	83.50 (12.00)
Flexible structure	100	77.22 (15.99)	80.33 (15.20)	71.38 (16.78)
Deep content	100	89.43 (10.33)	90.67 (7.70)	87.13 (14.42)
Usefulness	100	92.57 (12.56)	98.33 (4.27)	81.75 (15.94)
Accurateness	100	87.22 (15.00)	91.47 (9.95)	79.25 (19.95)

Abbreviations: *M*, mean; *SD*, standard deviation.

The verb tenses were consistently conjugated in the past throughout the interview. In the *Affect* section were added some sentences and examples to clarify the emotional responses (e.g., for anxiety were given examples such as tachycardia and sweaty hand; for depressivity were added questions about demotivation and

TABLE 2 Summary of the expert panel qualitative evaluation of the CI-BOR-A sections.

	Suggestions			
Sections	**In terms of structure**	***n***	**In terms of content**	***n***
Initial and optional questions	The optional questions coming before the initial questions; verb tenses in the past; sentence construction	3	Ask about love relationships; communicate with people online; ask about school performance; ask about previous psychological/psychiatric treatments; give more examples; complete some sentences	10
Affect section	Order of questions; verb tenses in the past; sentence construction	6	Add a timeframe for some specific questions; explore emotional expressions further; provide information about the emotional states; ask about emotional triggers; explore suicide ideation further	12
Self-section	Order of questions on self-direction item	1	Add information to clarify the unstable identity, feelings of emptiness, dissociation and self-direction	6
Relationships section	Write the sentence in the positive; replace 'call' for 'try to contact'	6	Add information to clarify empathy, paranoia and abandonment	7
Impulsivity section	Simplify one of the sentences about NSSI; typo detected	2	Add information to clarify impulse and ask for examples of potentially dangerous behaviours. Ask about saying things without thinking	5
Appendix (NSSI)	Ask for a mean and not a frequency of NSSI	2	Add question about engaging in NSSI alone or in a group; if it was done just by habit; explore possible manipulation motive; clarify communication and stopping dissociation motives; clarify suicide ideations	6

Abbreviation: *n*, number of suggestions.

anhedonia). In the *Self* section, the dissociation was completed with more statements such as 'Feeling inside a bubble?' and 'Do you remember what happened in those moments?'. The same applies to self-direction with the addition of 'Do you have defined objectives in the short, medium and long term?' and 'Thinking about your future after school makes you anxious or worried?'. In the *Relationships* section, empathy was clarified by adding, 'Are you able to put yourself on someone else's shoes? Has someone said to you the opposite?' as well as paranoia (e.g., feeling others as harmful or dangerous). Finally, in the *Impulsivity* section, the following sentences were added to specify verbal impulse 'Have you said something you regretted? Can you give me examples?'

In the NSSI appendix, the frequency of those behaviours was asked as a mean ('On average, how many times you usually have these behaviours?'). We also added the following questions 'Did you do it alone or in a group? Does anyone know about these behaviours? Did you tell anyone?'. Regarding motives and functions of NSSI, we clarified *communication* (added 'do you want to communicate to others that you are suffering?') and *stopping dissociation* (added 'do these behaviours help you feel alive?'). Moreover, we included two more motives: manipulating others and by habit.

DISCUSSION

Despite the reluctance expressed by some clinicians and researchers about the BPD diagnosis in people under the age of 18, it seems that some youth might present clinical criteria for BPD (Crick et al., 2005; Paris, 2014; Sharp & Fonagy, 2015). The early diagnosis, or at least the early detection of impairing and pervasive borderline features, could be an essential first step to seek adequate treatment (Bozzatello et al., 2019). Therefore, the current study aimed to present the adaptation and development of the CI-BOR-A, which combines Section II and III formulations of BPD into one interview. Specifically, it retains

the nine Section II items but then adds seven items to cover Criterion A and Criterion B of the AMPD model. Some items are used for both dimensional and categorical assessment because they have several questions about the construct and are scored in terms of presence/absence and impairment. In this preliminary study, our goal was to examine how adolescents accepted the interview and submit it to the evaluation of an expert panel in mental health.

