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# Cognitive insight in psychotic patients institutionalized and living in the community: an examination using the Beck Cognitive Insight Scale

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### ABSTRACT

Keywords: psychotic disorders schizophrenia cognition awareness cognitive insight self-reflectiveness and self-certainty Improving cognitive insight can reduce delusions in patients with psychotic disorders. Although institutionalized patients usually have more severe delusions than outpatients, little is known about the differences in cognitive insight between these two groups. In this study, we evaluated the psychometric properties of the Beck Cognitive Insight Scale (BCIS) for a sample of Portuguese patients with psychotic disorders and compared the cognitive insight of institutionalized patients with patients living in the community. Participants in this study were 150 patients diagnosed with psychotic disorder (78 institutionalized patients and 72 outpatients). The tested model of the BCIS was a very good fit. Our study shows that patients living in the community showed higher levels of cognitive insight (total BCIS and self-reflectiveness) than institutionalized patients. Future studies assessing cognitive insight should take into account differences between the cognitive insights of institutionalized psychotic patients living in the community.

### 1. Introduction

One characteristic of psychotic disorders is poor insight (Amador et al., 1993), the most severe levels of which are associated with the first psychotic episode (Leonhardt et al, 2016). In schizophrenia and other psychotic disorders such as bipolar disorder, higher levels of insight are related to increased adherence to medication (Novick et al., 2015). Clinical insight may be viewed as an awareness of having a mental illness, i.e., an awareness of its symptoms, causes and consequences in terms of functional disability (Fulford, 1998). Markova and Berrios (1992) viewed insight as a subcategory of self-knowledge, not only in terms of awareness of one's illness but also in terms of understanding how one's disease affects interpersonal relationships. Insight should therefore not be considered an isolated symptom, which may be present or absent, since it is affected by numerous internal and external variables. Markova and Berrios (1992) also assert that different mental disorders involve different mechanisms in the insight-compromising process that influence how disorders should be evaluated in clinical practice. This form of insight therefore focuses on aspects of clinical phenomenology that are essential for diagnosis and treatment (Markova & Berrios, 1992). Clinical insight is normally evaluated through a clinical interview that involves the observation of the patient's behavior (Kuang et al., 2017).

The concept of cognitive insight, developed recently by Beck (2004) (Riggs et al., 2010) is theorized as a combination of self-reflectiveness and self-certainty. It involves evaluating and correcting distorted beliefs and interpretations based on metacognition by, for instance, distancing oneself from misinterpretations and reassessments (Beck et al., 2004). Cognitive insight refers, therefore, to the capacity for patients with psychosis to reflect on their psychotic experiences and respond to corrective feedback (Riggs et al., 2010). Such processes can be evaluated based on patients' reports of their objectivity towards delusional thinking, their perspectives of past errors, their abilities to reassign misleading explanations, and their receptivity to other people's

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corrective information (Beck et al., 2004). A study of the neural correlates of self-reflective processing and its relationship to insight in schizophrenia showed a relationship between self-reflection and insight in brain areas related to self-reflection (van der Meer et al., 2013). Self-reflectiveness can therefore be considered both a form of cognitive and clinical insight, and poor insight can be considered the result of impaired self-reflectiveness (Pijnenborg et al., 2019).

Four aspects of cognitive insight may be compromised in psychotic disorders: (a) impairment in being objective in relation to delusions and cognitive distortions; (b) a reduced ability to put these experiences into perspective; (c) a failure to respond to corrective information from others; and (d) an overconfidence in delusional judgments (Beck & Warman, 2004).

