# Reliability and validity of a Brazilian version of the Hypomania Checklist (HCL-32) compared to the Mood Disorder Questionnaire (MDQ)

# Confiabilidade e validação da versão brasileira do Questionário de Hipomania (HCL-32 VB) comparado ao Questionário de Transtornos de Humor (MDQ)

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### **Abstract**

**Objective:** Bipolar disorders are often not recognized and undertreated. The diagnosis of current or past episodes of hypomania is of importance in order to increase diagnostic certainty. The Hypomania Checklist-32 is a self-applied questionnaire aimed at recognizing these episodes. As part of the international collaborative effort to develop multi-lingual versions of the Hypomania Checklist-32, we aimed to validate the Brazilian version and to compare its psychometric properties with those of the Mood Disorder Questionnaire. Method: Adult outpatients with bipolar disorder I (n = 37), bipolar disorder II (n = 44) and major depressive disorder (n = 42) of a specialized mood disorder unit were diagnosed according to DSM-IV-TR using a modified version of the SCID. We analyzed the internal consistency and discriminative ability of the Hypomania Checklist-32 Brazilian version in relation to the Mood Disorder Questionnaire. Results: The internal consistency of the Brazilian Hypomania Checklist-32, analyzed using Cronbach's alpha coefficient, was 0.86. A score of 18 or higher in the Hypomania Checklist-32 Brazilian version distinguished between bipolar disorder and major depressive disorder, with a sensitivity of 0.75 and a specificity of 0.58, compared to 0.70 and 0.58, respectively, for the Mood Disorder Questionnaire (score ≥ 7). The Hypomania Checklist-32 Brazilian version showed a dual factor structure characterized by "active/elated" and "risk-taking/ irritable" items. Hence, the Hypomania Checklist-32 Brazilian version was found to have a higher sensitivity but the same specificity as the Mood Disorder Questionnaire. Conclusion: The Brazilian version of the Hypomania Checklist-32 has adequate psychometric properties and helps discriminating bipolar disorder from major depressive disorder (but not bipolar disorder I from bipolar disorder II) with good sensitivity and specificity indices, similar to those of the Mood Disorder Questionnaire.

**Descriptors:** Questionnaire; Major depressive disorder; Bipolar disorder; Diagnosis; Psychometrics

## Resumo

Objetivo: O transtorno bipolar muitas vezes não é reconhecido e deixa de ser tratado adequadamente. O diagnóstico de episódios atuais ou passados é importante, a fim de aumentar a certeza diagnóstica. O Questionário de Autoavaliação de Hipomania-32 é um questionário autoaplicável para o rastreamento desses episódios. Como parte do desenvolvimento em vários idiomas do Questionário de Autoavaliação de Hipomania-32, nós objetivamos validar a versão brasileira e comparar suas propriedades psicométricas com o Questionário de Transtornos do Humor. Método: Em uma unidade especializada em transtornos do humor foram selecionados pacientes ambulatoriais adultos com transtorno bipolar I(n = 37), transtorno bipolar II (N = 44) e transtorno depressivo maior (N = 42) de acordo com a DSM-IV-TR, utilizando uma versão modificada do SCID. Analisou-se a consistência interna e capacidade discriminativa do Questionário de Autoavaliação de Hipomania-32 versão brasileira comparada ao Questionário de Transtornos do Humor. Resultados: A consistência interna do Questionário de Autoavaliação de Hipomania-32 versão brasileira é boa, com alfa de Cronbach 0,86. Um escore de 18 ou mais no Questionário de Autoavaliação de Hipomania-32 versão brasileira distingue entre o transtorno bipolar e o transtorno depressivo maior com uma sensibilidade de 0,75 e especificidade de 0,58, e para o Questionário de Transtornos do Humor, para um escore de 7 ou mais, de 0,70 e 0,58, respectivamente. O Questionário de Autoavaliação de Hipomania-32 mostrou uma estrutura caracterizada pela predominância de dois fatores (ativação/elação e irritabilidade/ correr riscos). Assim, o Questionário de Autoavaliação de Hipomania-32 versão brasileira tem maior sensibilidade, mas a mesma especificidade que o Questionário de Transtornos do Humor. Conclusão: A versão brasileira do Questionário de Autoavaliação de Hipomania-32 possui propriedades psicométricas adequadas e ajuda a discriminar o transtorno bipolar do transtorno depressivo maior (mas não transtorno bipolar I de transtorno bipolar II), com boa sensibilidade e especificidade, semelhante ao Questionário de Transtornos do Humor.