Current assessment tools for BPD in adolescents have limitations that make them not optimal for this population. The SCID-5-PD (First et al., 2015) and SCID-5-AMPD (First et al., 2018) are widely recognized as reliable clinical interviews for assessing personality disorders categorically or dimensionally. However, they were not specifically designed to assess BPD in adolescents and may not account for the unique characteristics of this age group. Conversely, the CI-BPD (Sharp et al., 2012; Zanarini, 2003) was designed to assess BPD in adolescents but only categorically. The CI-BOR-A was developed to assess BPD in adolescents dimensionally and categorically, while taking into consideration the specific features of this population. It has specific language adaptations for adolescents, which makes it easier for them to understand and respond to the questions. It also provides several examples of questions to help clinicians explore the presence and impairment of different criteria. Furthermore, an appendix is included that explores NSSI in depth, as this is a common feature of adolescent BPD and could serve as a valuable indicator for the emergence of BPD symptoms during adolescence (Reichl & Kaess, 2021).

Based on our results, it appears that adolescents responded positively to the CI-BOR-A assessment as none of them declined to participate and they demonstrated motivation and attentiveness during the interview. Moreover, the strangeness felt about some items was expected considering they were part of a community sample of adolescents. We expect that clinical samples of adolescents with marked borderline features would relate more with the items. Nonetheless, these suggestions about wording and meanings were taken into consideration to make the interview more suited to young people. This feedback also provided important indicators that the CI-BOR-A would be well accepted by adolescents. Preliminary data with correlations between the CI-BOR-A items and several psychological variables were already presented (Carreiras et al., 2020). Results showed that the items were associated in the expected direction with borderline features, depression, anxiety, stress, self-harm, impulsivity, suicide ideation and self-disgust (Carreiras et al., 2020).

Generally, the quantitative evaluation of the experts showed that the CI-BOR-A is a relevant, clear, accurate and complete interview for BPD diagnosis in adolescents. The scores of all sections were above 75% of the highest possible score. The same happened for the scores of general questions suggesting that CI-BOR-A has an organized format, understandable instructions, flexible structure, deep content, usefulness and accurateness. We consider that these scores are a good indicator of the interview's quality. Moreover, the suggestions in terms of structure and content provided by the experts were considered and changes were conducted accordingly.

In sum, the CI-BOR-A is a clinical interview designed to assess BPD in adolescents based on the categorical assessment of the CI-BPD (Sharp et al., 2012; Zanarini, 2003) and with the possibility to assess BPD also according to the dimensional approach of the AMPD (APA, 2022). Clinicians are given the option to choose which one fits their practice and patients better or use both. The 16 items (divided into four sections: *affect*, *self*, *relationships* and *impulsivity*) that compose the interview were rearranged and reformulated according to the suggestions of 23 mental health professionals making them more accurate and precise. The decision tables are particularly useful to decide about the diagnosis, and the optional NSSI appendix may be a supplementary tool to characterize self-harm behaviours. The CI-BOR-A is not time-consuming, being administered on average in 30 min. The time would be increased when adolescents present more borderline symptoms and NSSI, in number and severity. The feedback provided by adolescents and experts seems to indicate that the CI-BOR-A is accurate and complete to be used in research, clinical and community settings. We consider that the CI-BOR-A is a very valuable instrument for assessing main difficulties, examining change and evaluating the impact of therapeutic interventions in adolescents with borderline symptoms.

Limitations and future directions

The current study represents the first step in establishing the usefulness of the CI-BOR-A testing its acceptability and content validity. However, there is still a considerable amount of work to be done, and it is important to acknowledge significant limitations. Firstly, the small sample size of adolescents limits our conclusions and a more extensive sample size to conduct further validation of the interview is needed. A larger sample of adolescents and the use of clinical samples would allow testing factor structure, convergent and divergent validity, sensitivity, and specificity. Secondly, the sample of experts was used to assess the quality of the interview and future research should analyse inter-rater reliability. This will examine whether the use of CI-BOR-A allows for an accurate and impartial evaluation, promoting replicability and testing

validity. Finally, as part of our ongoing efforts, we are currently exploring the potential cross-cultural use of our interview and collecting data to assess the validity and reliability of an English version. We believe that this will provide valuable insights into the applicability of our findings, enabling us to identify any potential cultural biases or limitations of our instrument, as well as explore the dimensional and categorical approach to BPD diagnosis in adolescence.

