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PBQ-SF ©

ACB 3/12/99

Name: _____ Date: _____

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ID: ☐☐☐☐☐☐

Intake

Please read the statements below and rate HOW MUCH YOU BELIEVE EACH ONE. Try to judge how you feel about each statement MOST OF THE TIME. Do not leave any statements blank.

4	3	2	1	0
I Believe it Totally	I Believe it Very Much	I Believe it Moderately	I Believe it Slightly	I Don't Believe it at all

Example	HOW MUCH DO YOU BELIEVE IT?				
1. The world is a dangerous place. (Please circle)	4 Totally	3 Very Much	(2) Moderately	1 Slightly	0 Not at All
1. Being exposed as inferior or inadequate will be intolerable.	4	3	2	1	0
2. I should avoid unpleasant situations at all cost.	4	3	2	1	0
3. If people act friendly, they may be trying to use or exploit me.	4	3	2	1	0
4. I have to resist the domination of authorities but at the same time maintain their approval and acceptance.	4	3	2	1	0
5. I cannot tolerate unpleasant feelings.	4	3	2	1	0
6. Flaws, defects, or mistakes are intolerable.	4	3	2	1	0
7. Other people are often too demanding.	4	3	2	1	0
8. I should be the center of attention.	4	3	2	1	0
9. If I don't have systems, everything will fall apart.	4	3	2	1	0
10. It's intolerable if I'm not accorded my due respect or don't get what I'm entitled to	4	3	2	1	0
11. It is important to do a perfect job on everything.	4	3	2	1	0

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	HOW MUCH DO YOU BELIEVE IT?				
	4 Totally	3 Very Much	2 Moderately	1 Slightly	0 Not at All
12. I enjoy doing things more by myself than with other people.	4	3	2	1	0
13. Others will try to use me or manipuate me if I don't watch out.	4	3	2	1	0
14. Other people have hidden motives.	4	3	2	1	0
15. The worst possible thing would be to be abandoned.	4	3	2	1	0
16. Other people should recognize how special I am.	4	3	2	1	0
17. Other people will deliberately try to demean	4	3	2	1	0
18. I need others to help me make decisions or tell me what to do.	4	3	2	1	0
19. Details are extremely important.	4	3	2	1	0
20. If I regard people as too bossy, I have a right to disregard their demands.	4	3	2	1	0
21. Authority figures tend to be intrusive, demanding, interfering, and controlling.	4	3	2	1	0
22. The way to get what I want is to dazzle or amuse people.	4	3	2	1	0
23. I should do whatever I can get away with.	4	3	2	1	0
24. If other people find out things about me, they will use them against me	4	3	2	1	0
25. Relationships are messy and interfere with freedom.	4	3	2	1	0
26. Only people as brilliant as I am understand me.	4	3	2	1	0
27. Since I am so superior, I am entitled to special treatment and privileges.	4	3	2	1	0
28. It is important for me to be free and independent of others	4	3	2	1	0

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	HOW MUCH DO YOU BELIEVE IT?				
	4 Totally	3 Very Much	2 Moderately	1 Slightly	0 Not at All
29. In many situations, I am better off to be left alone.	4	3	2	1	0
30. It is necessary to stick to the highest standards at all times, or things will fall apart.	4	3	2	1	0
31. Unpleasant feelings will escalate and get out of control.	4	3	2	1	0
32. We live in a jungle and the strong person is the one who survives.	4	3	2	1	0
33. I should avoid situations in which I attract attention, or be as inconspicuous as possible.	4	3	2	1	0
34. If I don't keep others engaged with me, they won't like me.	4	3	2	1	0
35. If I want something, I should do whatever is necessary to get it.	4	3	2	1	0
36. It's better to be alone than to feel "stuck" with other people.	4	3	2	1	0
37. Unless I entertain or impress people, I am nothing.	4	3	2	1	0
38. People will get at me if I don't get them first.	4	3	2	1	0
39. Any signs of tension in a relationship indicate the relationship has gone bad; therefore, I should cut it off.	4	3	2	1	0
40. If I don't perform at the highest level, I will fail.	4	3	2	1	0
41. Making dealines, complying with demands, and conforming are direct blows to my pride and self-sufficiency.	4	3	2	1	0
42. I have been unfairly treated and am entitled to get my fair share by what ever means I can.	4	3	2	1	0
43. If people get close to me, they will discover the "real" me and reject me.	4	3	2	1	0
44. I am needy and weak.	4	3	2	1	0
45. I am helpless when I'm left on my own.	4	3	2	1	0

	HOW MUCH DO YOU BELIEVE IT?				
	4 Totally	3 Very Much	2 Moderately	1 Slightly	0 Not at All
46. Other people should satisfy my needs.	4	3	2	1	0
47. If I follow the rules the way people expect, it will inhibit my freedom of action.	4	3	2	1	0
48. People will take advantage of me if I give them the chance.	4	3	2	1	0
49. I have to be on guard at all times.	4	3	2	1	0
50. My privacy is much more important to me than closeness to people.	4	3	2	1	0
51. Rules are arbitrary and stifle me.	4	3	2	1	0
52. It is awful if people ignore me.	4	3	2	1	0
53. What other people think doesn't matter to me.	4	3	2	1	0
54. In order to be happy, I need other people to pay attention to me.	4	3	2	1	0
55. If I entertain people, they will not notice my weaknesses.	4	3	2	1	0
56. I need somebody around available at all times to help me to carry out what I need to do or in case something bad happens	4	3	2	1	0
57. Any flaw or defect or performance may lead to a catastrophe.	4	3	2	1	0
58. Since I am so talented, people should go out of their way to promote my career.	4	3	2	1	0
59. If I don't push other people, I will get pushed around.	4	3	2	1	0
60. I don't have to be bound by the rules that apply to other people.	4	3	2	1	0
61. Force or cunning is the best way to get things done.	4	3	2	1	0
62. I must maintain access to my supporter or helper at all times.	4	3	2	1	0
63. I am basically alone -- unless I can attach myself to a stronger person.	4	3	2	1	0
64. I cannot trust other people.	4	3	2	1	0
65 I can't cope as other people can.	4	3	2	1	0

Personality Belief Questionnaire – Short Form (PBQ-SF)
Scoring Key

Patient Name: _____ Date on PBQ: _____

Scored By: _____ Date of Scoring: _____

PBQ Scale	Sum items to calculate raw score	Raw Score	Use formula to calculate Z-score	Z-score
Avoidant	Sum items 1, 2, 5, 31, 33, 39, & 43	____	(Raw score – 10.86)/6.46	_____
Dependent	Sum items 15, 18, 44, 45, 56, 62, & 63	____	(Raw score – 9.26)/6.12	_____
Passive-Aggressive	Sum items 4, 7, 20, 21, 41, 47, & 51	____	(Raw score – 8.09)/5.97	_____
Obsessive-Compulsive	Sum items 6, 9, 11, 19, 30, 40, & 57	____	(Raw score – 10.56)/7.20	_____
Antisocial	Sum items 23, 32, 35, 38, 42, 59, & 61	____	(Raw score – 4.25)/4.30	_____
Narcissistic	Sum items 10, 16, 26, 27, 46, 58, & 60	____	(Raw score –3.42)/4.23	_____
Histrionic	Sum items 8, 22, 34, 37, 52, 54, & 55	____	(Raw score – 6.47)/6.09	_____
Schizoid	Sum items 12, 25, 28, 29, 36, 50, & 53	____	(Raw score – 8.99)/5.60	_____
Paranoid	Sum items 3, 13, 14, 17, 24, 48, & 49	____	(Raw score – 6.99)/6.22	_____
Borderline	Sum items 31, 44, 45, 49, 56, 64, 65	____	(Raw score – 8.07)/6.05	_____

Note: Z-scores are based on a sample of 683 psychiatric outpatients with mixed diagnoses.

ACButler, 6/00

Running head: Personality Beliefs Questionnaire

Beliefs in personality disorders: An overview of the Personality Beliefs Questionnaire

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Abstract

The Personality Beliefs Questionnaire (PBQ) is a 126-item self-report measure of beliefs associated with personality disorders. This paper presents an overview of the measure's psychometric properties, refinements and research applications. Across both non-clinical and psychiatric populations, the PBQ has demonstrated high internal consistency and test-retest reliability. Concurrent validity has been demonstrated in psychiatric samples for scales measuring beliefs of avoidant, paranoid, obsessive-compulsive, narcissistic, borderline and dependent personality disorders. Factor analysis has empirically supported a ten-factor structure of the PBQ for psychiatric patients. The original PBQ has been expanded to include a scale measuring beliefs of borderline personality disorder. A short form version has also been developed and validated. The sensitivity to change of the PBQ has been demonstrated in treatment outcome research. Its application in such research has subjected to empirical testing the theoretical conjectures of cognitive theory regarding the pivotal role of beliefs in personality disorders. The PBQ is a promising instrument for identifying beliefs pertinent to a range of personality disorders.

Key words: Personality disorders, assessment, measures

Beliefs in personality disorders: An overview of the Personality Beliefs Questionnaire

A prominent feature of the cognitive theory of personality disorders is its emphasis on the role of dysfunctional beliefs. According to this theory, each personality disorder has a characteristic set of dysfunctional beliefs. The behavior patterns of the different personality disorders are viewed as overt manifestations of the underlying cognitive structures (Beck, Freeman, Davis, & Associates, 2004). In 1990, Beck and colleagues, proposed a set of cognitive features believed to represent the dysfunctional beliefs characteristic of each DSM-III-R personality disorders (Beck, Freeman, & Associates, 1990). For example, the main beliefs purported to explain the behavior of patients with avoidant personality disorder were "I am socially inept and socially undesirable in work or social situations" and "I cannot tolerate unpleasant feelings", while those typical of paranoid personality patients included "People will take advantage of me if I give them the chance" and "I have to be on guard at all times."

The assessment of beliefs is an important component of cognitive therapy of personality disorders. Dysfunctional beliefs form the central component of cognitive case conceptualizations and are prime targets for intervention. When correctly identified, key dysfunctional beliefs reflect one or more conceptual themes that link a patient's developmental history, compensatory strategies and dysfunctional reactions to current situations. As therapist and patient work together to identify and modify these key beliefs, improvements may be seen simultaneously across many areas of functioning. These cognitive features are purported to constitute a primary focus and mechanism of change in cognitive interventions of personality disorders.

Further, the assessment of such beliefs may also serve a diagnostic function. The identification of such beliefs arguably form an important source of data for the differential diagnosis of personality disorders listed in the Diagnostic and Statistical Manual-IV-Text Revised (DSM-IV-TR) nosology (American Psychiatric Association, 2000). The content of DSM criteria sets, including most of those for personality disorders primarily consist of behavioral indicators, such as avoidance behavior (e.g., "avoids occupational activities that involve significant interpersonal contact"), unhelpful interpersonal styles (e.g., "bears grudges"), situational variables (e.g., "lacks close friends) and emotional states (e.g., "affective instability"). Although DSM's criteria for personality disorders are defined in largely behavioral terms, many criteria refer to beliefs that may explain the reason for the behaviors. For example, one behavioral criterion for dependent personality disorder is "difficulty expressing disagreement with others" which is explained as the result of one's fear of "loss of support or approval." Thus, an assessment of beliefs can purportedly be useful for identifying the presence of such fears, which in turn can help establish whether the individual meets the behavioral criteria for the personality disorder.

A number of self-report measures have been developed to assess beliefs associated with personality disorders including the Dysfunctional attitude Scale ((DAS: Beck, Brown, Steer, & Weissman, 1991), the Young Schema Questionnaire (YSQ: Young, 1994) and the Personality Disorder Beliefs Questionnaire (PDBQ: Arntz, Dietzel, & Dreessen, 1999; Arntz, Dreessen, Schouten, & Weertman, 2004). However, these self-report measures are limited because they (a) include a mixture of dysfunctional beliefs and behavior patterns (e.g., YSQ), (b) were not developed to correspond directly with

DSM-IV personality disorders (e.g., YSQ, DAS), (c) have not yet been validated for a number of DSM-IV personality disorders (e.g., PBDQ).

To address these limitations, Beck and Beck (1991) developed the Personality Belief Questionnaire (PBQ) to measure the beliefs associated with ten DSM personality disorders. The PBQ is a 126-item self report measure of beliefs purported by cognitive theory to be relevant to the following DSM-IV personality disorders: Avoidant, dependent, obsessive-compulsive, histrionic, passive–aggressive, narcissistic, paranoid, schizoid, antisocial and borderline.[1] The items of the PBQ were based on the clinical observation of Beck et al (1990).

The present paper provides an overview of the psychometric properties of the PBQ, its refinements and its applications in treatment outcome research. Given that nearly 20 years have passed since its development it is timely to consider the performance of the scales across non-clinical and clinical research studies. The current paper has three aims: The first is to review the reliability and validity of the PBQ across these studies and populations. The second is to describe the developments to the PBQ since its original version. Since its inception in 1991, two refinements to the scale have been made: One, as noted, an additional scale measuring beliefs of borderline personality disorder has been identified. Two, a short form of the questionnaire has been developed.. Third, as the PBQ has now been used in several treatment studies, there is an opportunity to examine the measure's sensitivity to change, as well as the accumulated evidence for whether beliefs inform the outcomes and change process in cognitive therapy of personality disorders, as would be predicted by cognitive theory.

[1] The PBQ originally comprised nine scales – items measuring BPD beliefs were later identified from these nine scales (Butler, Brown, Beck, & Grisham, 2002). Items measuring beliefs corresponding to Schizotypal Personality Disorder remain to be identified.

Psychometric Properties of the PBQ

Reliability and Validity

Five studies have focused on investigating the reliability and validity of the PBQ. These studies have demonstrated considerable support for the internal consistency, stability, criterion validity and construct validity of the measure. In this section, we review these psychometric properties of the PBQ.