Psychiatric deinstitutionalization has changed how care is given to patients with mental illness and brought benefits related to personal autonomy. The issue of institutionalization versus treatment in the community is still being debated (Krieg, 2020). A systematic review of the literature on the impact of deinstitutionalization on patients with mental illness revealed both positive and negative effects. Positive effects include a better quality of life, better quality of care associated with a higher level of autonomy, and better independent functioning (responsibility, self-direction and social skills) associated with rehabilitation training. However, some patients suffer negative effects such as undetected (physical) health problems, substance abuse, social isolation, crime victimization, and more visits to emergency psychiatric care facilities (Bredewold, Hermus, & Trappenburg, 2020). According to the above authors, it is still unclear whether deinstitutionalization leads to real inclusion in the community and whether institutionalization costs are greater than those incurred in treating outpatients (Bredewold, Hermus, & Trappenburg, 2020). Despite worldwide psychiatric deinstitutionalization, many patients with severe mental illness remain in institutions. Studies show that institutionalized psychotic patients experience more cognitive impairment (Evans, Negron, Palmer, Paulsen, Heaton, & Jeste, 1999; Gupta, Steinmeyer, Frank, Lockwood, Lentz, & Schultz, 2003) and more negative symptoms (Gupta et al., 2003; Kasckow et al., 2001) than those who live in the community. A two-year prospective study of elderly patients with mental illness, 70% of whom were diagnosed with schizophrenia, showed that patients who remained institutionalized had more severe symptoms of excitement, hostility, impulsive behavior, uncooperativeness, delusion, grandiosity and suspicion than those who had been discharged (White, Parrella, McCrystal-Simon, Harvey, Masiar, & Davidson, 1997). A recent study of patients with schizophrenia showed that inpatients and outpatients had similar everyday functional abilities, although inpatients had more severe neurocognitive deficits, more severe symptoms and more impairment in social competencies than outpatients (Reynolds, Portillo, & Serper, 2018). We found no studies that compare the cognitive insights of institutionalized psychotic patients and psychotic patients living in the community and that examine the differences between them. However, several studies show that in those with psychosis, less cognitive insight is associated with more negative symptoms, higher depression rates, more severe delusions, and worse functional outcomes (Phalen et al., 2015, Riggs et al., 2010).

In recent years, several studies have acknowledged the importance of insight into psychological rehabilitation in mental illness and aimed to implement strategies to complement treatment aimed at improving it. Improved cognitive insight correlates with fewer delusions in psychosis and is a predictor of health gains in psychotherapy (Riggs et al., 2010). A recent study of patients with schizophrenia showed that cognitive insight training is beneficial, that it can improve meaning-making in patients and that improving cognitive insight helps patients to accept their diagnoses (Moritz et al., 2017). Another study found that the self-reflectiveness domain of the Beck Cognitive Insight Scale (BCIS) predicted the severity of symptoms at four years in those with first-episode psychosis and concluded that improving self-reflectiveness may be beneficial for early intervention in this population (O'Connor

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et al., 2017). Metacognitive training is one of the most common strategies for improving insight and has recently been applied with this aim (Favrod et al., 2011Lam et al., 2015; Moritz et al., 2017; Vohs et al., 2018). Pijnenborg et al. (2019) assert that more studies are needed in this area because insight is unlikely to instinctively improve in patients with chronic diseases.

Given the importance ascribed to interventions aimed at improving insight, tools for assessing such interventions are essential. The BCIS assesses an individual's ability to evaluate and question his or her cognitive processes (cognitive insight), whereas other insight assessment scales focus on knowledge of one's disease and the need for treatment (clinical insight) (Pedrelli et al., 2004). In view of the importance of assessing cognitive insight in mental disorders, the instrument has been translated into at least seven languages, i.e., Chinese, Turkish, Norwegian, French, Spanish, Korean and Japanese (Riggs et al., 2010). However, it has not yet been translated into Portuguese, nor have its psychometric properties been tested in a Portuguese population.

Since cognitive insight can be improved, it is important to determine whether differences between institutionalized patients and outpatients exist so that multidisciplinary teams can implement interventions based on such findings.

This study therefore had two goals. First, we translated and adapted the psychometric properties of the BCIS and evaluated the scale in a sample of Portuguese patients with psychotic disorder. We then compared the levels of cognitive insight in institutionalized psychotic patients to those of patients living in the community. The Portuguese version of the BCIS was expected to have good psychometric properties. Regarding the cognitive insight of institutionalized psychotic patients and psychotic patients living in the community, we did not know what to expect, as we did not find any studies that have made this comparison. The following hypotheses were formulated to meet these objectives:

H1. The factorial structure of the Portuguese version of the Beck Cognitive Insight Scale is the same as that of the original version and fits the two-factor model.

H2. The cognitive insight of institutionalized psychotic patients is worse than that of psychotic patients living in the community.

### 2. Methods

### 2.1. Study Design

This cross-sectional and methodological study was carried out in two phases. First, we adapted the BCIS to Portugal and then compared the scores of institutionalized psychotic patients to those of patients living in the community.