**Descritores:** Questionário; Transtorno depressivo maior; Transtorno bipolar; Diagnóstico; Psicometria

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## Introduction

Bipolar disorder (BD) is a chronic psychiatric illness that is often misdiagnosed. Indeed, it may take an average of 10 years from symptom onset to recognition and treatment. It is a burdensome disorder, and even its subsyndromal forms negatively impact social and functional outcomes in adolescents. Accordingly, the identification of patients within the broad bipolar spectrum is of great clinical importance. Consequences of misdiagnosis include worsening of the disease, iatrogenic treatment with antidepressants, increased risk of suicide, alcoholism, drug addiction, risk of contracting sexually transmitted diseases (mainly AIDS), and litigations. AIDS), and litigations.

Bipolar disorder type II (BD-II) is a common disorder, affecting around 3-5% of the adult population worldwide, with estimates of up to 11% for bipolar spectrum disorders.<sup>8</sup> In Brazil, the lifetime prevalence is 8.3% for the bipolar spectrum.<sup>9</sup>

Recognition of past episodes of hypomania is pivotal for the diagnosis, although depression is the typically presenting feature of the illness. The under-recognition of hypomania leads to a significant rate of misdiagnosis, with consequent mismanagement, i.e., treatment of BD as a unipolar disorder. <sup>10</sup> Because hypomania is often not perceived by patients as pathological, it is not common for them to spontaneously report it to clinicians. <sup>11</sup> Furthermore, clinicians often do not directly inquire about hypomania if patients are seen during episodes of depression, <sup>12</sup> despite evidence showing that from 30% to 60% of outpatients with BD are initially considered to be unipolar. <sup>13</sup> This is of great importance, since the long term outcome of BD can be modified by early identification and treatment. <sup>14</sup>

Accordingly, the recognition of hypomania may require more detailed assessments than currently available through structured diagnostic interviews, such as the diagnostic criteria of the DSM-IV.15 Indeed, these interviews may be less valid than previously believed.<sup>12</sup> The DSM-IV diagnostic criteria have high specificity but low sensitivity for the diagnosis of hypomania. It has been proposed that focusing on specific symptoms (e.g., activation), as well as accepting shorter durations of episodes, may improve the recognition of bipolar disorder.<sup>4</sup> For these reasons, diagnostic tools for hypomania and BD-II are necessary. Several screening instruments have been developed for this purpose. Some of them assess trait-like features (e.g., Hypomanic Personality Scale), 16 and are better understood as assessing risk factors for future disorders. 12 These scales assess personality traits rather than the episodic nature of hypomania, and do not evaluate possible changes in affect, cognition, and behavior in bipolar patients.<sup>17</sup> Other self-report measures have not been proposed as screening instruments, but assess symptoms, such as the Self-Report Inventory for Mania<sup>18</sup> and the Brief Bipolar Disorder Scale.<sup>19</sup>

The Hypomania Checklist-32 (HCL-32) is an internationally validated self-applied questionnaire. The primary goal of the authors of the HCL-32 is to identify hypomanic components in patients with depression, in order to facilitate the diagnosis of BD-II. A secondary goal is the development of shorter multi-lingual versions with established cut-off scores for hypomania.

Accordingly, the aim of this study was to develop a Brazilian version of the HCL-32 (HCL-32 VB), as well as to describe its psychometric characteristics for use in the clinical practice. We also aimed to determine a threshold score with good sensitivity and specificity to detect hypomania. In addition, we contrasted the HCL-32 VB with the Mood Disorder Questionnaire (MDQ), a screening instrument largely used for improving the identification of BD.<sup>26</sup> Its English version was shown to have a sensitivity of 73% and a specificity of 90% for a sample consisting mostly of BD-I patients. In the development study, the MDQ was more efficient in identifying BD-I than BD-II.<sup>27</sup> Because the HCL-32 has a better focus on hypomanic symptoms, we hypothesized that it could be more adequate to identify bipolarity types I and II.