The first study to examine the psychometric properties of the PBQ was conducted by Trull and colleagues (Trull, Goodwin, Schopp, Hillenbrand, & Schuster, 1993). In this study, the PBQ was administered to college students (n = 188, mean age = 19.74, SD = 3.73, 64.5% female). Good evidence of internal consistency was found for the PBQ scales; Cronbach's alphas (α) ranged from .77 to .93 (see Table 1). Test-retest correlation coefficients over a one-month interval were high, ranging from .63 (passive-aggressive scale) to .82 (paranoid scale) with a median of .75. However, the evidence for validity in this non-clinical sample was less compelling. Modest correlations were obtained between the PBQ and measures of personality disorders such as the Personality Disorder Questionnaire-Revised (PDQ-R: Hyler, Skodol, Oldham, Kellman, & Doidge, 1992) and the Minnesota Multiphasic Personality Inventory-Personality Disorders (Morey, Waugh, & Blashfield, 1985). These results questioned the criterion validity of the PBQ for non-clinical PD traits.

However, as noted by Beck et al. (2001), given that the PBQ was designed for use with psychiatric patients, tests of criterion should evaluate how it performs with its intended population, rather than with non-clinical individuals. Therefore, in the second and largest psychometric study of the PBQ, Beck and colleagues (2001) employed a

sample of 756 adult psychiatric outpatients. Due to limited sample sizes for some Axis II disorders, they focused their investigation on five Axis II diagnoses: Avoidant, dependent, obsessive-compulsive, narcissistic and paranoid personality disorders (mean age = 34.73, *SD* = 11.46; 53% female). The reliability of the PBQ was adequate. The PBQ scales had satisfactory internal consistency (alphas > .80) (see table 1). Test-retest correlations for the scales were between .57 (avoidant scale) and .93 (antisocial scale) in a subset of 15 patients over a period of eight weeks.

In this study, two findings supported the concurrent validity of the five PBQ scales. First, patients scored higher on their corresponding PBQ scale than on other PBQ scales. For example, avoidant patients scored significantly higher on the PBQ avoidant scale than on the dependent, obsessive-compulsive, narcissistic or paranoid scales. Second, for most comparisons, the highest score on a PBQ scale was obtained by patients with the clinically diagnosed corresponding personality disorder, compared to patients with other Axis II disorders. For example, patients with dependent personality disorder scored higher on the dependent scale than patients with avoidant, obsessive-compulsive, narcissistic, paranoid or no personality disorder. Exceptions to such findings were with respect to the obsessive-compulsive and paranoid scales. In both instances, patients with narcissistic personality disorder scored as highly as did patients with the criterion personality disorders. However, when analyses were conducted on how well each of the five PBQ scales discriminated its criterion group from the collection of remaining personality disorders, the researchers found that across all comparisons, patients with the criterion personality disorder scored higher on the corresponding belief scale than did the

collection of these other patients. These findings provided support for the criterion validity of the five PBQ scales when applied to clinical populations.

Given that only five scales were validated by Beck and colleagues (2001), they recognized that additional studies were needed to validate the PBQ with other personality disorders. In response to this gap in the literature, a third study was conducted on the psychometrics of the PBQ. Jones, Burrell-Hodgson and Tate (2007) explored the criterion validity of three other PBQ scales (passive-aggressive, schizoid, borderline[2]), as well as the avoidant and dependent beliefs scales. The researchers found considerable support for the criterion validity of these scales. Using stepwise regression analyses with a sample of 164 psychiatric outpatients (mean age = 37.62, *SD* = 11.95, 60% female), they examined the association between these scales and the corresponding Axis II diagnoses as identified by Millon Multiaxial Personality Inventory III (Millon, Davis, & Millon, 1997). The dependent variable was group membership to a particular personality disorder (present/absent coded 1 and 0 respectively). The predictors were the 5 specific PBQ scales. These specific PBQ scales emerged as significant unique predictors for their criterion personality disorders. For instance, the PBQ avoidant scale significantly predicted group membership for avoidant personality disorder. Likewise, the PBQ dependent scale significantly predicted group membership for dependent personality disorder. Similar results were found for the PBQ passive-aggressive, schizoid and borderline scales.

In a fourth study on the validation of the PBQ, McMurran and Christopher (2008) examined the relationship between the PBQ antisocial scale and antisocial personality disorder. They predicted that individuals with antisocial personality disorder would score

[2] The development of the Borderline scale of the PBQ is described below.

higher on the PBQ antisocial scale compared to other PBQ scales and individuals with no personality disorder. They also predicted that the antisocial scale would best predict the presence or absence of antisocial personality disorder. Participants (mean age = 33.0, *SD* = 8.03; all men) were recruited from three prisons across Wales. Index offences were violence (44%), acquisitive (25%) and dangerous driving (3%). Personality disorders were diagnosed with the International Personality Disorder Examination (Loranger, 1999). Seventeen of the participants were diagnosed with antisocial personality only, 14 with antisocial personality plus another personality disorder, and 18 with no personality disorder diagnosis (controls). The study found that compared to the controls, individuals with diagnosis of antisocial personality disorder scored significantly higher on the antisocial scale.

However, the diagnosed group did not score highest on the antisocial scale compared to other scales on the PBQ. Further in a discriminant function analysis, the researchers found that avoidant and paranoid scales of the PBQ were better discriminators of antisocial personality disorder, than was the antisocial scale. These findings suggest a potential weakness in the utility of the antisocial scale for identifying individuals with antisocial personality disorders. McMurran and Christopher (2008) suggest that such individuals may avoid admitting to antisocial beliefs in a deceitful effort to manage impressions, particularly when incarcerated. Therefore, it is possible that the face validity of the PBQ scale may compromise its utility with respect to antisocial beliefs. Further research is required to investigate the utility of this scale in other contexts with individuals diagnosed with antisocial personality disorder.

In the fifth and most recent published psychometric study of the full PBQ, Turkcapar and associates (Turkcapar, Orsel, Ugurlu, Sargin, Turhan, Akkoyunlu, Hatiloglu, & Karakas, 2007) examined the psychometric properties of a Turkish version of the PBQ in a non-clinical sample of 232 undergraduates. This translated version was found to have good internal consistency (.67- .90, lowest for the avoidant scale, highest for paranoid scale) and one-month test retest reliability (.65-.87) (Turkcapar et al., 2007). The internal consistency found in this study was largely consistent with findings from other research groups (Beck et al., 2001; Connan, Dhokia, Haslam, Mordant, Morgan, Pandya, & Waller, 2009; Kuyken, Kurzer, DeRubeis, Beck, & Brown, 2001; Nelson-Gray, Huprich, Kissling, & Ketchum, 2004) (see table 1).

Factorial Structure

Although there have not been any published studies on the factor structure of the PBQ using clinical samples, there are to date, two published factor analytic studies using non-clinical student samples (Trull et al., 1993; Turkcapar et al., 2007) . These studies have produced a virtually identical two-factor structure for the PBQ. In both studies, the first factor consisted of passive-aggressive, obsessive-compulsive, antisocial, narcissistic, schizoid and paranoid scales, and the second factor consisted of avoidant and dependent scales. Trull et al. suggested that the first factor reflected interpersonal dominance, while the second, anxious attachment.

In contrast to these two studies, a recent unpublished study with 438 depressed outpatients (mean age = 43 years, 59% female) found a very different factor structure for the PBQ (Fournier, DeRubeis, & Beck, 2009). Evidence from this study suggested that the content of 90 of the 126 items of the PBQ could be captured by 10 empirically

identified components, a factor structure consistent with intended structure of PBQ. Thus, there is some indication that the structure of the PBQ is different for non-clinical versus clinical populations.

Developments to the PBQ

The Borderline Scale of the PBQ

A PBQ scale for borderline personality disorder (BPD) was not developed *a priori* because the beliefs of BPD patients seemed to transcend the categorization of the other personality disorders (Beck et al., 2001). Clinical experience indicated that BPD patients endorsed numerous beliefs that were also characteristic of the other personality disorders (Beck et al., 1990). Subsequent research with the PBQ confirmed that BPD patients scored highly on virtually all of the PBQ scales (Butler et al., 2002).

However, a more fine-grained analysis found that BPD patients also preferentially endorsed certain PBQ items that came from the PBQ dependent, paranoid, avoidant and histrionic scales. Specifically, Butler et al. (2002) found that fourteen PBQ items discriminated patients with BPD from patients with other personality disorders. After cross-validating these findings in a separate sample, a composite scale was constructed from the 14 items. BPD patients were found to score significantly higher on the newly constructed PBQ borderline scale than on any other PBQ scale. Further, consistent with the cognitive model of BPD, these items captured beliefs that were not only dysfunctional but conflicting as well. The composite scale included items measuring dependency beliefs (e.g., “I am needy and weak”) as well as distrust (e.g., “I cannot trust other people”). Sensitivity of the PBQ-Borderline scale to treatment was demonstrated in a study by Brown and colleagues (Brown, Newman, Charlesworth, Crits-Christoph, &

Beck, 2004). They found significant reductions in borderline scale scores for BPD patients who responded to cognitive therapy.

Subsequent analysis was conducted to examine the dimensional structure of the PBQ-Borderline Scale (Bhar, Brown, & Beck, 2008). With a sample of 184 patients diagnosed with borderline personality disorder (mean age = 33.1, *SD* = 10.47, 75% females), exploratory factor analysis found that the 14 items in the PBQ-borderline scale segregated into three distinct factors: The view of self as helpless and dependent (Dependent factor, $\alpha = .87$), a distrust of other people (Distrust factor, $\alpha = .87$), and beliefs about the need to act preemptively in order to guard against rejection and distress (Protection factor, $\alpha = .75$). The three scales showed discriminant validity with respect to risk indicators for suicide – depression, hopelessness and suicide ideation. Of the three factors, distrust was the only significant correlate of suicide ideation ($r = .35$). Dependency and distrust were both significantly associated with hopelessness (rs = .30 and .39, respectively), while all factors related significantly to depression (rs = .20 to .41). Thus, the PBQ allows for the assessment of various beliefs associated with BPD, and can augment a cognitive formulation of the range of difficulties presented by patients with BPD.

The Short Form Version of the PBQ

An abbreviated version of the PBQ was recently developed to provide clinicians and researchers with a brief measure of personality disorder beliefs (Butler, Beck, & Cohen, 2007). The development for the PBQ – Short Form (PBQ-SF) proceeded in two stages. In the first stage, archival data from 920 adult psychiatric outpatients (mean age = 36.4, *SD* = 11.1, 55% female) were used to construct experimental scales comprised of

the 7 PBQ items with the highest item-total correlations for each PBQ scale. In this sample, there were sufficient numbers of patients with personality disorders to examine the criterion validity of five PBQ scales: avoidant (n = 79), dependent (n = 26), obsessive-compulsive (n = 58), narcissistic (n = 26) and paranoid (n = 27). In the second stage, the experimental scales were administered to a new sample of psychiatric outpatients (n = 160, mean age = 39.8, SD = 14.2, 58% female), and the reliability and construct validity of the PBQ-SF were evaluated in this new independent sample.

Results from the first stage showed that the experimental scales had good internal consistency (see table 1). Patients with the criterion personality disorder tended to score higher on the corresponding PBQ-SF scale, compared to patients with other personality disorders, or no personality disorders. For example, patients with dependent personality disorder scored higher than patients with other personality disorders or no personality disorders, on the experimental PBQ dependent scale. In only 4 such comparisons were results non significant. Further, results from within-group analyses showed that the five personality disorder groups scored higher on their corresponding experimental scale than on alternative experimental scales.

In stage 2, the researchers examined the internal consistency, test-retest reliability and construct validity for these scales in an independent sample of psychiatric patients. Cronbach's alpha coefficients ranged from .81 (for the avoidant and narcissistic scales) to.92 (for the paranoid scale; see table 1). Test retest correlation over a 4 week interval ranged from .57 (Antisocial scale) to .82 (Obsessive-compulsive scale). As expected all nine PBQ-SF scales correlated in theoretically consistent ways with other clinical variables including depression, anxiety, dysfunctional attitudes, neuroticism, self-esteem,

and psychosocial functioning. For example, the PBQ-SF scale for avoidant personality disorder correlated negatively with a measure of self-esteem, and positively with measures of anxiety, depression and depression-related attitudes. The PBQ-SF scale for narcissistic personality disorder correlated with the same variables, but in the opposite direction. The researchers concluded that the PBQ-SF appears to be a practical alternative as a measure of personality disorder beliefs when it is not feasible to use the longer PBQ.

Applications of the PBQ in Research

Comorbidity Research

Using the PBQ, Connan and colleagues (Connan et al., 2009) examined the personality disorder beliefs associated with eating disorders. The authors noted that individuals with eating disorders frequently meet diagnostic criteria for Axis II disorders, in particular cluster B and C personality disorders. They found that the PBQ beliefs that were most relevant to eating disorder pathology were those relating to avoidance and obsessive-compulsive personality disorder. They suggested that these beliefs might account for the comorbidity between eating disorders and those specific personality disorders.

Treatment Outcome Research

Ng (2005) used the PBQ to assess the efficacy of cognitive therapy for outpatients with refractory depression and obsessive compulsive personality disorder (OCPD). All patients completed the PBQ prior to commencement of cognitive therapy (at enrollment), at the commencement of treatment (pre-treatment) and at the last session of treatment (post-treatment). Ng found that post treatment scores on the PBQ obsessive-compulsive scale were significantly lower compared to scores at enrollment and pre-treatment.

Further, Ng found that the treatment was also successful at significantly reducing the severity of OCPD symptoms. Thus, in addition to lending support for the efficacy of cognitive therapy for OCPD, Ng's study demonstrates that the PQB obsessive-compulsive scale is sensitive to change.