### 2.2. Participants

The sample was selected by a nonprobabilistic method (convenience sampling). Participants of the study were patients who had been diagnosed by a psychiatrist with a psychotic disorder, were at least 18 years old, were fluent in Portuguese, provided their informed consent, and voluntarily agreed to participate. Patients with organic syndrome were excluded from the study. All individuals who met the inclusion criteria and were available when the data were collected were invited to participate. The individuals were identified and referred by a nurse or assistant psychiatrist. A total of 150 participants with psychotic disorder took part in the study, 78 of whom were institutionalized and 72 of whom were outpatients (living in the community). These participants were recruited from two inpatient psychiatric units and two outpatient psychiatric services.

### 2.3. Instruments

The BCIS is a 15-item self-report measure developed to assess cognitive insight in patients with psychosis. It uses a 4-point Likert scale

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(0-3) where 0 denotes *do not agree at all* and 3 denotes *totally agree*. It was designed to assess self-reflectiveness about delusional ideas, the ability to correct misjudgments, and overconfidence in personal interpretations and experiences. Its original version is divided into two dimensions: self-certainty (6 items) and self-reflectiveness (9 items). Cognitive insight is calculated by subtracting the self-reflectiveness (SR) scale from the self-certainty (SC) scale (SR-SC). The higher the score, the higher the degree of cognitive insight (Beck et al., 2004).

### 2.4. Procedures

Before start the translation process for the instrument, permission was obtained from the author of the original scale to translate and culturally adapt it and to evaluate its psychometric properties for a Portuguese sample of patients with psychotic disorders. The cultural adaptation process was conducted in accordance with international guidelines (Beaton, Bombardier, Guillemin & Ferraz, 2000) over five stages, i.e., translation, synthesis, back-translation, evaluation by a committee, and spoken reflection. The BCIS was translated into Portuguese from the original English version by two independent bilingual researchers who are experts in the field of mental health and severe mental illness. Convergent/divergent aspects were analyzed, and a consensus version was reached for the Portuguese version after semantic analysis was conducted to fit Portuguese culture. Back-translation was then performed by a third independent investigator who is an expert in the field of mental health.

Once the cultural adaptation process was completed, the sample was selected, and data were collected in a private office on an individual basis over a period of six months (from February to July 2019). The scale was completed by each participant (since it is a self-report measure), and any necessary explanations were given by the researcher. The scale took between 10 and 15 minutes to complete. The scale was administered by research collaborators with extensive training in the study procedures.

We performed statistical analyses of scale validity and reliability as well as statistical analyses comparing the BCIS scores of institutionalized psychotic patients to those of patients living in the community.

### 2.5. Ethical procedures

All ethical principles outlined in the Declaration of Helsinki and in subsequent revisions of the Declaration were respected (World Medical Association, 2013). Approval for the study was obtained from the ethical committees of the institutions involved. Written informed consent was obtained from all participants after the study objectives were explained to them, and data confidentiality was maintained.

### 2.6. Statistical analysis

We first conducted an item-by-item exploratory analysis to verify the behavior of each item using measures of central tendency, dispersion, asymmetry and kurtosis and explored the presence of outliers.

To verify the first hypothesis regarding whether the analyzed model fit the bifactorial model of the Beck Cognitive Insight Scale, we performed a confirmatory factor analysis using its covariance matrix and a multivariate analysis using the AMOS program (version 25, IBM SPSS). The reflexive model studied contained 15 observed variables and 2 latent variables. To estimate the parameters of each item to scale the factors, their variance was set to 1. Normality was assessed by univariate and multivariate symmetry and kurtosis coefficients. The existence of outliers was assessed by the Mahalonobis squared distance, while normality was assessed by univariate and multivariate asymmetry and the kurtosis coefficient with asymmetry values of <|3| and kurtosis values of <|10|. Given the metrical nature of the variables and their distributions, the maximum likelihood estimation method was used. Local adjustment was assessed by factor weights and individual item reliability. Composite reliability and the mean extracted variance of