## Method

The study was conducted at the Mood Disorders Unit (GRUDA) of the Department and Institute of Psychiatry of the School of Medicine, Universidade de São Paulo, Brazil. The study was approved by the Institutional Ethics Committee and consent forms were obtained from all participants.

# 1. Subjects

BD-I, BD-II, and major depressive disorder (MDD) outpatients of both genders (N = 150), aged 18 to 65 years, were selected according to SCID-I/P – DSM-IV diagnoses. Participants were typically chronic and difficult to treat. We included only symptomatic individuals (mania, hypomania, depression), treated or not. Exclusion criteria included uncompensated substance abuse or dependence (except nicotine) over the previous three months, organic mental disorders, and incapacity to understand the questionnaire. Volunteers were assessed by the primary investigator using the SCID-I/P.<sup>28</sup>

## 2. Instruments

The HCL-32 consists of 32 yes/no questions. It is a self-applied questionnaire for the assessment of hypomania that investigates the presence of a variety of symptoms. Participants are requested to focus on "the 'high' periods" and to indicate whether specific thoughts or emotions were present during this state (including low-threshold symptoms such as "making jokes" and "I am less shy and inhibited" or "I am more flirtatious and/or am sexually more active"). In addition, the HCL-32 includes 8 severity and functional impact items related to the duration of the episodes and to positive and negative consequences across different areas. Participants are asked to rate the impact on family life, social life, school, and leisure, as "positive", "no impact", or "negative." In addition, other people's reactions and comments (positive, neutral or negative) about such episodes are assessed.

The MDQ is a self-rating screening questionnaire for BD-I and II, with questions related to hypomania, validated for use in psychiatric practice<sup>2</sup> and in the general population.<sup>29</sup> It consists of 13 questions (yes/no) evaluating mood, self-confidence, energy, sociability, interest in sex, and other behaviors. Two additional questions explore the concomitance of symptoms during any given

period, as well as the severity of the functional impairment caused by the symptoms. Disability is rated from "no consequences" to "severe consequences".<sup>29</sup> The MDQ is considered positive when individuals respond "yes" to at least 7 of the 13 items, have at least 2 symptoms occurring simultaneously, and are at least moderately impacted. The Brazilian version of the MDQ is in process of validation by the authors.

The SCID-I/P is the standardized semi-structured clinical interview which provides diagnoses according to the DSM-IV-TR.<sup>15</sup> It was developed by the American Psychiatric Association and is designed for use by clinicians with experience in assessing psychopathology and managing patients. According to it, the diagnosis of hypomania requires at least four days of mood change with euphoria and/or irritability and is a prerequisite for subsequent questioning on manic symptoms. The present study imposed no minimum time limit for hypomania diagnosis, given that the four-day period is in itself arbitrary.<sup>21</sup> All mania-related questions were asked, even when patients denied mood changes. When this happened, the question on irritable and/or manic mood was asked again at the end of the evaluation in order to increase the detection of bipolarity.<sup>25</sup>

# 3. Procedures

The original version of the HCL-32 was translated and adapted to Brazilian Portuguese according to the World Health Organization instrument translation protocol.<sup>30</sup> The first draft of the Brazilian version was translated by the authors and reviewed by experts in mood disorders, as well as by a Brazilian Portuguese teacher. It was then back-translated by an English (American) teacher. The same procedure was applied for the MDQ. All eligible patients received instructions to complete both the HCL-32 VB and the MDQ.