ACKNOWLEDGEMENTS

We would like to express our gratitude to all adolescents who accepted to be interviewed and all the professionals who kindly agreed to integrate the expert panel of this study.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

The database used in this study is available from the corresponding author on reasonable request.

ETHICS STATEMENT

All procedures considered the ethical standards of the Ministry of Education (number: 0082000013), Faculty of Psychology and Educational Sciences of the University of Coimbra, National Commission for Data Protection of Portugal (number: 6713/ 2018) and the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all participants and/or legal guardians. The school head's teachers of the involved institutions agreed to collaborate with this research.

ORCID

Diogo Carreiras https://orcid.org/0000-0003-2048-1895

REFERENCES

American Psychiatric Association. (2022). *Diagnostic and statistical manual of mental disorders* (5th ed.). text rev. American Psychiatric Association Publishing, Inc.

Bach, B. (2015). *The alternative DSM-5 model for personality disorders: Validity and clinical utility of the pathological personality traits criterion*. University of Copenhagen.

Bozzatello, P., Bellino, S., Bosia, M., & Rocca, P. (2019). Early detection and outcome in borderline personality disorder. *Frontiers in Psychiatry*, *10*(710), 710. https://doi.org/10.3389/fpsyt.2019.00710

Brown, M. Z., Linehan, M. M., Comtois, K. A., Murray, A., & Chapman, A. L. (2009). Shame as a prospective predictor of self-inflicted injury in borderline personality disorder: A multimodal analysis. *Behaviour Research and Therapy*, *47*(10), 815–822. https://doi.org/10.1016/j.brat.2009.06.008

Brown, R. C., & Plener, P. L. (2017). Non-suicidal Self-Injury in Adolescence. In *Current Psychiatry Reports* (Vol. 19, Issue 3). Current Psychiatry Reports. https://doi.org/10.1007/s11920-017-0767-9

Brown, T. A., & Barlow, D. H. (2005). Dimensional versus categorical classification of mental disorders in the fifth edition of the diagnostic and statistical manual of mental disorders and beyond: Comment on the special section. *Journal of Abnormal Psychology*, *114*(4), 551–556. https://doi.org/10.1037/0021-843X.114.4.551

Carreiras, D., Castilho, P., & Cunha, M. (2022). Uncovering borderline features in a community sample of Portuguese adolescents. *Revista de Psicopatología y Psicología Clínica*, *27*(3), 159–167. https://doi.org/10.5944/RPPC.32319

Carreiras, D., Cunha, M., & Castilho, P. (2020). Preliminary results of the Clinical Interview for Borderline Personality Disorder for Adolescents (CI-BOR). *Annual Congress of the European Association for Behavioural and Cognitive Therapies*.

Chanen, A., Sharp, C., Hoffman, P., & Global Alliance for Prevention and Early Intervention for Borderline Personality Disorder. (2017). Prevention and early intervention for borderline personality disorder: A novel public health priority. *World Psychiatry*, *16*(2), 215–216. https://doi.org/10.1002/wps.20429

Chanen, A. M., Jovev, M., Djaja, D., McDougall, E., Yuen, H. P., Rawlings, D., & Jackson, H. J. (2008). Screening for borderline personality disorder in outpatient youth. *Journal of Personality Disorders*, *22*(4), 353–364. https://doi.org/10.1521/pedi.2008.22.4.353

Cheung, Y. T. D., Wong, P. W. C., Lee, A. M., Lam, T. H., Fan, Y. S. S., & Yip, P. S. F. (2013). Non-suicidal self-injury and suicidal behavior: Prevalence, co-occurrence, and correlates of suicide among adolescents in Hong Kong. *Social Psychiatry and Psychiatric Epidemiology*, *48*(7), 1133–1144. https://doi.org/10.1007/s00127-012-0640-4

Crick, N. R., Close, D. M., & Woods, K. (2005). Borderline personality features in childhood: A short-term longitudinal study. *Development and Psychopathology*, *17*, 1051–1070. https://doi.org/10.1017/S0954579405050492

First, M. B., Skodol, A. E., Bender, D. S., & Oldham, J. M. (2018). Module I: Structured clinical interview for the level of personality functioning scale. In Oldham J., First MB, Skodol AE, Bender DS (Ed.), *Structured clinical interview for the DSM-5 Alternative Model for Personality Disorders (SCID-AMPD)*. American Psychiatric Association.