Brown and colleagues (Brown et al., 2004) used the 14 item borderline scale from the PBQ in an investigation of the efficacy of cognitive therapy for borderline personality disorders. A total of 32 patients with borderline personality disorders, who reported suicide ideation or engaged in self-injury behavior, received weekly cognitive therapy sessions, as described by Layden, Newman, Freeman and Morse (1993). The results showed significant and clinically important decreases on the number of borderline symptoms and dysfunctional beliefs at termination and 18 month follow up assessment. These results substantiate the sensitivity to change of the PBQ borderline beliefs scale.

Kuyken and colleagues (Kuyken et al., 2001) examined whether personality disorder beliefs predicted outcomes for cognitive therapy. The outcomes of interest were depression (as measured by the Beck Depression Inventory-II) and clinician rated global functioning (GAF rating). In a naturalistic study, 162 depressed outpatients (57% women, mean age = 33.61, *SD* = 11.91) with and without a personality disorder were followed over the course of cognitive therapy. The researchers found that personality disorder status did not predict response to therapy; however, beliefs associated with avoidant and paranoid personality disorders predicted variance in outcome. More specifically, high scores on the PBQ avoidant scale was predictive of greater severity of depressive symptoms at termination of treatment, while high scores on the PBQ paranoid scale were predictive of poorer global functioning (i.e., GAF scores) at termination. The

authors of this study suggest that such results demonstrate the moderating role of these beliefs in the change process.

Summary and Future Directions

The PBQ measures beliefs that are hypothesized to relate to specific DSM personality disorders. This article was intended to provide researchers and clinicians with an up-to-date overview of the psychometric properties, developments and applications of the PBQ in exploring the role of beliefs in personality disorders. .

As shown, the reliability of the PBQ is consistently high in psychiatric and non-psychiatric samples. Internal consistency estimates ranged from .77 to .94 and test-retest correlations were found to be greater than .50 in both psychiatric and non-psychiatric samples. The criterion validity of PBQ was demonstrated in psychiatric samples and particularly for six of the ten PBQ scales – namely, the borderline, avoidant, dependent, narcissistic, paranoid and obsessive-compulsive scales (Beck et al., 2001; Butler et al., 2007; Butler et al., 2002). With few exceptions, the results from these studies demonstrate specificity in the relationship between beliefs measured by the various PBQ scales and their corresponding personality disorders. Factorial validity of the PBQ in psychiatric patients has yet to be established, but there is research in progress in which the theoretical structure appears to be confirmed (Fournier et al., 2009).

Since the inception of the PBQ in 1991, an additional subscale - that is the borderline personality beliefs scale – and a short form version of the PBQ have been developed. These additions have increased the applicability of the measure in two ways. First, by empirically identifying 14 items that discriminate patients with borderline personality disorder from those with other personality disorders, the PBQ can be used to

assess beliefs specific to this diagnostic group. Second, the development of an abbreviated version of the PBQ provides a practical alternative as a measure of personality disorder beliefs when the full PBQ cannot be used.

The PBQ has been used in four studies, one investigating cognitive basis of comorbidity between personality disorders and eating disorders, and three on treatment outcomes. In these latter studies, the PBQ has demonstrated its sensitivity to change in theoretically consistent ways. Scores on PBQ obsessive-compulsive scale and borderline scale were significantly reduced for individuals treated for those disorders (Brown et al., 2004; Ng, 2005). In addition, PBQ avoidant and paranoid scales were found to predict changes in depressive symptoms and general functioning respectively over the course of cognitive treatment for depression (Kuyken et al., 2001). These results suggest that the PBQ is helpful in tracking and predicting cognitive treatment outcomes. As predicted by cognitive theory, the results also support the proposal that beliefs inform the outcomes and change process in cognitive therapy.

While some research shows that the beliefs measured by the PBQ are modified with treatment (Brown et al., 2004; Ng, 2005), more research is required to examine the extent to which changes in such beliefs mediate the outcomes of cognitive therapy of personality disorders. For instance, Brown and colleagues (p. 265) found only "small or negligible" associations between the PBQ borderline scale and number of borderline criteria. Perhaps as suggested by Bhar et al. (2008), more research attention could be directed to the relationships between subsets of beliefs within that scale and BPD symptoms and related psychopathology. Thus, more research is needed to elucidate the

relationships between specific factors within the various PBQ scales and specific symptoms of personality disorders.

The applicability of the PBQ for non-clinical individuals also requires further examination. There is evidence that the PBQ is more applicable for psychiatric patients, than non-clinical individuals. Although in both populations, the internal consistency and test-retest reliability of the PBQ is strong, its validity and factorial structure may be different in non-clinical populations compared to psychiatric populations. Current findings suggest that while the PBQ demonstrates high levels of validity with psychiatric patients, its applicability in non-clinical populations is less well established.

Like other self-report measures, the PBQ relies exclusively on self-report data. Some research has suggested that the exclusive reliance on self-report data for measuring personality functioning is limited. As reviewed in Oltmanns and Turkheimer (2009) peer reports of personality disorders have been found to better predict adverse outcomes for individuals with dysfunctional personality traits. Such findings have advocated that investigators consider data from informants in order to reach a more complete description of personality disorders and functioning. However, while the support is compelling for the incremental utility of informant data over self report in predicting adverse outcomes, the relative validity of self vs. peer data for identifying private internal phenomena such as beliefs remains to be subjected to empirical investigation.

Finally, there is very limited research on the psychometrics of certain PBQ scales. Only one study has examined the validity of the antisocial scale (McMurran & Christopher, 2008) and of the passive-aggressive and schizoid scales (Jones et al., 2007) respectively. No study to date has examined the validity of the histrionic scale. Further

research is needed to explore whether these scales specifically relate to individuals with these criterion personality disorders.

In summary, empirical investigations of the PBQ have found it to be a promising self-report measure of beliefs characteristic of several personality disorders. Various PBQ scales demonstrate good internal consistency, test-retest reliability, and in psychiatric samples, adequate levels of validity. The development of a borderline scale and short form version of the measure has further widened the applicability of the PBQ. Its applicability in treatment outcome research is demonstrated by studies showing that the measure includes scales that are sensitive to treatment related changes and predictive of treatment related outcomes.

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Table 1 Internal consistency (Cronbach's alphas) of the PBQ

Scale	Study						
	Trull et al., 1993[1]	Beck et al., 2001[2]	Kuyken et al., 2001[3]	Nelson-Gray, 2004[4]	Butler et al., 2007 (phase 1)[5]	Butler et al., 2007 (phase 2)[6]	Connan et al., 2009[7]
Avoidant	.83	.89	.86	.88	.84	.81	.91
Dependent	.84	.90	.86	.94	.89	.89	.93
Passive-aggressive	.77	.90	N/A	NA	.86	.85	.89
Obsessive-compulsive	.86	.84	.88	.90	.90	.90	.91
Antisocial	.87	.93	NA	.85	.80	.85	.81
Narcissistic	.85	.87	.84	.88	.83	.81	.84
Histrionic	.82	.88	N/A	.90	.89	.87	.90
Schizoid	.79	.81	N/A	.81	.79	.83	.83
Paranoid	.93	.81	.93	.95	.91	.92	.94
Borderline	N/A	.89[8]	N/A	N/A	N/A	N/A	.90

Note: N/A = not available, 1 = 188 non-clinical college undergraduate students, 2 = 756 psychiatric outpatients, 3 = Depressed outpatients, 4 = Non depressed undergraduates diagnosed with PDs, 5 = 920 adult psychiatric outpatients, 6 = 160 adult psychiatric outpatients, 7= 92 eating disorder patients, 8 = 84 outpatients diagnosed with Borderline Personality disorder (Butler et al., 2001).

Psychometric Properties and Structural Validity of the Short Version of the Personality Beliefs Questionnaire (PBQ-SF)

Propiedades Psicométricas y Validez Estructural de la Versión Corta del Cuestionario de Creencias de Personalidad (PBQ-SF)

Research

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ABSTRACT

The Personality Belief Questionnaire- Short Form (PBQ-SF) is an assessment instrument of personality beliefs based on the cognitive theory that states that these are characterized by a specific pattern of dysfunctional thoughts. The objective of this study was to establish the psychometric properties and structural validity of the PBQ-SF questionnaire in Colombian adults from 18 to 35 years old. To carry out the above and with permission of the author the validation process was initiated following a thorough and rigorous process that led to a final version of the PBQ-SF applied to 1423 persons born in Colombia and living in nine Colombian cities. Analysis of internal consistency among the items (Cronbach´s alpha), confirmatory factor analysis and calculus of goodness of fit estimators were performed. It was found that the Internal consistency of the domains varied from 0,65 for avoidant disorder up to 0,83 for paranoid disorder.

RESUMEN

El Cuestionario de Creencias de Personalidad - Versión Corta (PBQ-SF) es un instrumento de evaluación de creencias de personalidad basado en la teoría cognitiva que sostiene que estas están caracterizadas por un patrón específico de pensamientos disfuncionales. El objetivo de este estudio fue establecer las propiedades psicométricas y la validez estructural del cuestionario PBQ-SF, en adultos colombianos de 18 a 35 años. Para llevar a cabo lo anterior y con previa autorización del autor se inició el proceso de validación el cual siguió un proceso completo y riguroso que derivó en una versión final del PBQ-SF aplicada en 1423 personas nacidas en Colombia y residentes en 9 ciudades colombianas; se realizaron análisis de consistencia interna entre los ítems (alfa de Cronbach), análisis factorial confirmatorio y cálculo de los estimadores de bondad de ajuste. Se encontró que la consistencia interna de los dominios varió desde 0,65 para el trastorno evitativo hasta 0,83 para el trastorno paranoide.

Palabras clave:
Personalidad, Creencias, Adaptación y Validación, PBQ-SF.

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1. INTRODUCTION

The cognitive theory of personality disorders states that each personality disorder is characterized by a specific pattern of dysfunctional thoughts. Meanwhile, the Cognitive Profile concept is resumed from the Cognitive Therapy Model of Aaron Beck, to describe the cognitive style of people with clinical and personality disorders. The cognitive style is the way, mode or tendency to think and process information, to interact with the environment and himself.

The identification of a specific profile disorder for each of the disorders is based on the assumption of specificity of the schematic contents, which refers that each psychological disorder has a distinctive, cognitive profile, which is obvious at the level of schemes, of biased processing and automatic negative thoughts. Thus, it can be said, that the thought content of each disorder is specific and its identification facilitates the intervention process at the level of mental health (Beck, & Clark, 1997). In relation to personality disorders, Beck and Freeman (1995) consider that they are not characterized only for a dysfunctional or asocial behavior, but also for a constellation of beliefs and attitudes, feelings and strategies. It is possible to give a distinctive disorder profile based on cognitive, affective and behavioral traits. Please notice that the individuals may exhibit traits of more than one type of personality. Certain hypertrophied strategies may originate or compensate a specific type of self-concept and be a response to specific experiences of development. In addition, the genetic predisposition favors the development of a specific type of preference pattern to other possibilities.

According to the previous statement, Beck and Beck (1991) developed a self-report questionnaire to identify the dysfunctional beliefs related to each of the nine personality disorders described in DSM III R, since for Beck it is important to count with measurements of self-report, as a complement to the interviews based on beliefs (Beck et al, 2001). The PBQ was developed as an instrument for clinical and research use that measures dysfunctional beliefs associated with personality disorders, from 126 items (9 scales, 14 items per scale) (Butler, Beck & Cohen, 2007).

Trull, Goodwin, Schopp, Hillenbrand and Schuster (1993), obtained the psychometric properties from an early version of PBQ, which was applied to university students examining inter-correlations between the scales, as well as the correlations between the scales and other personality disorder measurements, finding an adequate evidence of reliability. The average correlation between the scales of PBQ was 0.40 and there was only a slight correlation between the PBQ and the revised questionnaire of personality disorders (Hyler et al., 1992) and the MMPI-PD (Morey, Waugh & Blashfield, 1985).

Two problems were found when interpreting the results of Trull et al. (1993). First, the PBQ was designed to be used with psychiatric patients and its validity criteria should be evaluated regarding general population. Second, it was suggested that the correlations between scales showed greater overlapping between the constructs that were being measured and affected the validity of the scales. This relates to the fact that it is difficult to find “pure” personality disorders and the common thing is to find heterogeneity in them. (Millon & Davis, 1996).

Beck, Butler, Brown, Dahlsgaard, Newman and Beck (2001), evaluated whether specific subscales of dysfunctional beliefs were differentially associated with five personality disorders. For these 756 psychiatric outpatients who completed the Personality Belief Questionnaire (PBQ) upon entry. Then, they were evaluated to identify in them personality disorders using a standardized clinical interview conducted by professionals who had no knowledge of the patient´s answers in the previous application of PBQ. The conclusions showed that patients with avoidant, dependent, obsessive-compulsive, narcissist and paranoid personality disorders, preferred the beliefs that theoretically are linked to the PBQ of their specific personality disorder. Expanding the results in this study was found a good consistency and high reliability in each of the PBQ scales. These results were repeated likewise in the research of Arntz et al. (1999) in which patients with personality disorders were compared with healthy controls.

Later a short form of this instrument was developed, which was done in two stages. In the first stage, data of patients that attended in outpatient psychiatric consultation that had completed the questionnaire between 1995 and 2001. The sample consisted of 920 persons, with an average age of 36.4 years (DT 11.1; range 18-76), of which 55% were women. In this sample, there was enough number of patients with personality disorders to validate five PBQ subscales: avoidant, dependent, obsessive-compulsive, narcissist and paranoid. A structured clinical interview by clinical personnel was done for the personality disorders

(SCID-II). They were trained for at least two weeks before starting the evaluation. Seven items of each subscale that were more representative were identified and these were used to design the short form of this questionnaire and a multivariate analysis of the variance (MANOVA) was conducted to observe the interaction of gender, which was not significant (Butler, Beck & Cohen, 2007). The reliability indexes for the subscales were avoidant (0.84), dependent (0.89), passive-aggressive (0.86), obsessive-compulsive (0.90), antisocial (0.80), narcissist (0.83), histrionic (0.89), schizoid (0.79) and paranoid (0.91). Besides, it was found that 85% of the 25 patients with personality disorders obtained a higher score in the subscale of the same disorder than in the other subscales or in none of the same test (Butler, Beck & Cohen, 2007). In the second stage, this version was applied to another sample of psychiatric outpatients and the internal consistency, the reliability - retest and the construct validity were evaluated. Patients who sought treatment at the Beck Institute of Cognitive Therapy and Research during 2003 and 2004 were evaluated. The sample consisted of 160 patients, of whom 58% were women, with an average age of 39.8 years (DT 14.2 years). In the sample the distribution Axis I disorders were: 53% with affective disorders, 28% with anxiety disorders, 10% with adjustment disorders and 9% with other disorders. Thirty-one patients had personality disorders, among these 9 had avoidant personality disorder, 7 obsessive- compulsive personality disorders, 7 borderline personality disorder and 26 non-specified personality disorders. (Butler, Beck & Cohen, 2007).