## 4. Statistical analysis

Data were entered in summary tables and descriptive statistics. Demographic variables (except gender) were analyzed using analysis of variance (ANOVA) after confirmation of normality and homogeneity of variances. Data related to gender were analyzed using the chi square test, since each frequency was > 5. In the absence of a normal distribution, we used a nonparametric Mann-Whitney *U*-test to compare the mean number of positive responses to the HCL-32 BV. To analyze the consistency of the 32 items, we used principal component factor analysis with subsequent varimax rotation. The number of factors was decided in accordance with the Scree test and Monte Carlo Parallel Analysis. Subscale scores for each factor were obtained by summing all items that loaded higher than 0.40 on the corresponding factor. Internal consistency

was analyzed using Cronbach's alpha coefficient for the total HCL-32 VB and its subscales. Receiver operating characteristic (ROC) analysis was conducted to distinguish MDD from bipolar patients. Threshold scores in the HCL-32 VB for bipolar patients were calculated. The area under the ROC curve (AUC) was determined as a measure of discriminant predictive value. Associations between the current mental state (HCL-32) and current episode type (DSM-IV) were evaluated using Spearman's correlation. Two-tailed tests with a probability (p-value) < 0.05 were considered significant. All statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS).<sup>31</sup>

## Results

# 1. Sample size and demographic variables

The HCL-32 VB was completed by 150 patients. The sample size was established so that the total number of patients was approximately five times the number of items<sup>32</sup> in the HCL-32, and adequately powered (0.944) to conduct a factor analysis and assess the sensitivity and specificity of the instrument. For an estimated power of 0.85, we would need 31 patients in each diagnosis. Of 150 individuals enrolled, 27 were excluded; 11 due to substance abuse and 16 due to inability to complete the questionnaires properly. Such inability was mostly related to their low educational level and not to cognitive impairment associated with mania, hypomania or depression. Accordingly, our final sample comprised 81 patients with BD (37 BD-I; 44 BD-II) and 42 with MDD. No significant differences were found in relation to age or gender (Table 1).

# 2. Translation and adaptation

The Brazilian version of the HCL-32 was approved by the authors of the original version and was named HCL-32 VB (Appendix 1 – see at www.scielo.br/rbp). The Brazilian version of the MDQ was named MDQ VB (Appendix 2 – see at www.scielo.br/rbp).

Feasibility was described as the percentage of patients (n = 12) who did not complete the entire questionnaire (8% left at least one question unanswered). Internal consistency was high, with a Cronbach's alpha coefficient of 0.86 for the entire HCL-32 VB, indicating that the items of the questionnaire were sufficiently homogeneous. The exclusion of individual items did not affect Cronbach's alpha. The factor analysis resulted in 9 factors with eigenvalues > 1, explaining 61.6% of the total variance. According to the Scree test and Monte Carlo Parallel Analysis, a 2-factor solution was preferred.

The first factor, with an eigenvalue of 6.79, explained 21.2% of the variance and comprised 20 items (Table 2). This subscale

Table 1 - Mean age and sex distribution among bipolar I and II and MDD patients in the Brazilian Version of the HCL-32

	Total	BD-I	BD-II	MDD	р	
	(N = 123)	(N = 37)	(N = 44)	(N = 42)		
Women	78.9%	81.1%	75%	81%	0.736	
Mean age	42 (SD = 11.1)	41 (SD = 11.3)	43 (SD = 11.3)	40 (SD = 10.9)	0.405	

Table 2 - Factor structure of the HCL-32 Brazilian Version after varimax rotation in bipolar I, bipolar II, and MDD patients

Item description	Factors				
_	1 ("active-elated")	2 ("irritable/risk-taking")			
I talk more	0.647	-0.018			
I want to meet or actually met more people	0.645	0.092			
I make more jokes	0.615	0.125			
I engage in lots of new things	0.607	-0.139			
I think faster	0.587	0.159			
I am physically more active	0.584	-0.280			
I am more flirtatious or more sexually active	0.583	-0.059			
I am more sociable	0.538	-0.299			
My mood is higher, more optimistic	0.533	-0.336			
I have more ideas, I am more creative	0.523	-0.135			
I take more risks in my daily life	0.523	0.279			
I wear more colorful and more extravagant clothes	0.522	-0.003			
I am less shy or inhibited	0.521	-0.094			
am more interested in sex	0.515	-0.022			
I plan more activities or projects	0.515	-0.280			
I fell more energetic and more active	0.502	-0.176			
I enjoy my work more	0.498	-0.335			
My thoughts jump from topic to topic	0.494	0.360			
I want to travel and/or do travel more	0.439	-0.280			
I do things more quickly and/or more easily	0.417	-0.174			
I am more easily distracted	0.388	0.182			
I need less sleep	0.376	0.189			
I am more self-confident	0.358	-0.170			
I tend to drive faster or take more risks	0.306	0.254			
I take more drugs	-0.021	0.635			
I smoke more cigarettes	0.068	0.601			
am more impatient and/or get irritable more easily	-0.018	0.574			
can be exhausting or irritating for others	0.297	0.557			
get into more quarrels	0.300	0.498			
spend more money/to much money	0.318	0.490			
I drink more alcohol	0.230	0.445			
I drink more coffee	0.159	0.371			