First, M. B., Williams, J. B. W., Benjamin, L. S., & Spitzer, R. L. (2015). *User's guide for the SCID-5-PD (structured clinical interview for DSM-5 personality disorder)*. American Psychiatric Association.

Goodman, M., Tomas, I. A., Temes, C. M., Fitzmaurice, G. M., Aguirre, B. A., & Zanarini, M. C. (2017). Suicide attempts and self-injurious behaviours in adolescent and adult patients with borderline personality disorder. *Personality and Mental Health*, *11*(3), 157–163. https://doi.org/10.1002/pmh.1375

Gratz, K. L., Chapman, A. L., Dixon-Gordon, K. L., & Tull, M. T. (2016). Exploring the association of deliberate self-harm with emotional relief using a novel implicit association test. *Personality Disorders: Theory, Research, and Treatment*, *7*(1), 91–102. https://doi.org/10.1037/per0000138

Grilo, C. M., Becker, D. F., Fehon, D. C., Walker, M. L., Edell, W. S., & McGlashan, T. H. (1996). Gender differences in personality disorders in psychiatrically hospitalized adolescents. *American Journal of Psychiatry*, *153*(8), 1089–1091. https://doi.org/10.1176/ajp.153.8.1089

Groschwitz, R. C., Kaess, M., Fischer, G., Ameis, N., Schulze, U. M. E., Brunner, R., Koelch, M., & Plener, P. L. (2015). The association of non-suicidal self-injury and suicidal behavior according to DSM-5 in adolescent psychiatric inpatients. *Psychiatry Research*, *228*(3), 454–461. https://doi.org/10.1016/j.psychres.2015.06.019

Haslam, N. (2020). Unicorns, snarks, and personality types: A review of the first 102 taxometric studies of personality. *Australian Journal of Psychology*, *71*(1), 39–49. https://doi.org/10.1111/ajpy.12228

Haslam, N., McGrath, M. J., Viechtbauer, W., & Kuppens, P. (2020). Dimensions over categories: A meta-analysis of taxometric research. *Psychological Medicine*, *50*(9), 1418–1432. https://doi.org/10.1017/S003329172000183X

Herpertz, S. C., Huprich, S. K., Bohus, M., Chanen, A., Goodman, M., Mehlum, L., Moran, P., Newton-Howes, G., Scott, L., & Sharp, C. (2017). The challenge of transforming the diagnostic system of personality disorders. *Journal of Personality Disorders*, *31*(5), 577–589. https://doi.org/10.1521/pedi_2017_31_338

Hörz-Sagstetter, S., Ohse, L., & Kampe, L. (2021). Three dimensional approaches to personality disorders: A review on personality functioning, personality structure, and personality organization. *Current Psychiatry Reports*, *23*(7), 1–16. https://doi.org/10.1007/S11920-021-01250-Y/TABLES/2

Johnson, J. G., Cohen, P., Kasen, S., Skodol, A. E., & Oldham, J. M. (2008). Cumulative prevalence of personality disorders between adolescence and adulthood. *Acta Psychiatrica Scandinavica*, *118*(5), 410–413. https://doi.org/10.1111/j.1600-0447.2008.01231.x

Lewinsohn, P. M., Rohde, P., Seeley, J. R., & Klein, D. N. (1997). Axis II psychopathology as a function of Axis I disorders in childhood and adolescence. *Journal of the American Academy of Child and Adolescent Psychiatry*, *36*(12), 1752–1759. https://doi.org/10.1097/00004583-199712000-00024

Milinkovic, M. S., & Tiliopoulos, N. (2020). A systematic review of the clinical utility of the DSM–5 section III alternative model of personality disorder. *Personality Disorders: Theory, Research, and Treatment*, *11*(6), 377–397. https://doi.org/10.1037/PER0000408

Paris, J. (2009). Borderline personality disorder. In P. H. Blaney & T. Millon (Eds.), *Oxford textbook of psychopathology* (pp. 723–737). Oxford University Press.