### Table 1

Participant characteristics

Variables	Total		Insti alize patie	Institution- alized patients		Outpatients	
	Ν	%	n	%	n	%	
	150	100	78	52	72	48	
Age							
Mean (s.d.)	50.0		50.9 (10.09)		49.1		
	(10.37	(10.37)				(10.66)	
Gender							
Female	68	45.3	34	43.6	34	47.2	
Male	82	54.7	44	56.4	38	52.8	
Education level							
No schooling	4	2.7	1	1.3	3	4.2	
4 years of schooling	35	23.3	22	28.2	13	18.1	
6 to 9 years of schooling	72	42.0	32	41.0	31	43.0	
High school (12 years of schooling)	30	20.0	16	20.5	14	19.4	
University education	18	12.0	7	9.0	11	15.3	
Marital Status							
Single	111	74.0	63	80.8	48	66,7	
Married	11	7.3	1	1.3	10	13,9	
Divorced or widowed	28	18.7	14	17.9	14	19,4	
Employment Status							
Employed	1	0.7	0	0.0	1	1.4	
Unemployed	149	99.3	78	100	71	98.6	
Diagnosis							
Schizophrenia	123	82.0	66	84.6	57	79.2	
Schizoaffective disorder	11	7.3	9	11.5	2	2.8	
Bipolar disorder	7	4.7	0	0.0	7	9.7	
Other psychotic disorder	9	6.0	3	3.8	6	8.3	
	Mean (s.d.)		Mean (s.d.)		Mean (s.d.)		
BCIS total	3.57 (6.37)		2.15 (6.01)		5.11 (6.44)		
BCIS subscales							
Self-reflectiveness	11.63	11.63		10.79 (4.77)		12.53	
	(4.94)				(4.99)		
Self-certainty	8.05 (3.82)		8.64 (3.96)		7.42 (3.58)		

each factor were evaluated as described by Marôco, 2010. In addition to the modification indices, model adjustment followed the underlying theoretical considerations and recommendations given by Kline (2010). The following adjustment indices were used: the Normalized Chi-square ( $\chi$ 2/df), Root Mean Square Residual (RMR), Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Root Mean Square Error of Approximation (RMSEA) and Expected Cross Validation Index (ECVI). Statistical significance was considered whenever the *p* value was less than 0.05.

The internal consistency of the instrument and its dimensions were evaluated by Cronbach's  $\alpha$  coefficient.

To verify the second hypothesis, we performed a comparative analysis of the groups (institutionalized psychotic patients and those living in the community) using the t test for independent samples (means analysis). In the t test reading, the homogeneity of variations between the groups was assessed by the Levene test.

Data analysis was performed using IBM SPSS version 25.0 for Windows.

### 3. Results

### 3.1. Sociodemographic and clinical characteristics

The sample included 150 participants (institutionalized patients (n=78) and outpatients (n=72)) aged between 22 and 71 with a mean age of 50.04 (SD = 10.37).

The sociodemographic and clinical characteristics of the sample are shown in Table 1.

### 3.2. Analysis of psychometric properties (H1)

Our results demonstrate a good adjustment of the measurement model with values of  $\chi^2/df=1.082$ , RMR=0.065, GFI=0.924,



Fig. 1. BCIS confirmatory factor analysis

### Table 2

 $t\ {\rm test}\ {\rm results}\ {\rm for}\ {\rm independent}\ {\rm samples}\ {\rm for}\ {\rm the}\ {\rm BCIS}.$ 

Variables		n	Mean (SD)	t	p- value
Self- reflectiveness	Institutionalized patients	78	10.79 (4.774)	-2.172	0.031
	Outpatients	72	12.53		
0.10	** .* .	-	(4.996)	1 000	0.05
Self-certainty	patients	78	8.64 (3.964)	1.980	0.05
	Outpatients	72	7.42 (3.579)		
Composite	Institutionalized	78	2.15	-2.909	0.004
index	patients		(6.013)		
	Outpatients	72	5.11		
			(6.436)		

CFI=0.973, RMSEA=0.023 (IC90%=0.0001-0.052) and ECVI=1.063. The factor loadings of the items present significant values (0.28 to 0.76) for the factors to which they belong (Figure 1). No significant correlation was found between the two dimensions that form the instrument (r=-0.01; p>0,05).

With regard to internal consistency, the BCIS generated a Cronbach's  $\alpha = 0.628$ , the SR dimension generated a Cronbach's  $\alpha = 0.695$ , and the SC dimension generated a Cronbach's  $\alpha = 0.696$ .

## 3.2. Comparison of the sample of institutionalized patients to the sample of outpatients

To compare the cognitive insight of outpatients with that of institutionalized patients (H2), we used a *t* test for independent samples to compare means. Our results show that outpatients achieved higher total BCIS (p<0.05) and self-reflectiveness scores (p<0.05), while institutionalized patients achieved a higher self-certainty score (p=0.05) (Table 2).

### 4. Discussion

This study analyzed the psychometric properties of the Portuguese version of the BCIS for a sample of institutionalized patients and

### Table 3

Comparison of our study to that by Favrod et al. (2008).