Extraction method: Principal Component Analysis. Two factors extracted.

consisted of questions related to "active/elated" symptoms. The second factor, with an eigenvalue of 3.31 (10.34% of the variance), comprised 7 items and included questions associated with "irritable/risk-taking" items. For individual items, a factor loading  $\geq 0.40$  suggested significant item factors. The factor structure resembled that obtained for other samples of non-clinical subjects and patients with affective disorders in previous studies.  $^{11,20,22}$ 

Individuals with BD had the highest HCL-32 VB scores. The mean number of affirmative responses to the list of symptoms was significantly different according to diagnosis. We analyzed the scale's discrimination of BD through the ROC curve. The

area under the curve of the HCL-32 BV was 0.702, indicating a good discriminant ability (Figure 1). The best combination of sensitivity (0.75) and specificity (0.58) was established with a score above 18, which discriminates between BD and MDD patients. To compare the discriminant properties of the HCL-32 VB and the MDQ VB, we calculated the sensitivity and specificity of both questionnaires. The ROC curve of the MDQ VB is shown in Figure 2. The HCL-32 VB had a sensitivity of 0.75 and specificity of 0.58. The MDQ VB had a sensitivity of 0.70 and specificity of 0.58. Hence, the HCL-32 VB showed a higher sensitivity but the same specificity as the MDQ VB. Spearman's correlation was

# **ROC CURVE (HCL-32 VB)**

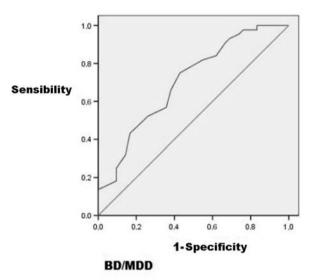


Figure 1 - ROC curve showing the power of HCL-32 total scores to discriminate between bipolar disorder (BD) and major depressive disorder (MDD)

used to correlate current mood state and the HCL-32 total and subscale scores. There was no impact on the self-assessment of hypomanic symptoms (p = 0.861). Significant differences were found for the two subscales between BD-II and MDD, but not between BD-I and BD-II, and no differences were found between BD-I and MDD when using the subscale of the first dimension, composed of 20 items (Table 3).

## Discussion

The recognition of hypomania is pivotal for the diagnosis of BD-II. Because hypomania is often not perceived by patients as

# ROC CURVE (MDQ)

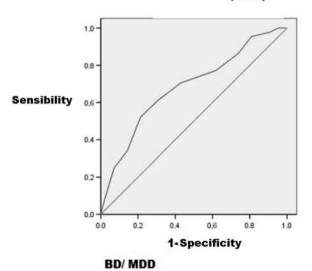


Figure 2 - ROC curve showing the power of MDQ total scores to discriminate between bipolar disorder (BD) and major depressive disorder (MDD)

Table 3 - Multiple comparisons: differences between diagnoses

			р
Factor 1 (ANOVA)	TBI	TBII	0.520
		DM	0.288
	TBII	TBI	0.520
		DM	0.021
	DM	TBI	0.288
		TBII	0.021
HCL32 VB (ANOVA)	TBI	TBII	0.567
		DM	0.025
	TBII	TBI	0.567
		DM	0.001
	DM	TBI	0.025
		TBII	0.001
Factor 2 (Mann-Whitney)	TBI	TBII	0.988
		DM	0.000
	TBII	TBII	0.988
		DM	0.000

pathological, it is not common for them to spontaneously report it to clinicians. The recognition of hypomania may require more subtle inquiries than those present in currently available structured diagnostic interviews, such as those based on DSM-IV criteria. Instruments assessing hypomania may be of importance for the clinical practice in Portuguese-speaking countries like Brazil.