To the patients were applied the Depression Inventory of Beck II (Beck, Steer & Brown, 1996), the Beck Anxiety Scale (Beck & Steer, 1990), the Dysfunctional Attitude Scale (Weissman & Beck, 1978), the Rosenberg Self-esteem scale (Rosenberg, 1978), the Social Support Scale (Russell & Cutrona, 1984) and a scale to measure the psychosocial performance (Progress Assessment Scales, Ihilevich & Gleser, 1979, 1982). Besides, they were also interviewed using the SCID to diagnose disorders of axis I and axis II. The results of this study showed an alpha coefficient of 0.97. The total average of the scale was 81.28 (DT = 42.70). The subscales of PBQ-SF obtained alpha between 0.81, for narcissist and avoidant personality disorder, up to 0.92 of paranoid scale. The correlations test and retest were: avoidant 0.67, dependent 0.80, passive–aggressive 0.80, obsessive–compulsive 0.82, antisocial 0.57, narcissist 0.74, histrionic 0.78, schizoid 0.74 and paranoid 0.72 (Butler, Beck & Cohen, 2007).

All scales showed correlation with depression. Seven of the nine disorders showed correlation with anxiety, only the antisocial and narcissist scale did not have it. Depression and anxiety have a strong correlation with the dependency scale and show a weaker correlation with the narcissist scale. (Butler, Beck & Cohen, 2007).

Over time, PBQ has become an evaluation instrument for personality disorders. This is evident in studies such as in Jones, Burrell-Hodgson y Tate (2007), who conducted a research in which they measured PBQ ability to identify individuals with personality disorder, according to the scores obtained by them in the Million Multi-axial Personality Inventory (MCMI III). The study was conducted with 155 patients who were treated by clinical psychologists, for anxiety or depression problems, none of which had been referred for personality disorder treatment. The results of the research permitted to evaluate the avoidant, dependent, passive–aggressive and schizoid sub-scales, finding that each personality disorder could be predicted from the PBQ subscale.

Even though at the beginning, items in the PBQ had not been specially developed for the borderline personality disorder, Butler et al (2002) found 14 items that were significantly more appropriate for the borderline personality disorder than for any other disorder. These beliefs reflect the central topics of this disorder according to the cognitive therapy: dependency and distrust beliefs.

Therefore, Bhar, Brown and Beck (2008), conducted a study that sought to examine the structure for the subscale for borderline personality disorder of PBQ. The study was carried out with 184 patients, with an average age of 33.1 years (range 18-61; SD 10.47) diagnosed with Borderline Personality Disorder, who had been evaluated for psychotic disorders. 97.3% of these had comorbidity with Axis I disorders and 84.2% had a mood disorder. They also found that 46.4% had comorbidity with other personality disorders. The results of the study showed three factors: the feeling of being defenseless, without the constant support of others, expectations of being betrayed by others or dishonesty and vision that one must preventively avoid threat. Although the three factors related with depression, only dependence and mistrust were associated with hopelessness. Distrust was the factor more related with suicide conception. These results support the dimensional structure of the borderline personality subscale of PBQ.

As can be seen, the consistency of PBQ in relation with evaluating dysfunctional beliefs of personality disorders was successful; however, the study of McMurran and Christopher (2008) shows a different evidence. These researchers conducted a study that sought to confirm the Beck et al (2001) research in which correlations between the PBQ subscales and the personality disorders were found, but in which the histrionic, schizoid and antisocial scales could not be analyzed, due to an insufficient number of patients. The participants were 71 male inmates of three prisons, with an average age of 33 years (SD = 8.03), to whom the International Interview of Personality Disorder (IPDE) and the PBQ were applied. Of the total sample of 31 prisoners, (43.67%) had a diagnosis and 12 prisoners (16.90%) had a probable diagnosis. The results of this research did not show that the antisocial beliefs subscale discriminated against those that had antisocial personality disorder from those without. Looking at the content of this scale we find that the items are focused on selfishness and "trying to be number one" despite the impact on others and how the others see the subject. In this study, these beliefs did not discriminate men with antisocial personality disorders. (McMurran & Christopher, 2008).

According to the above, the validation of PBQ in an American context has been sufficiently evaluated; showing with it, not only effectiveness when it is was used in assessing the patient but usefulness in intervention process with patients. This suggests the need to carry out a validation process that permits to run the test in the Colombian context. Even if in previous years it included a validation of by Londoño, Calvete and Palacio (2012) they also noticed limitations in the validation process with reference to the (non-random) sampling type, non-homogeneous distribution of the different categories of the socio-demographic variables (city, age group, occupation, educational level) and a concentration of the sample in a specific age (17 years). Therefore, to think in a new validation, that takes into account these limitations permits to emphasize the purpose of the current research, where much emphasis is made in the use of validated and standardized instruments to comply with the methodological requirements for this. This increases the certainty that the instrument has to measure what it has to be measured and at the same time complies with the measurement principle that states that regardless of whether an instrument has been validated in some context, it does not mean that is valid in another time, culture or context. (Gjersing, Caplehorn & Clausen, 2010).

Currently there is no universal agreement on how to adapt the instruments to another culture, but we do know that it is not simply to make a translation, but that it implies an adaptation from the linguistic aspect, but also including the verification of validity and reliability. This process is important when an instrument is to be used in another language, moment or time, to reduce the risk of bias in the study; especially when what is going to be measured are attitudes, which cannot be directly observed, but are inferred by the answers in a questionnaire. (Gjersing, Caplehorn & Clausen, 2010).

All this then led to carry out the study that not only pretends a validation of a test, but adapting the same to the context, in such a way that it can be used in the clinical and research field.

2. METHOD

This study is due to a quantitative bet, correlational of structural and concurrent validation and determination of the psychometric properties of the Personality Belief Questionnaire Short Form (PBQ-SF) in Colombian population.

2.1 Population and Sample

The reference population were the persons of both genders, between 18 and 35 years old, born in Colombia and living in nine different cities of Colombia (San Andrés, Florencia, Manizales, Quibdó, Villavicencio, Sincelejo, Barranquilla, Medellín and Bogotá).
Since this study is linked to a doctoral thesis that aims to evaluate the personality beliefs in offending drivers, the range of age defined for the study population was due to the fact that the driver's licenses are requested by 85% of people with this gender and age characteristics. With regard to the selection of cities, at the beginning Medellín was chosen to host the Doctoral study and through a random selection was formed the group of cities, taking as criteria to include at least one city in each geographical region of the country.

This study tended for an ample and heterogeneous sample, so that it was representative, both in number and participants of the general population. When small samples are used there is the risk of finding correlations proper of the sample or that do not show all the diversity of the population participants. Some studies have used samples that vary between 700 (Beck, Butler, Brown,

Dahlsgaard, Newman & Beck, 2001) and 950 (Butler, Beck & Cohen, 2007) persons randomly selected from the target population of the study. According to the above, the random type sample used in this Project component was not less than 900 persons, men and women of this age range.

The factor analysis was used as estimation criteria for the size of the sample. To perform the factor analysis of the instrument, that has 65 questions, a fraction of the sample was applied among 8 to 10 participants per question, to reach between 80% and 100% of reliability, which suggested a sample of 650 persons. Since the instrument was applied in nine cities the greater fraction of sampling was used with a design effect of two, therefore, the total estimated sample was 1260 persons.

Adding to the supposition that a maximum of 20% of the participants (1 in 5 persons) had not properly filled out the instrument, specifically that they had not completed it or had left some question without answer, the final size of the sample was 1575 persons. However, the final number of participants on which valid information was obtained for carrying out the analysis was 1423 persons, surpassing the total estimated in the sampling design. Finally, the number of participants per city was estimated with a proportional fixation according to the population figures between 16 and 35 years of age in each city.

2.2 Validation Process

To carry out the validation process the following steps were taken:

- The test was acquired and the authorization from the test´s authors, Aaron Beck y Judith Beck of Beck Institute of the United States was obtained to carry out the validation process of the test in Colombia.
- A Spanish translation is performed by two independent translators and they were isolated from one another. The translated Spanish versions were reviewed by an expert committee on the topic and the methodology of test validation chose the best version.
- Then, the most adequate version was defined; it was retranslated into English by other two qualified persons, in an independent and isolated way. None of these translators knew the original version of the instrument.
- The consolidated retranslation version was submitted, along with the Spanish version, to professor Aaron Beck, creator of the test. With author´s recommendations, who gave a favorable concept on the quality and the similitude of the translations, we proceeded to consolidate the final version translated into Spanish of the PBQ-SF.
- Pilot test: The instrument was tested with a group of 325 persons, randomly selected, in order to refine the design aspects and the form details, but not the background in the wording of the questions. The test was applied by professionals in psychology trained and standardized by the researchers on the structure, content and application form of the instrument. With the results obtained in the pilot test, adjustments were done in the presentation of the instrument.
- The formal application of the instrument was carried out in the sample designed for purpose. Psychologists of the nine cities included were trained in the sampling design, who carried out the process during an average of four months until all the samples in each city were completed.
- Reliability and validity of the construct was evaluated, by estimating the internal consistency indexes (Cronbach´s alpha) and confirmatory factor analysis.
- Other statistics tests as the significance of correlation matrix, the Kaiser-Meyer-Olkin test and the Bartlett´s sphericity test were carried out to verify the structural validity of the scales that make up the PBQ-SF.

3. RESULTS

3.1 Socio-demographic Variables

1423 instruments were applied of the Spanish translated version of PBQ-SF, in nine Colombian cities randomly selected. The number of people interviewed in each city was calculated by proportional fixation to the number of inhabitants from 18 to 35 years in each selected city. (Table 1)

Table 2 shows that the participants were 896 men (63%) and 527 women (37%). 95% (n=1340) of the participants reported as being single. The majority (66.4%) reported to have university studies, undergraduate or postgraduate, and a quarter of the sample reported having followed up to high school.

Table 1. *Geographical Distribution of Participants. Cross-cultural Validation of the PBQ-SF. Colombia.*

City	Number of persons	Percentage
San Andrés	31	2.2%
Florencia	40	2.8%
Manizales	50	3.5%
Quibdó	51	3.6%
Villavicencio	70	4.9%
Sincelejo	77	5.4%
Barranquilla	80	5.6%
Medellín	501	35.2%
Bogotá	523	36.8%
Total	1423	100.0%

Table 2. *Education Level of Participants. Cross-cultural Validation of PBQ-SF. Colombia*.

Education Level	Number	Percentage
Primary	6	0.4%
Secondary	385	27.1%
Technical / Technological	87	6.1%
University Undergraduate	931	65.4%
University Postgraduate	14	1.0%
Total	1423	100.0%

3.2 Evaluation of internal consistency of the instrument Personality Beliefs.

Cronbach´s alpha coefficient was calculated to verify reliability (internal consistency) of each of the ten factors in the selected sample. This index was calculated for the total scale. In the following Table, the results of internal consistency of each of the factors analyzed were shown. All the values of Cronbach´s coefficient above 0.60, which allow us to interpret them as adequate. Cronbach´s alpha statistics had a value of 0.93 for the total PBQ-SF scale translated to Spanish, a value highly significant, reflecting the internal consistency of the items that comprise it to value the existence of personality dysfunctional beliefs.

From its design, the Personality Beliefs Questionnaire (PBQ-SF), given the high internal consistency of its factorial components, each of which represent a personality dysfunctional belief, allows the use of the subscales independently for the evaluation of these factors in a specific interest groups. Thus, for example, components of borderline type dysfunctional beliefs, narcissist, histrionic and antisocial, can be used for the measurement of such characteristics in persons with this type of associated behaviors, such as impulsivity, hostility, aggression and the search of sensations. (Table 3)

3.3 Confirmatory Factor Analysis

Prior to carrying out the confirmatory factor analysis the factorial charges in each of the 10 proposed indicators were analyzed. As may be seen in table 4, in each of the items, the factor previously defined charged more, confirming with that that all the items were well explained from the theoretical construct for which they were defined.