Paris, J. (2014). A history of research on borderline personality disorder in childhood and adolescence. In C. Sharp & J. L. Tackett (Eds.), *Handbook of borderline personality disorder in children and adolescents* (pp. 9–16). Springer. https://doi.org/10.1007/978-1-4939-0591-1_2

Reichl, C., & Kaess, M. (2021). Self-harm in the context of borderline personality disorder. *Current Opinion in Psychology*, *37*, 139–144. https://doi.org/10.1016/J.COPSYC.2020.12.007

Sadeh, N., Londahl-Shaller, E. A., Piatigorsky, A., Fordwood, S., Stuart, B. K., McNiel, D. E., David Klonsky, E., Ozer, E. M., & Yaeger, A. M. (2014). Functions of non-suicidal self-injury in adolescents and young adults with borderline personality disorder symptoms. *Psychiatry Research*, *216*(2), 217–222. https://doi.org/10.1016/J.PSYCHRES.2014.02.018

Schmeck, K., Kumperscak, H. G., Birkhölzer, M., & Goth, K. (2022). Editorial: Dimensional assessment of personality disorders in young people: A closer look on personality functioning in younger ages, different cultures, and various clinical settings. *Frontiers in Psychiatry*, *13*, 1082189. https://doi.org/10.3389/FPSYT.2022.1082189

Sharp, C., & Fonagy, P. (2015). Practitioner review: Borderline personality disorder in adolescence—Recent conceptualization, intervention, and implications for clinical practice. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, *56*(12), 1266–1288. https://doi.org/10.1111/jcpp.12449

Sharp, C., Ha, C., Michonski, J., Venta, A., & Carbone, C. (2012). Borderline personality disorder in adolescents: Evidence in support of the childhood interview for DSM-IV borderline personality disorder in a sample of adolescent inpatients. *Comprehensive Psychiatry*, *53*, 765–774. https://doi.org/10.1016/j.comppsych.2011.12.003

Skodol, A. E., Bender, D. S., & Oldham, J. M. (2014). An alternative model for personality disorders: DSM-5 Section III and beyond. In J. M. Oldham, A. E. Skodol, & D. S. Bender (Eds.), *The American Psychiatric Publishing textbook of personality disorders* (pp. 511–544). American Psychiatric Publishing, Inc.

Skodol, A. E., Gunderson, J. G., Pfohl, B., Widiger, T. A., Livesley, W. J., & Siever, L. J. (2002). The borderline diagnosis I: Psychopathology, comorbidity, and personality structure. *Biological Psychiatry*, *51*(12), 936–950. https://doi.org/10.1016/S0006-3223(02)01324-0

Stein, D. J. (2012). Dimensional or categorical: Different classifications and measures of anxiety and depression. *Medicographia*, *34*, 270–275.

Tanner, A. K., Hasking, P., & Martin, G. (2015). Suicidality among adolescents engaging in nonsuicidal self-injury (NSSI) and fire-setting: The role of psychosocial characteristics and reasons for living. *Child and Adolescent Psychiatry and Mental Health*, *9*(1), 1–11. https://doi.org/10.1186/s13034-015-0068-1

Trull, T. J., & Durrett, C. A. (2005). Categorical and dimensional models of personality disorder. *Annual Review of Clinical Psychology*, *1*, 355–380. https://doi.org/10.1146/annurev.clinpsy.1.102803.144009

Yen, S., & Spirito, A. (2013). Borderline personality disorder in suicidal adolescents. *Personality and Mental Health*, *7*(2012), 87–101. https://doi.org/10.1002/pmh.1216

Zanarini, M. C. (2003). *The childhood interview for DSM-IV borderline personality disorder (CI-BPD)*. McLean Hospital and Harvard Medical School.

Zanarini, M. C., Frankenburg, F. R., Reich, D. B., Fitzmaurice, G., Weinberg, I., & Gunderson, J. G. (2008). The 10-year course of physically self-destructive acts reported by borderline patients and axis II comparison subjects. *Acta Psychiatrica Scandinavica*, *117*(3), 177–184. https://doi.org/10.1111/j.1600-0447.2008.01155.x

Zanarini, M. C., Frankenburg, F. R., Sickel, A. E., & Yong, L. (1996). *The diagnostic interview for DSM-IV personality disorders*. McLean Hospital, Laboratory for the Study of Adult Development.

How to cite this article: Carreiras, D., Cunha, M., Sharp, C., & Castilho, P. (2023). The Clinical Interview for Borderline Personality Disorder for Adolescents (CI-BOR-A): Development, acceptability and expert panel evaluation. *Personality and Mental Health*, 1–10. https://doi.org/10.1002/pmh.1586