Our study included patients with BD-I, BD-II and MDD. We found that the HCL-32 VB had good sensitivity (0.75) and specificity (0.58) with a cut-off score of 18, meaning that 18 affirmative answers have good discriminatory power to distinguish BD from unipolar disorder. This differs from the cut-off point (14-15) found in studies conducted in other languages. <sup>4,21-24</sup> These differences can be explained by the fact that the sample was derived from a tertiary care facility, characterized by patients with greater chronicity and more resistant to treatment. The criterion of 18 affirmative responses to hypomanic symptoms in the HCL-32 VB is sensitive enough to alert healthcare providers about the presence of bipolar disorder. Once aware, clinicians should proceed to a more detailed psychiatric assessment in order to establish a definitive diagnosis.

When compared with the MDQ (sensitivity = 0.70/specificity = 0.58), the HCL-32 VB and the HCL-32 are more sensitive to detect hypomanic symptoms. The patients enrolled in our study were symptomatic (mania or hypomania and depression). The correlation analysis showed no association between current mood state and self-assessment of hypomanic symptoms. Internal consistency (Cronbach's alpha of 0.86) was high and similar to values found in the validation of the HCL-32 for other languages. 11,20,22-24 It was comparable to other instruments such as the MDQ. 26,29 This reliability is similar to values found in samples of remitted patients (Italy, Spain, and Sweden). 33 This indicates stable psychometric properties, regardless of clinical status or cultural differences.

The factor structure also resembled that obtained with other samples of patients with affective disorders in previous studies. 11,20 A single factor load responded for 21,2% of the total variance. There is a greater possibility of bipolarity when high scores are detected in two factors, such as increased activation/elation and irritability/risk-taking behavior. The first factor (increase in activity, energy, social contacts, verbal fluency, self-confidence, and communication) relates to activation/increase in energy, while the other factor is related to disinhibition, self-control, and ability to focus (irritability, inattention, difficulties with impulse control, and excessive spending). We confirmed the presence of these two factors and, therefore, high scores in these factors are suggestive of bipolarity. The presence of subsyndromal symptoms of hypomania, such as "wear more colorful and more extravagant clothes, or make more jokes", increases the possibility of BD, but also of more false-positive results.

An interesting finding of our study was the high proportion of patients with MDD (42.9%) who scored positive in 18 or more questions, which was similar to results obtained in the large international BRIDGE study (data not yet published referring to 2729 subjects with major depressive episodes).<sup>33</sup> This finding could be related to the fact that the sample was recruited among patients of a tertiary care facility, characterized by greater chronicity and treatment resistance, which can be considered as risk factors for bipolarity. When used in another sample with more severe mood disorders, the cut-off score of the HCL-32 was also higher, and even after accurate screening for recurrent MDD, almost 18% had manic symptoms at a level similar to that of BD patients.<sup>27</sup> Another possible explanation is that some symptoms of hypomania (soft bipolarity) may be present even in clinically undisputable "unipolar" patients.34 The DSM-IV criteria do not seem to distinguish the presence or absence of bipolarity. The diagnosis of hypomania is a key aspect in the diagnosis of BD, and this questionnaire provides a potential aid to clinicians. Its use may translate into earlier diagnosis and treatment. Further studies are needed to evaluate the cut-off for other samples of non-clinical subjects or patients with less severe affective disorders.

# Limitations

Although the parameters found for the HCL-32 VB were robust, further studies are needed to evaluate the concurrent and discriminant validity, and the factor structure of the instrument. Furthermore, our study reflects parameters assessed in a tertiary care setting. A comparison with similar samples, before the application in patients, should be performed in future studies, both for the HCL-32 VB and the MDQ. This pioneering study is proposed to establish initial points for validation. Further studies can complement the process of validation of the HCL-32 VB. Moreover, other psychometric properties of the Brazilian version of the HCL-32, such as long-term test-retest reliability, remain to be evaluated in future research.