Table 3. *Internal Consistency of the Instrument. Cross-cultural Validation of PBQ-SF. Colombia.*

Personality Dysfunctional Beliefs	Cronbach´s Alpha Coefficient
Borderline	0.75
Paranoid	0.83
Schizoid	0.71
Histrionic	0.81
Narcissist	0.74
Antisocial	0.75
Obsessive / Compulsive	0.76
Passive / Aggressive	0.73
Dependent	0.77
Avoidant	0.65

Table 4. *Factorial charges of the items in each factor in the PBQ_SF Spanish Version.*

Factors	Questions and Factorial Charges						
Antisocial	P.23	P.32	P.35	P.38	P.42	P.59	P.61
	0.69	0.59	0.61	0.59	0.65	0.62	0.64
Dependent	P.8	P.12	P.33	P.42	P.48	P.49	P.56
	0.45	0.36	0.55	0.60	0.69	0.70	0.55
Schizoid	P.12	P.25	P.28	P.29	P.36	P.50	P.53
	0.61	0.55	0.61	0.71	0.68	0.68	0.35
Avoidant	P.1	P.2	P.5	P.31	P.33	P.39	P.43
	0.37	0.59	0.67	0.72	0.59	0.55	0.46
Histrionic	P.8	P.22	P.34	P.37	P.52	P.54	P.55
	0.64	0.63	0.70	0.77	0.52	0.76	0.71
Borderline	P.31	P.44	P.45	P.49	P.56	P.64	P.65
	0.64	0.71	0.68	0.50	0.55	0.59	0.68
Narcissist	P.10	P.16	P.26	P.27	P.46	P.58	P.60
	0.45	0.57	0.75	0.79	0.64	0.74	0.47
Obsessive compulsive	P.6	P.9	P.11	P.19	P.30	P.40	P.57
	0.59	0.66	0.65	0.48	0.74	0.68	0.69
Paranoid	P.31	P.13	P.14	P.17	P.24	P.48	P.49
	0.67	0.76	0.72	0.72	0.72	0.69	0.64
Passive Aggressive	P.4	P.7	P.20	P.21	P.41	P.47	P.57
	0.56	0.55	0.55	0.71	0.57	0.61	0.70

3.4 Confirmatory Factor Analysis Results

Statistics tests as the significance of the correlation matrix, the evaluation of the determinant of the correlation matrix, the Kaiser-Meyer-Olkin test and Bartlett´s sphericity test were used to verify the structural validity of the scales that make up the PBQ-SF. (See Table 5)

Table 5. *Structural Characteristics of PBQ-SF Spanish Version. Colombia.*

Personality Dysfunctional Beliefs	Matrix Significance	Matrix Determinant	KMO	Bartlett's Sphericity Test
Borderline	High	.237	.796	.000
Paranoid	High	.118	.886	.000
Schizoid	High	.379	.826	.000
Histrionic	High	.132	.879	.000
Narcissist	High	.220	.827	.000
Antisocial	High	.281	.816	.000
Obsessive / Compulsive	High	.238	.827	.000
Passive / Aggressive	High	.311	.801	.000
Dependent	High	.424	.763	.000
Avoidant	High	.410	.751	.000

A matrix determinant of relatively low correlations identified, except avoidant and dependent factors, thus indicating that the variables held by each evaluation category of (PBQ-SF) test are linearly related.

Similarly, it was evident an appropriate factor model in each of the categories (scales) of evaluation of PBQ SF questionnaire Spanish Version, since the results obtained by measuring the sampling adequacy of Kaiser-Meyer-Olkin (Coefficient KMO) were close to 1; among the highest identified factor is the paranoid factor (0.886) and the histrionic (0.879). Since all the items show values above 0.50 with the indicator KMO we conclude that the factor analysis is highly suitable as an analysis model for these scales. This result is consistent with the significance level of the Bartlett´s sphericity test, for which all the resulting items also are highly significant. Finally, the analysis of the quadratic saturations derived from the extraction of the main components of the instrument showed a total variance explained of the 55.2 %, percentage that may be considered acceptable. (See Table 6)

Table 6. *Indexes of goodness of fit of the ten factors of the PBQ-SF Questionnaire Spanish Version.*

Factor	CFI	TLI	RMSEA	SRMR	CD
Antisocial	0.998	0.995	0.016	0.011	0.764
Dependent	0.992	0.978	0.027	0.015	0.641
Schizoid	0.994	0.991	0.020	0.016	0.737
Avoidant	0.995	0.988	0.022	0.017	0.684
Histrionic	0.999	0.997	0.016	0.012	0.810
Borderline	0.994	0.966	0.048	0.013	0.668
Narcissist	0.998	0.996	0.017	0.012	0.782
Obsessive/ Compulsive	0.994	0.987	0.030	0.015	0.779
Paranoid	0.998	0.996	0.021	0.010	0.827
Passive / Aggressive	0.995	0.989	0.024	0.016	0.719

To evaluate the adjustment of the model were used: the Root Mean Square Error of Approximation (RMSEA) and the Standardized Root Mean Square Residual (SRMR) as absolute adjustment measurements and the Tucker-Lewis Index (TLI) and Comparative Fit Index (CFI) as incremental adjustment measurements. (Gelabert et al., 2011; Leighton, Gokiert y Cui, 2007), besides the coefficient of determination CD was estimated. With respect to this pointed out that adequate level of a good adjustment of the model is a RMSEA less than .08 (MacCallum, Browne & Sugawara, 1996), reaching a good adjustment for

values below .06 (Hu & Bentler, 1999) and a strict superior borderline of .07 (Steiger, 2007), as we found in this study. For the measurements TLI and CFI, greater or equal values to .90 are indicative of an adequate adjustment (Bentler & Bonnet, 1980). These type of values were found in this study. Each of the factors referred to in the questionnaire; obtain adequate values for the different indicators, showing acceptable adjustment levels for the data; in the same way all, the parameters were significant. The coefficient of determination CD indicated a high explicative value of the questions in each one of the factors. This permits to suppose that the questions tend to explain sufficiently the behavior of each of the factors in general. The results show that using the confirmatory factor analysis the factorial solutions obtained are valid.

Table 7. *Summary measurements for the dysfunctional beliefs for the Colombian population. Cross-cultural Validation of the PBQ-SF Form in Spanish Version.*

Dysfunctional Personality Beliefs	General Population		Men		Women		*p** Value
	Mean	Std. Dev.	Mean	Std Dev.	Mean	Std Dev.	
Borderline	6.62	4.76	6.55	4.73	6.75	4.82	0.511
Paranoid	8.04	5.39	7.62	5.22	8.81	5.62	0.001
Schizoid	13.58	5.11	13.44	5.15	13.84	5.03	0.131
Histrionic	6.31	4.66	6.01	4.51	6.86	4.87	0.006
Narcissist	7.30	4.5	6.97	4.20	7.89	4.96	0.007
Antisocial	9.17	5.15	8.61	4.96	10.19	5.34	0.001
Obsessive / Compulsive	11.64	5.24	11.27	5.26	12.34	5.15	0.001
Passive / Aggressive	9.77	4.77	9.37	4.62	10.51	4.95	0.001
Dependent	8.91	4.38	8.59	4.23	9.51	4.61	0.002
Avoidant	10.44	4.66	10.23	4.61	10.83	4.73	0.050

To establish if there were significant differences in the dysfunctional personality beliefs between men and women and since the test values refer to a numerical scale, and not to quantitative variables, the non-parametric Mann-Withney U test was used. With exception of the borderline type and schizoid type personality beliefs, the others were significantly different between men and women. Even though there is a controversy about the dysfunctional personality beliefs if they are associated or not to gender, these findings should be taken into account at the moment of interpreting the results of applying the PBQ-SF test.

4. DISCUSSION

For the validation process of the psychometric instruments you must have selection, application and design techniques of a rigorous scheme of data quality control, all of that in order to determine and back up the metric properties of the instruments, in our case the PBQ-SF. Similarly, as a backup of this process, it was necessary to count with a rigorous theoretical planning and an appropriate methodological design.

According to this, during this process, the generation of evidence of construct validity as a validation stage was carried out with rigor and therefore the results lead to the conclusion that the said questionnaire effectively gives account of the interest traits under the appropriate

dimensions according to the Beckian theory that oriented its initial design and posterior sustenance. It is important to point out that this research process intended to establish the psychometric properties of an instrument that evaluates the personality beliefs and is not centered in the clinical diagnosis of personality disorder, which was taken into account in the selection process the sample, which corresponded to a non-clinical population.

With respect to the confirmatory factor analysis (CFA), this constitutes one of the analysis procedures more used in research, since it emphasizes the study of the relationship between the a set of variables observed and one or more factors, for the case, the items of a test, specifically the PBQ-SF and the scores obtained by the subjects in Colombia. The confirmatory factor analysis is, in consequence, a very useful strategy in the scope of the hypothesis test and the confirmation in the PBQ-SF of the Beckian theory.

It is considered that although there are different forms of measuring of possible adjustment indexes, none of them separately is enough to determine that the model adjusts to the data. The most used combination today is the following: $\chi 2$, RMSEA, ECVI, SRMR, GFI and CFI: this set should be sufficient to take a decision with respect to the adjustment of the model (Boomsna, 2000; McDonald & Ho, 2002). Based on the above, it is evident in the validation process that the conjugation of these measurements shows an appropriate structural validity and suggests it potential application with reduced uncertainties.

Therefore, it is concluded that the questionnaire of personality beliefs (Personality Belief Questionnaire PBQ-SF) of Aaron Beck and Judith Beck, contains 10 scales that may be applied in an independent or joint form to measure each one of the personality beliefs, of the disorders described in the Diagnosis and Statistics Handbook of Mental Illness DSM V: avoidant, dependency, passive-aggressive, obsessive-compulsive, antisocial, narcissist, histrionic, schizoid and paranoid.

The Instrument PBQ-SF, has high stability and internal consistency indexes, which Cronbach´s alpha values go from 0.65 in the avoidant disorder up to 0.83 in the paranoid disorder; values of high acceptability at the moment of considering the reliability of a scale and as in the Londoño, Calvete and Palacio (2012) study they oscillated between 0, 68 and 0,84. Besides, it showed consistency and agreement with the validation studies for other countries and when its effectiveness was compared with other instruments of the same type (Jones, Burrell-Hodgson, Tate, 2007) and other scales or evaporative criteria of personality (Beck, Butler, Brown, Dahlsgaard, Newman, Beck, 2001).

The agreement of the findings around validity and reliability of this instrument in relation to the values originally reported by the research team of the Beck Institute, permit to conclude that the PBQ–SF questionnaire validated for Colombia, in its Spanish version, is a psychological evaluation tool that may be used in different non-clinical scopes to identify personality dysfunction beliefs in populations groups who are interested in establishing association relations between these and other behaviors for example: aggressiveness, impulsivity, search of sensations among others; which mean risk of occurrence of deathly outcomes for the individual or collective health.

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한국어판 단축형 성격신념질문지의 타당화 연구

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A Validation Study of Korean Version of Personality Beliefs Questionnaire-Short Form (PBQ-SF)

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Objectives The Personality Belief Questionnaire-Short Form (PBQ-SF) is a self-report instrument for assessment of dysfunctional beliefs based on Beck's cognitive formulations of personality disorders. The aims of this study was to examine the reliability and validity of the Korean version of PBQ-SF in clinical samples.

Methods The Korean version of PBQ-SF was examined in 115 participants (50 patients with personality disorder and 65 patients without personality disorder). All participants were assessed for personality disorder using the semi-structured clinical interview of the Personality Assessment Schedule. The construction validity was examined by correlation with Beck Depression Inventory, Spielberger State-Trait Anxiety Inventory, and Neuroticism-Extraversion-Openness Five-Factor Inventory neuroticism scales. Twenty four randomly sampled patients were examined for the test-retest reliability.

Results The Korean version of PBQ-SF showed good internal consistency [Cronbach's alpha=0.73 (schizoid)−0.92 (paranoid)] and test-retest reliability [r=0.74 (narcissistic)−0.92 (paranoid)]. The PBQ-SF was correlated with depression, anxiety, and neuroticism. The overall subscales of PBQ-SF were correlated with Diagnostic and Statistical Manual of Mental Disorders based diagnosis of personality disorders.

Conclusion Consistent with previous findings using the Korean full version of PBQ as well as the English version of PBQ-SF, our results support that the Korean version of PBQ-SF is a reliable and valid instrument for assessment of dysfunctional beliefs associated with personality pathology.

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KEY WORDS Personality disorder · Personality Belief Questionnaire-Short Form (PBQ-SF) · Diagnostic and Statistical Manual of Mental Disorders (DSM) · Cognitive theory of personality disorder · Reliability · Validity.

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서 론

성격장애는 부적응적인 신념에 의해 특징지어질 수 있는데,[1)] 인지이론가들에 따르면 각 성격장애의 인지 프로파일에서 그려지는 전형적인 신념들은 심리적 고통과 부정적인 생각과 행동을 초래하며, 이러한 역기능적 신념을 통해 성격장애의 실체가 드러나게 된다.[2)] 개인의 역기능적인 신념을 수정하는 것은 성격장애의 치료에 있어 핵심적인 작업 중 하나이다. 실제로 인지행동치료, 심리도식치료, 변증법적치료 등은 개인의 부적응적인 신념을 보다 적응적으로 수정하는 것을 치료의 목표로 삼고 있다.[2)] 따라서 성격장애 환자들이 가진 역기능적인 신념의 수준을 정확하게 평가하는 것은 치료의 시작이자 향후 치료계획을 수립하는 데 있어서도 매우 중요한 역할을 담당한다.

더군다나, 성격병리는 비단 성격장애에만 국한된 문제는 아니다. 주요임상증후군에 포함되는 많은 정신장애에서 성격적 역기능이 중요한 역할을 한다는 것은 잘 알려져 있는 사실이다.[2)] 이런 점에서 개인의 역기능적 성격 특성을 파악

하는 것은 치료에 대단히 중요하다.

현재 성격장애를 진단하기 위해 구조화되거나 혹은 반구조화된 다양한 면담도구들이 활용되고 있으나, 대부분이 장애의 진단을 위한 목적으로 개발되었기 때문에 환자들의 인지적 특성을 심층적으로 파악하기에는 어려움이 있다.[1] 또한 Dysfunctional Attitude Scale(이하 DAS)이나 Young Schema Questionnaire(이하 YSQ)와 같이 역기능적 신념을 파악하기 위한 자기 보고식 검사도구들이 개발되기도 하였으나, DAS는 Diagnostic and Statistical Manual(이하 DSM) 진단체계와 호환성이 떨어지고 YSQ는 인지적 특성과 행동 양상이 뒤섞여 있기에 명확한 역기능적 신념을 파악하는 데 한계가 있다.[2]

이에 Beck과 Beck[3]은 DSM-III-R에 제시되어 있는 9개 성격장애인 회피성, 의존성, 강박성, 연극성, 수동-공격성, 자기애성, 편집성, 조현성, 반사회성 성격장애에서 나타나는 주된 역기능적 신념을 평가하기 위해 성격신념질문지(Personality Belief Questionnaire, 이하 PBQ)[4]를 개발하였다. 성격신념질문지는 각 성격장애에 대응하는 역기능적 신념을 차원적인 연속선상에서 평가하기 때문에 DSM과 같은 범주적 진단체계가 가진 한계점을 보완할 수 있다. 또한 특정한 성격장애 증상에 국한되지 않고 다양한 역기능적 신념의 수준을 평가함으로써 개인의 광범위하고도 포괄적인 성격을 적절히 반영할 수 있다는 점에서도 그 의의가 크다. 한국에서는 Jo 등[5]이 대학생 및 일반인 374명을 대상으로 DSM-IV 진단체계에 포함되지 않는 수동-공격성 성격장애의 신념을 제외하고 경계성 성격장애의 신념을 포함하여 총 112문항으로 구성된 한국어판 성격신념질문지(PBQ)의 신뢰도와 타당도를 검증하였다.