	Favrod et al. (2008) Nursing home(n=34) Mean (s.d.)	<i>Outpatients</i> (n=124) Mean (s.d.)	t	Our study Institutionalized patients(n=78) Mean (s.d.)	<i>Outpatients</i> (n=72) Mean (s.d.)	t
BCIS	2.2 (5.6)	6.1 (7.7)	2.2*	2.15 (6.01)	5.11 (6.44)	-2.9*
Self-reflectiveness	12.4 (5.1)	14.8 (5.7)	-2.1*	10.79 (4.77)	12.53 (4.99)	-2.2*
Self-Certainty	10.2 (3.8)	8.6 (3.9)	3.3**	8.64 (3.96)	7.42 (3.58)	1,9

\**p* < 0.05; \*\**p* < 0.01

outpatients with psychotic disorders and compared the cognitive insights of these two types of patients. We conclude that the Portuguese version of the BCIS shows good psychometric properties and that outpatients achieved higher total BCIS and self-reflectiveness scores.

### 4.1. Psychometric properties of the BCIS

The psychometric properties of the BCIS were similar to those of the scale's original version. As for the original scale, the principal component analysis grouped the 15 scale items into the following two dimensions: 'self-reflectiveness' and 'self-certainty' (Beck et al., 2004). As five other studies have also confirmed the two-factor structure of the BCIS (Favrod et al., 2008; Gutiérrez-Zotes et al., 2012; Martin et al., 2010; Pedrelli et al., 2004; Tranulis et al., 2008), this structure is consistent. Three studies have confirmed the test-retest reliability of the BCIS (Kim et al., 2007; Martin et al., 2010; Uchida et al., 2009). Other studies have confirmed convergent validity by correlating the BCIS with different measures of clinical insight (Favrod et al., 2008; Pedrelli et al., 2004; Kim et al., 2007; Uchida et al., 2009).

Considering the parameters defined by Marôco (2010) and in analyzing the scale's psychometric characteristics, the adjustment values obtained for the measurement model indicate a very good fit to the tested model.

Our results are excellent when compared to those of Favrod et al. (2008) (French version, n=158) and Pedrelli et al. (2004) (USA version, n=164), who analyze the psychometric characteristics of the BCIS using the same statistical method as ours. Favrod et al. (2008) obtained values of  $\chi^2$ /df=1.38, GFI=0.91, CFI=0.89, and RMSEA=0.049 while Pedrelli et al. (2004) obtained values of CFI=0.96 and RMSEA=0.025. Internal consistency was found to be strong, and the Cronbach's  $\alpha$  of the present study was similar to that of the original study (Beck et al., 2004).

When the various studies evaluating the psychometric characteristics of the scale over time are compared, the BCIS is found to be consistent in its two-factor structure. Our study adds even more consistency to these findings, as it also has a stable two-factor structure. The Portuguese version of the BCIS shows acceptable psychometric properties and is therefore valid for application to the Portuguese population with psychotic disorders.

## 4.2. Comparison of institutionalized patients to outpatients with psychotic disorders

To test hypothesis 2, we compared the BCIS scores of two groups of patients with psychosis, i.e., institutionalized patients and patients living in the community. The most prevalent disorder in both groups was schizophrenia. The demographics of the two groups of patients, e.g., age, gender and educational level, were similar. With regard to marital status, 13.9% of the outpatients were married while only 1.3% of the institutionalized patients were married. Being married may therefore be a protective factor for living in the community. A prospective longitudinal study, for example, concluded that being married is a predictor of more positive outcomes in people with schizophrenia (Ran et al., 2017). Regarding employment status, only one outpatient was employed.

Our results confirm hypothesis 2, as differences in cognitive insight were found between institutionalized patients and outpatients. Outpatients had achieved higher total BCIS (p = 0.004) and 'self-reflectiveness" scores than institutionalized patients (p = 0.031), but institutionalized patients achieved higher scores in self-certainty, though these differences are not statistically significant (p = 0.05). Although Favrod et al. (2008) also studied outpatients, they distinguished between those living in nursing homes, which is a more protected environment, and those living independently in the community. Their results are similar to ours in terms of total BCIS scores and self-reflectiveness levels. With regard to self-certainty, our study finds no significant differences between groups (see Table 3).