### Conclusion

The HCL-32 is the first instrument developed for the self-assessment of hypomanic symptoms in patients diagnosed with depression. The retrospective detection of hypomania is critical for the correct diagnosis and, hence, for the treatment of BD. The psychometric parameters of the HCL-32 VB suggest that it is useful for the detection of hypomania in patients with mood disorders. A cut-off of 18 showed the best trade-off between sensitivity and specificity values. For screening tools, high sensitivity should not be traded-off by high specificity. The self-assessment of hypomania in patients with mood disorders.

The HCL-32 VB may be useful for the identification of hypomania in Brazilian epidemiological and clinical settings, facilitating the early identification of patients within the bipolar spectrum. The HCL-32 VB is a brief, self-administered questionnaire of easy application and interpretation, which can be used in Portuguese-speaking patients.

### **Disclosures**

Writing group member	Employment	Research grant <sup>1</sup>	Other research grant or medical continuous education <sup>2</sup>	Speaker's honoraria	Ownership interest	Consultant/ Advisory board	Other <sup>3</sup>
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Eduardo Calmon de Moura	USP Private practice	¥	æ	-	¥	-	÷
Jules Angst	Zurich University Psychiatric Hospital	æ	1.7	=	ā	<b>3</b> 0.1	ā
Ricardo Alberto Moreno	USP Private practice	FAPESP*	BMS** AstraZeneca** Servier**	-	-	CEIP ABTB ABP A. Lopes Munis Advogados Mattos Muriel Kestener Advogados	Segmento Farma Editoras Artmed Editora AS. Lopso Editora Editora Planmark DOC Editora. Phoenix Comunicação Integrada Solução

<sup>\*</sup> Modest

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<sup>\*\*</sup> Significant

<sup>\*\*\*</sup> Significant: Amounts given to the author's institution or to a colleague for research in which the author has participation, not directly to the author. Note: USP = Universidade de São Paulo; FAPESP = Fundação de Amparo à Pesquisa do Estado de São Paulo; BMS = Bristol-Myers Squibb; CEIP = Centro de Estudos do Instituto de Psiquiatria; ABTB = Associação Brasileira de Transtomo Bipolar; ABP; Associação Brasileira de Psiquiatria. For more information, see Instructions for Authors.

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Appendix 1 -	Questioná	rio de Rastrear	nento de Hipon	nania (HCL-32-	BV)					
Dados pessoa	is: Idade	9	Mascul	ino □ Fe	minino 🗆					
	Centr	•	Número							
Energia, Ativi	dade e Hu	mor								
			dos sentem muo de avaliar as ca					tos e bai	ixos" ou "para cir	ma e para
1) Antes de tu	do, como v	ocě está se sen	tindo hoje compi	arado ao seu es	tado habitual ?					
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3	habitual	habitual	habitual	habitual	habitual	habitual	habitu	al		
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3) Por favor, te	inte lembra	r de <u>um periodo</u>	em que você e	steve num estad	do "para cima".					
Como você										
Por favor, re	esponda a t	odos estes enu	nciados, indeper	idente do seu e	stado atual.					
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			fato me encontra	30310300000000000000000000000000000000						
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17.	Eu paquera	ava mais e/ou e	stava sexualmer	ite mais ativo (s	()					
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28.	Meu humo	r estava melhor,	mais otimista							

Em	tal estado:						600	
29.	Eu bebia m	ale cath					Sim	Não
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7) Vocé sent	iu tais "altos"	nas últimos doze me	ses?					
	Sim	□ Não I						
8) Se sim, Por favor,	estime quan	tos dias você passou	neste	s "altos" durar	nte os últimos doze mes	es.		
Levando tod	os em conta f	oi de cerca de			dias			

# Append $\times$ 2 - Questionár o de Transforms De Humor (MDC)-EV).

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OBRIGADO FOR PREENCHER ESTE QUESTIONÁRIO, POR PAYOR, DEVOUVA O AO SEU MÉDICO.