Beck 등[1]은 회피성, 의존성, 강박성, 자기애성, 편집성 성격장애 환자를 대상으로 성격신념질문지의 신뢰도와 타당도를 검증하였다. 연구 결과, 성격신념질문지의 Cronbach's alpha는 0.81(조현성, 반사회성)~0.90(의존성, 강박성)으로 좋은 내적 일관성을 보였으며, 8주 뒤 성격신념질문지를 다시 실시하여 검사-재검사 신뢰도를 측정한 결과 0.57(회피성)~0.93(반사회성)의 유의한 상관을 보였다. 또한 진단된 성격장애와 대응하는 하위 신념이 다른 역기능적 신념들보다 유의하게 높은 점수를 보고하는 등, 변별 타당도(discriminant validity) 역시 양호하였다. 더불어 다양한 연구자들에 의해 신뢰도와 타당도가 반복 검증되며 성격신념질문지가 개인의 역기능적 신념을 측정하는 적합한 도구임이 입증되었다.[6,7]

이후 많은 경험적 연구에서 성격신념질문지의 임상적 유용성이 밝혀졌다. Connan 등[8]은 92명의 섭식장애 환자들을 대상으로 부적응적인 섭식행동과 인지적 특성 간의 관계를 살펴보았다. 그 결과 섭식병리행동과 강박성 신념 및 회피성 신념 간 유의한 관련성이 있음이 밝혀졌다. 또한 우울장애 환자들의 인지치료에 있어서도 역기능적 신념이 치료효과를 중재한다는 연구 결과도 보고되었는데, 특히 회피성 신념 및 편집성 신념이 높을수록 인지치료의 효과가 감소하였다.[9] 따라서 정신장애의 효과적인 치료와 적절한 치료적 관계를 형성하기 위해서는 개인의 역기능적인 성격 특성을 객관적으로 파악하고 이를 고려한 치료적 개입이 필수적이라 할 수 있겠다.

이와 같은 유용성에도 불구하고, 성격신념질문지의 문항수가 많아 시간이 많이 소요된다는 한계가 지적되기도 하였다. 이에 Butler 등[10]은 통계적 분석을 근거로 보다 간결하되 신뢰도와 타당도를 겸비한 단축형 성격신념질문지(Personality Belief Questionnaire-Short Form, 이하 PBQ-SF)를 제안하였다.

그러나 Butler 등[10]이 제안한 보다 간편하고 유용한 단축형 성격신념질문지(PBQ-SF)에 대한 한국어판은 부재한 실정이다. 이에 본 연구에서는 정신건강의학과에 내원한 환자를 대상으로 한국어판 단축형 성격신념질문지(PBQ-SF)의 신뢰도와 타당도를 검증하고자 하였다.

방 법

대 상

본 연구는 서울 지역 대학병원 두 곳의 정신건강의학과에 내원한 환자를 대상으로 하였으며, 총 115명이 참여하였다. 일차적으로는 환자를 치료해 온 주치의가 외래 및 입원 환자들을 대상으로 DSM-5 성격장애의 정의에 부합하는 환자들을 선별하였다(50명). 한편, 이와는 별개로 성격장애가 없는 정신과 환자들을 선별하였다(65명). 이렇게 선별된 모든 피험자들을 대상으로 연구자가 반구조화 면담 형식의 성격평가절차(Personality Assessment Schedule, 이하 PAS)[11]를 이용하여 성격장애의 유무를 진단하였다. 연구 참여 제외기준은 정상미만의 지능, 기질성 뇌증후군, 언어 및 의사소통의 장애, 급성 약물 및 알코올 독성 상태, 망상 혹은 정신증 상태 등으로 성격기능의 변화를 초래할 수 있는 경우는 배제하였다. 본 연구는 각 병원이 소속된 윤리위원회의 승인을 거쳤으며, 모든 연구 참여자들은 연구에 관한 설명을 듣고 사전에 서면동의를 하였다. 연구 참가자들의 인구통계학적 특성은 표 1에 제시하였으며, 진단분포를 표 2에 제시하였다. 참가자들의 성별은 남성 48명(41.7%), 여성 67명(58.3%)이었고, 평균 연령은 31.8세(SD=12.4), 평균 교육연수는 13.2년(SD=2.21)이었다. 연구 참여자들의 정신질환의 진단은 기

분장애(28명 : 양극성장애 7명, 우울장애 21명)로 진단된 비율이 가장 높았으며, 외상후 스트레스장애(26명), 섭식장애(23명), 불안장애(20명) 순서로 분포되어 있었다. 또한 DSM-5에 따라 성격장애로 진단된 환자는 50명으로 정서불안정성 성격장애(17명)와 회피성 성격장애(15명) 순이었으며, 65명(56.5%)은 성격장애로 진단되지 않았다. 단축형 성격신념질문지(PBQ-SF)의 검사-재검사 신뢰도를 확인하기 위해 연구 참가자 중 27명을 단순 무작위로 추출하여 2주 뒤 동일한 설문을 다시 실시하였고, 설문을 미완성한 3명을 제외하고 검사-재검사 신뢰도를 측정하였다.

Table 1. Demographic characteristics of the participants (n=115)

	Value	Frequency	Percent (%)
Gender	Male	48	41.7
	Female	67	58.3
Marriage	Single	75	65.2
	Married	34	29.6
	Divorced	2	1.7
	Died	2	1.7
	Re-married	2	1.7
Job	Employed	66	57.4
	Unemployed	45	39.1
	No answer	4	3.5
Total		115	100.0
	Mean	Standard deviation	
Age (years)	31.8	12.4	
Education (years)	13.2	2.21	

측정도구

한국어판 단축형 성격신념질문지(Personality Belief Questionnaire-Short Form, PBQ-SF)(부록)

본 연구에서는 Beck과 Beck[3]이 개발한 성격신념질문지(PBQ original version)를 Jo 등[5]이 한국 실정에 맞게 타당화한 한국어판 성격신념질문지(PBQ)를 토대로, Butler 등[10]이 제시한 단축형(PBQ-SF original version)에 해당하는 문항들을 추출하여 사용하였다. 이렇게 만들어진 단축형 성격신념질문지는 원판(full version)과 마찬가지로 총 9개의 하위 요인으로 구성되어 있으며, 각각의 하위 요인별 7문항에 더하여 경계성 성격장애의 역기능적 신념을 측정하는 2문항이 추가된 65문항을 5점 Likert 척도로 평정하게 되어 있다. Butler 등[10]이 시행한 단축형 성격신념질문지(PBQ-SF original version)의 내적 합치도 계수(Cronbach's alpha)는 다음과 같다 : 조현성(0.79), 편집성(0.91), 반사회성(0.80), 자기애성(0.83), 연극성(0.89), 회피성(0.84), 의존성(0.89), 수동-공격성(0.86), 강박성(0.90). 본 연구에서는 DSM-5 진단체계에 포함되어 있지 않은 수동-공격성 성격신념은 제외하였으며, 경계성 성격신념을 포함해 총 9개의 하위 요인을 분석에 포함하였다.

성격평가절차(Personality Assessment Schedule, PAS)

PAS는 임상 현장에서 널리 사용되고 있는 성격장애 진단을 위한 표준화된 성격평가절차이다.[11] PAS는 반구조화된 면담 형식으로 진행되며 24개의 성격변수를 8점의 Likert 척

Table 2. Diagnostic distribution of participants based on DSM-5

Mental disorder	Frequency	Percent (%)	Personality disorder	Frequency	Percent (%)
Mood disorders	28	24.4	Paranoid personality disorder	1	0.9
Bipolar disorders	7	6.1	Schizoid personality disorder	4	3.5
Depressive disorders	21	18.3	Antisocial personality disorder	1	0.9
PTSD	26	22.6	Borderline personality disorder	17	14.8
Eating disorders	23	20.0	Histrionic personality disorder	6	5.2
Anxiety disorders	20	17.4	Avoidant personality disorder	15	13.0
Somatoform disorders	6	5.2	Other specific personality disorder	1	0.9
Adjustment disorder	2	1.7	Unspecified personality disorder	5	4.3
Dissociative disorder	2	1.7	No personality disorder	65	56.5
Insomnia, primary	2	1.7			
Alcohol dependence	1	0.9			
Schizotypal disorder*	1	0.9			
Gender Identity disorder	1	0.9			
Personality disorder only	1	0.9			
No disorder	2	1.7			
Total	115	100		115	100

* : Schizotypal disorder is included in the mental disorders in this study as PBQ-SF doesn't have the schizotypal scale. DSM-5 : Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, PTSD : Post-traumatic stress disorder, PBQ-SF : Personality Belief Questionnaire-Short Form

도로 평정한다. 본 연구에서는 숙련된 전문의 및 충분한 훈련을 받은 연구원에 의해 면담이 진행되었다. 평가자 간의 PAS는 DSM-III에 의거하여 개발되었으나 DSM-IV 및 DSM-5 적용에 적합하도록 채점체계를 알고리즘화하였다.[12] 본 연구에서는 Tyrer[12]가 제시한 알고리즘에 따라 PAS 평가 결과를 DSM-5 진단체계에 따른 각 성격장애의 수준으로 산출하였고, 조현형 성격을 제외한 9개의 성격장애 하위 점수를 분석에 사용하였다. 이는 PAS가 본래 International Classfication of Disease 진단기준을 토대로 만들어진 면담도구이기 때문에 조현형 성격장애에 대한 진단기준을 갖고 있지 않음에 기인하였다. 본 연구에 참여한 연구자들 간의 PAS의 평정자 간 신뢰도는 대체로 적합하였다(22개 변수들에서 Spearman's rho 0.520~0.967). 본 연구에서의 Cronbach's alpha는 0.91로 내적 일치도가 우수하였다.

한국판 Beck 우울척도(BDI)

Beck Depression Inventory(이하 BDI)는 우울 증상을 측정하기 위해 가장 많이 사용되는 척도 중 하나로, 우울증의 인지적, 정서적, 동기적, 신체적 증상을 포함하는 21문항으로 이루어져 있다.[13] 본 연구에서는 Rhee 등[14]이 한국 실정에 맞게 표준화한 BDI의 총점을 사용하였다.

한국판 Spielberger 상태-특성 불안 검사(STAI)

State-Trait Anxiety Inventory(이하 STAI)는 개인의 특성화된 불안과 현재 상태에서 느끼는 주관적인 불안감을 측정하기 위해 Spielberger와 Gorsuch[15]가 개발하였다. 본 연구에서는 Han 등[16]이 표준화한 설문을 사용하였으며, 연구 참가자 당시의 불안 수준을 측정하기 위해 STAI-State Form (이하 STAI-S) 총점을 분석에 사용하였다.

신경증 척도(Neuroticism)

McCrare와 Costa[17]는 성격 5요인을 측정하기 위해 Neuroticism-Extraversion-Openness Five-Factor Inventory(이하 NEO-FFI)를 개발하였으며, 본 연구에서는 Ahn과 Chae[18]가 한국어로 번안한 것을 사용하였다. NEO-FFI는 신경증(neuroticism), 외향성(extroversion), 개방성(openness), 친화성(agreeableness), 성실성(conscientiousness)의 5가지 하위 요인으로 구성되어 있으며, 이 중 신경증에 해당하는 12문항을 분석에 사용하였다.

자료분석

먼저, 연구 대상자의 인구 통계학적 정보를 확인하기 위해 기술통계분석을 실시하였다. 이후 한국어판 단축형 성격신념질문지(PBQ-SF)의 신뢰도 검증을 위한 내적 일치도를 확인하기 위해 Cronbach's alpha를 산출하였다. 또한 수렴타당도와 변별타당도를 검증하기 위해 단축형 성격신념질문지(PBQ-SF)의 각 하위 요인과 PAS, 그리고 우울, 불안, 신경증을 측정하는 척도와의 관계를 살펴보기 위해 상관분석을 실시하였다. 본 연구의 통계분석에는 SPSS-21 버전(SPSS Inc., Chicago, IL, USA)을 사용하였다.

결 과

신뢰도 검증

내적 일치도(Internal consistency)

한국어판 단축형 성격신념질문지(PBQ-SF)의 내적 일치도를 확인하기 위해 Cronbach's alpha를 산출하여 표 3에 제시하였다. 전체 문항의 Cronbach's alpha는 0.96으로 매우 높게 나타났다. 각 하위 요인별 내적 합치도 계수는 조현성(0.73), 편집성(0.92), 반사회성(0.80), 자기애성(0.74), 연극성(0.82), 경계성(0.84), 회피성(0.74), 의존성(0.83), 강박성(0.82)으로 적절한 수준의 내적 합치도를 보였다.

검사-재검사 신뢰도(Test-retest reliability)

검사-재검사 신뢰도를 확인하기 위해 단순 무작위로 추출한 24명을 대상으로 2주 뒤 단축형 성격신념 질문지(PBQ-SF)를 다시 실시하였다. 그 결과 하위 요인들의 검사-재검사 신뢰도는 r=0.69(회피성 신념)~0.92(편집성 신념)였으며, 총점에 대한 검사-재검사 신뢰도는 r=0.92로 시간의 경과에도 높은 수준의 상관을 보였다.