Although did not find any studies comparing the cognitive insight levels of institutionalized patients and outpatients with psychosis, a recent study comparing institutionalized patients and outpatients with schizophrenia found institutionalized patients to show more severe psychotic symptoms and neurocognitive deficits (Reynolds, Portillo, & Serper, 2018). Given that greater cognitive insight is correlated with fewer delusions in psychosis (Engh et al., 2010; Phalen et al., 2015; Riggs et al., 2010) and as institutionalized patients show more severe psychotic symptoms than outpatients (Reynolds, Portillo, & Serper, 2018), the results of the present study (more cognitive insight in outpatients) may be related to psychotic symptoms. However, more studies are needed to prove this. A study comparing clinical and cognitive insight in patients at an acute phase of psychosis found cognitive insight to contribute to clinical insight (Poyraz, 2016). Given the importance of clinical insight for adherence to medication (Novick et al., 2015), it is critical to improve the cognitive insight of institutionalized patients to enable them to integrate into the community. The results of this study therefore demonstrate that institutions should provide psychotherapy, e. g., metacognitive training, to help improve cognitive insight and thus reduce psychotic symptoms and improve clinical insight.

Validating the BCIS for the Portuguese population provides added value in clinical and research terms since it enables this useful instrument to be used in this context to better measure and evaluate the effects of psychotherapeutic interventions such as metacognitive training on cognitive insight. Such work therefore helps identify health gains sensitive to the care provided to those with psychotic disorders; may aid pharmacological and psychotherapeutic treatment and may be used by specialist mental health nurses, psychiatrists, psychologists and other professionals in the field. The instrument may also potentially be used with different forms of treatment.

This study presents certain limitations, however. For example, the sample was selected with the convenience method. Additionally, diagnoses differed between groups in that in the group of institutionalized patients there were more patients with schizophrenia but were not any patients with bipolar disorder.

In summary, our results show that living in the community is a predictor of higher levels of self-reflectiveness and cognitive insight than living in an institution. Since awareness of cognition is extremely important for recovery, this suggests a need for activities that improve the cognitive insight of institutionalized psychotic patients.

There are differences in the levels of cognitive insight in institutionalized patients and outpatients. Samples used in future studies to assess cognitive insight and generalize their results should therefore include both patients living in the community and those living in

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### institutions.

### Contributors

Authors LP, CS and CG designed the study. LP recruiting participants and wrote the first draft of the manuscript and all authors contributed to writing the manuscript. Authors FS and TM performed the statistical analyses. All authors contributed to and have approved the final manuscript.

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### **Declaration of Competing Interest**

There were no conflicts of interest.

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### Appendix

### Escala de Insight Cognitivo de Beck (BCIS)

(Traduzido e adaptado para Portugal por Pinho, Sampaio, Sequeira, Martins e Ferré-Grau\*)

Por favor, leia com atenção as afirmações abaixo e coloque uma cruz na resposta que mais se adequa à sua opinião, de entre as seguintes opções: "Discordo totalmente", "Concordo ligeiramente", "Concordo muito" e "Concordo totalmente". Não há respostas certas ou erradas, apenas queremos saber a sua opinião sobre as frases seguintes.

	Discordo totalmente	Concordo ligeiramente	Concordo muito	Concordo totalmente
Por vezes interpretei erradamente atitudes de outras pessoas em relação a mim.				
As minhas interpretações acerca das minhas vivências estão sempre corretas.				
Outras pessoas podem compreender a causa das minhas vivências invulgares melhor do que				
eu.				
Já tirei conclusões rápido demais.				
Algumas das minhas vivências que pareceram muito reais podem ter sido fruto da minha				
imaginação.				
Algumas das ideias acerca das quais estava certa/o acabaram por se revelar erradas.				
Se algo parece certo, então é porque está certo.				
Mesmo quando eu sinto fortemente que estou certa/o, posso estar errada/o.				
Eu sei melhor do que qualquer outra pessoa quais são os meus problemas.				
Quando as pessoas discordam de mim, geralmente elas estão erradas.				
Não posso confiar na opinião das outras pessoas acerca das minhas vivências.				
Caso alguém refira que aquilo em que acredito está errado, estou disposta/o a considerar				
essa hipótese.				
Posso sempre confiar nos meus próprios julgamentos.				
Existe frequentemente mais do que uma explicação possível para a forma como as pessoas				
agem.				
As minhas vivências invulgares podem dever-se ao facto de eu estar extremamente				
aborrecido ou stressado.				

\*Pinho, L. G., Sampaio, F., Sequeira, C., Martins, T., Ferré-Grau, C. (aceite para publicação). Cognitive insight in psychotic patients institutionalized and living in the community: an examination using the Beck Cognitive Insight Scale. *Psychiatry Research*.

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