Table 3. Reliability of Personality Belief Questionnaire-Short Form

	Internal consistency (Cronbach's alpha) (n=115)	Test-retest reliability (r) (n=24)
Schizoid	0.73	0.77
Paranoid	0.92	0.92
Antisocial	0.80	0.81
Narcissistic	0.74	0.74
Histrionic	0.82	0.86
Borderline	0.84	0.89
Avoidant	0.74	0.69
Dependent	0.83	0.83
Obsessive-compulsive	0.82	0.76
Total	0.96	0.92

타당도 검증

단축형 성격신념질문지(PBQ-SF)의 하위 요인 간 상관

한국어판 단축형 성격신념질문지(PBQ-SF)의 구성타당도를 검증하기 위해 각 하위 요인 간의 상관분석을 실시하고 구체적인 결과를 표 4에 제시하였다. 상관분석 결과 9가지 성격장애 신념 점수 간 모두 유의미한 정적 상관이 존재하였고, 그중에서도 보다 큰 관련성을 보이는 신념들이 존재하였다. 구체적으로, 조현성 신념은 동일한 편집성 신념과 0.60($p<0.01$)의 정적 상관을 보였다. 또한 연극성 신념과는 0.20($p<0.05$)으로 기타 8개의 성격신념 중 가장 낮은 상관을 보였고, 의존성 신념($r=0.23$, $p<0.05$), 강박성 신념($r=0.29$, $p<0.01$)과도 상대적으로 낮은 상관을 보였다. 또한 편집성 신념은 반사회성 신념과 0.77($p<0.01$)로 가장 높은 상관을 보였으며, 강박적 신념과는 0.30($p<0.01$)의 가장 낮은 상관을 보였다. 반사회성 신념은 경계성 신념($r=0.66$, $p<0.01$), 자기애성 신념($r=0.62$, $p<0.01$), 연극성 신념($r=0.60$, $p<0.01$) 등과 정적 상관을 보였다. 자기애성 신념과 연극성 신념은 0.63($p<0.01$)의 상관을 보였고, 연극성 신념은 의존성 신념($r=0.76$, $p<0.01$)과 가장 높은 상관을 보였다. 경계성 신념은 다양한 성격신념과 정적인 상관을 보이고 있는 가운데 상대적으로 의존성 신념($r=0.86$, $p<0.01$) 및 회피성 신념($r=0.81$, $p<0.01$)과 높은 정적 상관을 보였다. 회피성 신념은 의존성 신념과 0.67($p<0.01$), 강박성 신념과 0.41($p<0.01$)의 정적 상관을 보였고, 의존성 신념과 강박성 신념의 상관은 0.36($p<0.01$)으로 나타났다.

단축형 성격신념질문지(PBQ-SF)의 하위 요인과 PAS의 상관

한국어판 단축형 성격신념질문지(PBQ-SF)의 수렴타당도를 검증하기 위해 성격장애 진단적 평가도구인 PAS와 상관분석을 실시하였고 그 결과를 표 5에 제시하였다. 보다 자세히 살펴보면, 조현성 성격신념은 PAS의 조현성($r=0.44$, $p<0.01$) 및 회피성($r=0.44$, $p<0.01$)과 가장 높은 상관을 보였으며, 편집성 성격신념은 경계성($r=0.51$, $p<0.01$), 회피성($r=0.47$, $p<0.01$), 편집성($r=0.44$, $p<0.01$)과 유의한 정적 상관을 보였다. 반사회성 성격신념은 편집성($r=0.43$, $p<0.01$), 반사회성($r=0.41$, $p<0.01$)과 높은 상관을 보였다. 또한 자기애성 신념은 경계성($r=0.43$, $p<0.01$), 의존성($r=0.40$, $p<0.01$)과 정적 상관을 보였으며 자기애성과도 0.25($p<0.01$)의 유의한 상관이 나타났다. 더불어 연극성 신념과 경계성 신념은 각각 PAS의 연

Table 4. Correlations among Personality Belief Questionnaire-Short Form subscales

	1	2	3	4	5	6	7	8	9
1. Schizoid	-								
2. Paranoid	0.60†	-							
3. Antisocial	0.47†	0.77†	-						
4. Narcissistic	0.32†	0.59†	0.62†	-					
5. Histrionic	0.20*	0.52†	0.60†	0.63†	-				
6. Borderline	0.46†	0.73†	0.66†	0.44†	0.65†	-			
7. Avoidant	0.58†	0.69†	0.65†	0.50†	0.56†	0.81†	-		
8. Dependent	0.23*	0.54†	0.58†	0.40†	0.76†	0.86†	0.67†	-	
9. Obsessive-compulsive	0.29†	0.30†	0.47†	0.42†	0.37†	0.34†	0.41†	0.36†	-

* : $p<0.05$, † : $p<0.01$

Table 5. Correlations Personality Belief Questionnaire-Short Form (PBQ-SF) subscales with Personality Assessment Schedule (PAS)

PBQ-SF	PAS								
	SCH	PAR	ANT	NAR	HIS	BOR	AVO	DEP	OC
SCH	0.44†	0.43†	0.34†	0.14	0.17	0.43†	0.44†	0.22†	−0.02
PAR	0.27†	0.44†	0.37†	0.23*	0.32†	0.51†	0.47†	0.38†	0.09
ANT	0.24†	0.43†	0.41†	0.28†	0.26†	0.36†	0.31†	0.24*	0.00
NAR	0.15	0.35†	0.35†	0.25†	0.36†	0.43†	0.34†	0.40†	0.13
HIS	0.20*	0.42†	0.42†	0.35†	0.50†	0.48†	0.40†	0.48†	0.08
BOR	0.29†	0.45†	0.42†	0.29†	0.39†	0.51†	0.45†	0.41†	0.15
AVO	0.28†	0.31†	0.19*	0.09	0.27†	0.49†	0.45†	0.40†	0.02
DEP	0.17	0.29†	0.21*	0.16	0.46†	0.52†	0.46†	0.52†	−0.05
OC	0.33	0.22*	0.21*	0.23*	0.21*	0.35†	0.37†	0.20*	0.20*

* : $p<0.05$, † : $p<0.01$. SCH : Schizoid, PAR : Paranoid, ANT : Antisocial, NAR : Narcissistic, HIS : Histrionic, BOR : Borderline, AVO : Avoidant, DEP : Dependent, OC : Obsessive-compulsive

극성(r=0.50, p<0.01) 및 경계성(r=0.51, p<0.01)과 가장 높은 상관을 보였다. 한편, 회피성 신념은 경계성(r=0.49, p<0.01), 회피성(r=0.45, p<0.01), 의존성(r=0.40, p<0.01)과, 그리고 의존성 신념은 의존성(r=0.52, p<0.01), 연극성(r=0.46, p<0.01)과 정적 관련성이 나타났다. 또한 PAS 강박성은 단축형 성격신념질문지(PBQ-SF)의 하위 요인 중 유일하게 강박성 신념과 0.20(p<0.05)의 정적 상관을 보였다.

이상의 분석 결과를 요약하면 대체적으로 한국어판 단축형 성격신념질문지(PBQ-SF)의 성격장애적 역기능적 신념은 각각에 대응하는 성격장애 특성과 상대적으로 가장 높은 상관이 나타났다. 또한 동일한 군집으로 분류할 수 있는 역기능적 신념과 성격장애 특성들이 보다 밀접한 관련성을 보였다.

단축형 성격신념질문지(PBQ-SF)와 BDI, STAI-S, neuroticism 간의 상관관계

한국어판 단축형 성격신념질문지(PBQ-SF)의 하위 척도와 BDI, STAI-S, neuroticism 간의 상관분석을 실시하였고, 그 결과를 표 6에 제시하였다. 강박성 성격신념을 제외한 단축형 성격신념질문지(PBQ-SF)의 모든 하위 척도는 우울, 불안, 신경증을 측정하는 척도 모두와 유의한 정적 상관을 보였다. 이 중 몇 가지 특징적인 결과를 살펴보면, 9개의 하위 성격신념 중 회피성 신념은 BDI(r=0.59, p<0.01), STAI-S(r=0.60, p<0.01)와 정적 상관을 보였으며, neuroticism과도 0.62(p<0.01)의 높은 상관을 보였다. 또한 의존성 신념은 BDI와 0.47(p<0.01), STAI-S와 0.44(p<0.01)의 상관이 나타났으며, neuroticism(r=0.64, p<0.01)과 높은 정적 상관을 보였다. 더불어 C군 성격장애 중 강박성 성격신념과 BDI는 0.29(p<0.01), STAI-S는 0.29(p<0.01)의 상관을 보였으며, neuroticism과는 관련이 없었다. 한편, 자기애성 신념은 BDI (r=0.27, p<0.01), STAI-S(r=0.28, p<0.01), neuroticism (r=0.32, p<0.01) 척도와 상대적으로 낮은 수준의 상관을 보였다. 또한 경계성 척도는 BDI(r=0.63, p<0.01), STAI-S(r=0.60, p<0.01), neuroticism(r=0.74, p<0.01) 모두와 높은 상관을 보였다.

Table 6. Correlations between Personality Belief Questionnaire-Short Form and other scales

	BDI	STAI-S	Neuroticism
Schizoid	0.44*	0.41*	0.37*
Paranoid	0.43*	0.43*	0.49*
Antisocial	0.50*	0.42*	0.46*
Narcissistic	0.27*	0.28*	0.32*
Histrionic	0.36*	0.34*	0.56*
Borderline	0.63*	0.60*	0.74*
Avoidant	0.59*	0.60*	0.62*
Dependent	0.47*	0.44*	0.64*
Obsessive-compulsive	0.29*	0.29*	0.18

*: p<0.01. BDI: Beck Depression Inventory, STAI-S: State-Trait Anxiety Inventory-State Form

고 찰

본 연구는 한국어판 단축형 성격신념질문지(PBQ-SF)의 신뢰도와 타당도를 정신건강의학과 내원 환자들을 대상으로 검증하였다. 본 연구에서 사용된 단축형 성격신념질문지(PBQ-SF)의 문항은 Jo 등[5]이 제작한 한국어판 성격신념질문지(PBQ)에서 추출하였으며, 문항의 구성은 Butler 등[10]이 제작한 단축형 성격신념질문지(PBQ-SF)의 문항 구성을 그대로 따랐다. 본 연구 결과, 한국어판 성격신념질문지(PBQ)의 신뢰도와 안정성이 한국어판 단축형 성격신념질문지(PBQ-SF)에서도 유지됨을 교차 확인하였다.

외국에서 개발된 척도 국내판의 단축형 구성은 국내 자료를 기반으로 문항을 재구성하기도 하고,[19] 외국에서 개발된 단축형 문항을 그대로 사용하기도 한다.[20,21] 국내 단축형 문항 구성의 두 가지 방법은 각각 나름대로 장단점이 있다. 국내 자료를 기반으로 단축형의 문항을 재구성하는 경우 심리측정적으로 보다 양호한 문항들을 구성할 수 있다는 장점이 있다. 그러나 이 과정에서 단축형 원척도와는 요인 구조가 달라지기도 하고, 문항 구성이 달라지면서 측정 내용이 일부 변화할 가능성을 감수해야 한다. 이에 비해 단축형 원척도의 문항 구성을 그대로 유지하는 경우 심리측정적인 측면에서 일부 불이익이 있을 수 있지만 문항, 즉 측정 내용이 그대로 유지되기 때문에 문화 간 비교 연구를 하는 경우나 여러 지역(국가)에서 수집된 자료를 결합하여 분석하는 연구의 경우 유리한 점이 있다.

본 연구에서 한국어판 단축형 성격신념질문지(PBQ-SF)의 신뢰도 분석 결과 나타난 각 성격장애 수준에서의 내적 일관성 및 검사-재검사 안정성 결과는 한국어판 성격신념질문지(PBQ)를 타당화한 Jo 등[5]의 결과와 비교해 볼 때 두 판 간에 유사한 정도의 내적 일관성과 안정성을 보였다[Jo 등[5]의 한국어판 타당화 연구에서 Cronbach's alpha=0.71(회피성)~0.91(편집성), 검사-재검사 안정성 0.63(회피성)~0.89(경계성, 강박성)]. 또한, 한국어판 성격신념질문지(PBQ)에서 내적 일관성과 안정성이 낮게 나온 성격장애는 단축형에서도 낮은 것으로 나타났으며, 높게 나온 성격장애는 단축형에서도 높은 것으로 나타났다. 한국어판 성격신념질문지(PBQ)와 이 검사의 단축형(PBQ-SF) 간에 신뢰도가 유사하

게 나온 것은 신뢰도에 관한 일종의 교차 타당화의 의미가 있다. 즉, 한국어판 성격신념질문지(PBQ)의 신뢰도와 안정성이 한국어판 단축형 성격신념질문지(PBQ-SF)에서도 유지된다는 것을 의미하며, 또한 새로운 집단에서도 유사한 결과가 나타남을 교차 확인한 것이다. 이는 단축형에서 문항수가 112문항에서 65문항으로 축소된 점을 감안하면 대단히 고무적인 현상으로 볼 수 있다. 즉, 문항수가 줄어들었음에도 불구하고 신뢰도의 감소 없이 단축형 구성의 원래 취지인 사용 편이성을 확보할 수 있게 된 것이며, 이는 본 한국어판 단축형 성격신념질문지(PBQ-SF)의 임상적 유용성을 향상시킨 것으로 볼 수 있겠다.

한편, 성격신념질문지 영문 원판(PBQ)에 대한 연구들을 개관한 Bhar 등[2]의 연구에 따르면, 이 척도에 대한 여러 경험적 연구에서 내적 일관성은 연구에 따라 0.77~0.94, 재검사 안정성은 0.57~0.93으로 나타났다. 이 결과와 비교해 볼 때 본 한국어판 단축형의 신뢰도는 유사한 수준이고, 재검사 안정성은 오히려 한국어판에서 더 높다는 것을 말해준다.

단축형 성격신념질문지(PBQ-SF)의 구성 타당도를 확인하기 위해 9가지 하위 척도 간 상관관계를 살펴보았을 때 하위 척도 간 모두 정적상관관계가 나타났고, 그중에서 서로 더 밀접한 관련성을 보이는 신념들이 존재하였다(표 4). 단축형 성격신념질문지(PBQ-SF) 내에서 신념들 간의 이러한 관련성은 Beck과 Freeman[4]의 연구에서의 성격장애 간의 관계 양상 및 Jo 등[5]의 연구 결과와 일치한다. 이는 DSM에 근거한 성격장애 진단에 근거하는 특징이며, DSM 진단분류상 성격장애의 구체적인 진단 간의 상관관계가 크다는 것을 의미한다.

단축형 성격신념질문지(PBQ-SF)와 성격장애를 측정하는 성격장애 진단검사인 PAS 간 상관분석(표 5)에서 자기애를 제외하면 동일한 성격장애를 평가한 척도 간의 상관이 상이한 성격장애들 간의 상관에 비해 전반적으로 높게 나온 것을 확인할 수 있다. 또한 상이한 성격장애 또는 다른 군집에 속하는 성격장애와의 상관은 상대적으로 낮게 나왔다. 이 결과는 본 한국어판 단축형 성격신념질문지(PBQ-SF)의 수렴 및 변별 타당도를 말해 준다.

본 한국어판 단축형 성격신념질문지(PBQ-SF)와 BDI와의 상관은 모든 성격장애와 유의한($p<0.01$) 상관이 있었으며, 이 중 경계성, 회피성에서 가장 높은 상관이 나왔고, 자기애성, 강박성에서 가장 낮게 나왔다. STAI-S와의 상관 또한 모든 성격장애와 유의한($p<0.01$) 상관이 있었으며, 이 중 경계성, 회피성에서 가장 높은 상관이 나왔고 자기애성, 강박성에서 가장 낮게 나왔다. NEO-FFI의 neuroticism과는 강박성을 제외한 모든 성격장애와 유의한 상관이 있었다. 특히 경계성, 의존성, 회피성에서 상대적으로 높은 상관이 있고, 강박성, 자기애와 가장 낮은 상관이 나왔다. 9개 성격장애 전반에 걸쳐 우울, 불안, neuroticism과 유의한 상관이 나타난 것은 DSM-5 진단기준에 의거한 거의 모든 성격장애가 정서적인 측면에서 상당한 정도의 병리적 특성이 있음을 말해준다.

본 연구의 결과를 해석할 때 고려할 제한점은 첫째, 대상자 수가 충분치 않음으로 인해 타당화 연구에서 65개 문항에 대해 9개 하위 요인 간의 탐색적 요인분석을 시행하지 못한 것이고, 둘째, 대상자의 질환군이 동일하지 않았다는 것이다. 향후 연구에서는 보다 동질성이 강한 연구 대상자 수를 보강하여 연구 결과를 확인할 필요가 있다. 마지막 제한점으로는, 일부 하위 요인에서는 상대적으로 낮은 내적 일치도가 도출되었다는 것이다. 이에 추가적으로 각 하위 요인에 해당하는 문항을 제거하는 것을 가정하여 Cronbach's alpha 값을 산출해 보았고, 그 결과 조현성(0.73→0.78), 자기애성(0.74→0.76), 강박성(0.82→0.83) 등 4개의 하위 요인에서 내적 일치도가 상승하는 결과가 도출되었다. 그러나 문항 삭제 시 상승하는 Cronbach's alpha 값이 경미한 수준이었고, 또한 문항을 삭제하는 경우 타 언어로 시행된 결과와의 문화적 차이 등을 비교하는 것에 있어서도 적절한 비교가 불가능해진다. 즉, 일부 문항을 삭제하는 것이 비록 약간의 내적 일치도를 상승시키고는 있으나, 이외에 얻어지는 이득은 크지 않을 것으로 판단된다. 따라서 본 연구에서는 원판(PBQ-SF original version)과 동일한 구조의 한국어판 단축형 성격신념질문지(PBQ-SF)를 사용하는 것을 제안하는 바이다.

결 론

본 연구 결과는 한국어판 단축형 성격신념질문지(PBQ-SF Korean version)가 한국어판 성격신념질문지(PBQ Korean version)에 비해 문항수가 상당히 축소되었음에도 불구하고 심리측정적인 특성의 희생 없이 상당한 정도의 신뢰도와 타당도를 유지하고 있다는 점을 미루어 볼 때, 원문 단축형 성격신념질문지(PBQ-SF original version)에 견주어도 심리측정적으로 부족함이 없거나 오히려 더 양호하다는 것을 보여 준다.

중심 단어 : 성격장애 · 단축형 성격신념질문지 · DSM · 성격장애의 인지이론 · 신뢰도 · 타당도.

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Conflicts of Interest

The authors have no financial conflicts of interest.

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■ 부 록 ■

한국어판 단축형 성격신념질문지(Personality Belief Questionnaire–Short Form)

♣ 아래의 문장을 읽고 각각의 문장을 당신이 얼마나 믿고 있는지를 평가해 주십시오. 각 문장에 대해서 당신이 최대한 오랫동안 느껴왔던 정도를 판단하십시오. 모든 문장에 빠짐없이 선택해 주시기 바랍니다.

문 항	그렇지 않다	약간 그렇다	적당히 그렇다	매우 그렇다	완전히 그렇다
1. 열등한 사람이나 부적응적인 사람으로 보여지는 것은 견딜 수 없을 것 같다.	①	②	③	④	⑤
2. 불쾌한 상황은 어떻게 해서라도 피해야 한다.	①	②	③	④	⑤
3. 사람들이 나에게 친근하게 대하는 것은 나를 이용하고 착취하기 위한 것이다.	①	②	③	④	⑤
4. 나는 권위자에 대해 저항해야만 하지만 동시에 그들의 인정이나 수용을 받아야 한다.	①	②	③	④	⑤
5. 나는 불쾌한 감정들을 참고 견디기 어렵다.	①	②	③	④	⑤
6. 결점이나 결함, 실수를 용납할 수 없다.	①	②	③	④	⑤
7. 다른 사람들은 종종 너무 요구적이다.	①	②	③	④	⑤
8. 사람들의 관심이 나에게 집중되어야 한다.	①	②	③	④	⑤
9. 무슨 일이든 체계적으로 하지 않으면 엉망이 되고 말 것이다.	①	②	③	④	⑤
10. 나는 나에게 마땅히 주어져야 할 존중이나 권리를 받지 못하는 것을 견딜 수 없다.	①	②	③	④	⑤
11. 어떤 일이든지 완벽하게 처리하는 것이 중요하다.	①	②	③	④	⑤
12. 나는 다른 사람과 함께 일하는 것보다 혼자서 일하는 것을 즐긴다.	①	②	③	④	⑤
13. 경계를 철저히 하지 않으면 사람들은 나를 이용하고 조종하려고 할 것이다.	①	②	③	④	⑤
14. 사람들은 자신의 속마음을 숨긴다.	①	②	③	④	⑤
15. 이 세상에서 최악의 일은 버림받는 것이다.	①	②	③	④	⑤
16. 사람들은 내가 얼마나 특별한 사람인지 알아야만 한다.	①	②	③	④	⑤
17. 다른 사람들은 고의로 나를 떨어뜨리려 할 것이다.	①	②	③	④	⑤
18. 결정을 내리는 데 도움을 주거나 내가 해야 할 일을 알려줄 사람이 필요하다.	①	②	③	④	⑤
19. 세부적인 사항들은 매우 중요하다.	①	②	③	④	⑤

문 항	그렇지 않다	약간 그렇다	적당히 그렇다	매우 그렇다	완전히 그렇다
20. 만약 다른 사람이 너무 으스대는 것 같다고 생각되면, 나는 그들의 요구를 무시해야만 한다.	①	②	③	④	⑤
21. 권위적인 대상은 침해적이고 요구적이며 방해하고 통제하려는 경향이 있다.	①	②	③	④	⑤
22. 내가 원하는 것을 얻는 방법은 사람들을 놀라게 하거나 즐겁게 하는 것이다.	①	②	③	④	⑤
23. 내가 저지른 일의 대가를 모면할 수 있다면 무엇이든 해야만 한다.	①	②	③	④	⑤
24. 사람들은 나에 대해 어떤 것을 알게 되면 나에게 불리한 쪽으로 이용할 것이다.	①	②	③	④	⑤
25. 사람들과의 관계는 성가시고 자유를 방해한다.	①	②	③	④	⑤
26. 나처럼 똑똑한 사람만이 날 이해할 수 있다.	①	②	③	④	⑤
27. 나는 매우 뛰어난 사람이라서 특별한 대우나 특권을 누릴 자격이 있다.	①	②	③	④	⑤
28. 나로서는 혼자 자유롭게 독립적으로 되는 것이 중요하다.	①	②	③	④	⑤
29. 많은 경우 나 혼자 있는 것이 더 좋다.	①	②	③	④	⑤
30. 일을 엉망으로 만들지 않으려면 엄격한 기준을 정해서 철저하게 지켜나가야 한다.	①	②	③	④	⑤
31. 불쾌한 감정들은 점점 더 심해져서 결국 조절이 불가능하게 될 것이다.	①	②	③	④	⑤
32. 우리의 삶은 생존경쟁이며, 강자만 살아남는다.	①	②	③	④	⑤
33. 사람들의 주의를 끌만한 상황은 피해야 하며, 가능한한 다른 사람들의 눈에 띄지 않아야 한다.	①	②	③	④	⑤
34. 사람들과 관계를 유지하지 못하면 그들은 나를 좋아하지 않을 것이다.	①	②	③	④	⑤
35. 만약 내가 무엇인가를 원한다면, 그것을 얻기 위해 무엇이 필요하든지 꼭 해야 한다.	①	②	③	④	⑤
36. 사람들 속에서 곤란해 하는 것보다는 혼자 있는 것이 더 낫다.	①	②	③	④	⑤
37. 사람들을 즐겁게 하거나 감동시키지 못하면 나는 존재 가치가 없다.	①	②	③	④	⑤
38. 상대를 먼저 제압하지 못하면 내가 당하고 말 것이다.	①	②	③	④	⑤
39. 사람 관계에서 긴장은 관계가 나빠지는 것을 의미하기 때문에 그런 경우 관계를 끊어 버려야 한다.	①	②	③	④	⑤
40. 일을 최고 수준으로 해내지 못했다면 실패한 것이다.	①	②	③	④	⑤
41. 기한을 정하고, 요구를 받아들이며, 순응하는 것은 나의 자존심과 자기만족을 포기하는 것이다.	①	②	③	④	⑤

문 항	그렇지 않다	약간 그렇다	적당히 그렇다	매우 그렇다	완전히 그렇다
42. 나는 부당한 대우를 받아 왔으며, 무슨 수를 써서라도 내 몫을 되찾을 권리가 있다.	①	②	③	④	⑤
43. 사람들이 나와 가까워지면, 그들은 나의 참모습을 발견하고 나를 싫어하게 될 것이다.	①	②	③	④	⑤
44. 나는 부족하고 허약하다.	①	②	③	④	⑤
45. 나는 혼자서는 아무것도 할 수 없다.	①	②	③	④	⑤
46. 사람들은 나의 욕구를 충족시켜 줘야 한다.	①	②	③	④	⑤
47. 만약 내가 사람들이 기대하는 규칙을 따른다면, 그것이 내 행동의 자유를 제약할 것이다.	①	②	③	④	⑤
48. 사람들에게 빈틈을 보이기만 하면 그들은 나를 이용해 먹을 것이다.	①	②	③	④	⑤
49. 나는 항상 빈틈없이 경계 태세에 있어야 한다.	①	②	③	④	⑤
50. 다른 사람과의 친밀한 관계는 내게 중요하지 않다.	①	②	③	④	⑤
51. 규칙들이란 독단적이며 나를 숨막히게 한다.	①	②	③	④	⑤
52. 사람들로부터 무시당하는 것은 끔찍한 일이다.	①	②	③	④	⑤
53. 나에 대해 사람들이 어떻게 생각하는가는 중요하지 않다.	①	②	③	④	⑤
54. 나는 나에게 관심을 기울이는 사람들이 있어야 행복해질 수 있다.	①	②	③	④	⑤
55. 만일 내가 사람들을 즐겁게 하면 그들은 나의 약점을 알아차리지 못할 것이다.	①	②	③	④	⑤
56. 내게 필요한 일을 해야 할 때 또는 어떤 나쁜 일이 발생했을 때 가까이에서 나를 도와줄 사람이 항상 필요하다.	①	②	③	④	⑤
57. 사소한 실수나 잘못으로도 끔찍한 결과가 초래될 수 있다.	①	②	③	④	⑤
58. 나는 재능이 매우 많기 때문에 사람들은 내가 출세할 수 있도록 노력해야만 한다.	①	②	③	④	⑤
59. 내가 만약 다른 사람들을 밀어붙이지 않으면, 결국 내가 당하게 될 것이다.	①	②	③	④	⑤
60. 나는 다른 사람들에게 적용되는 규칙에 얽매일 필요가 없다.	①	②	③	④	⑤
61. 힘의 행사와 잔꾀는 일을 성취하는 지름길이다.	①	②	③	④	⑤
62. 나를 지지해주는 사람과는 항상 가까이 있어야 한다.	①	②	③	④	⑤
63. 나는 강한 사람과 밀착되어 있지 않으면 외톨이나 마찬가지다.	①	②	③	④	⑤
64. 나는 다른 사람을 믿을 수 없다.	①	②	③	④	⑤
65. 나는 다른 사람들만큼 대처할 수가 없다.	①	②	③	④	⑤