

## Urdu Translation, Cultural Adaptation and Validation of Personality Belief Questionnaire-Short Form in Non-Clinical Population

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### Abstract

The Personality Belief Questionnaire-Short Form (PBQ-SF) is a widely used tool for assessing maladaptive beliefs underlying personality disorders. In Pakistan, however, there is an absence of culturally adapted measures to assess these beliefs. This study aimed to Urdu translate, culturally adapt, and validate the PBQ-SF for the Urdu-speaking population. A descriptive cross-sectional design was used. A total of 610 participants were recruited through convenience sampling from diverse demographic backgrounds. The study was conducted in four phases including forward-backward translation, expert review using two Delphi rounds for content validity and cultural adaptation, pilot testing, and testing psychometric properties. The collected data were analyzed using SPSS v26 and AMOS v23. Confirmatory factor analysis supported the original ten-factor structure, demonstrating excellent model fit (CFI = .97, TLI = .96, GFI = .95, RMSEA = .043). Internal consistency was acceptable across subscales ( $\alpha = .60-.83$ ). Convergent validity was confirmed through significant correlations with the Urdu Big Five Inventory-10. Findings indicate that the Urdu PBQ-SF is a reliable and valid instrument for assessing maladaptive personality beliefs. This study provides a culturally relevant tool for research, clinical practice, and cross-cultural comparisons.

**Keywords:** Cultural Adaptation, Personality Belief Questionnaire-Short Form, Personality Disorders, Reliability, Urdu, Validity

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### Introduction

In cognitive theory, “personality beliefs” consists part of the core cognitive framework, underling personality disorders. A hierarchical set of cognitive structures was posited by Beck’s cognitive model. It includes core schemas (or core beliefs), intermediate beliefs (rules, assumptions), and

automatic thoughts (Beck & Freeman, 1991; Leahy, 2003). Core schemas are enduring and involve broad, unconditional beliefs about self, others, and the world. They are often formed in early life. Intermediate beliefs serve as conditional rules derived from schemas. Whereas, automatic thoughts are situation-specific activations (Lyddon, 1992). These cognitive structures are formed through early experiences which includes attachment, reinforcement, and sociocultural input. Once schemas are formed, they become consolidated. These schemas automatically bias attention, memory, inference, and emotional regulation. This causes maintenance of maladaptive personality functioning (Beck & Beck, 1991; Beck & Beck, 2011). In personality disorders, these beliefs are not transient but operate continuously and shapes interpersonal behavior, self-identity, and

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coping responses (Pincus et al., 2020). These underlying belief patterns differ across personality disorders, and they perpetuate symptomatology via specific mechanisms. For example, individuals often hold beliefs such as “I am fundamentally unlovable” or “others will abandon me,” in borderline personality disorder (BPD). These beliefs lead to hypervigilance to rejection, emotional dysregulation, impulsivity, and unstable relationships (Jintanachote et al., 2024; Rehman & Suneel, 2025). Such beliefs sustain disorder both because they are self-reinforcing and because they induce maladaptive coping and reinforce emotional distress.

Clinicians face several methodological challenges while assessing these personality beliefs. Belief content often overlaps across personality disorders, such as defective or rejection schemas appear in both avoidant and borderline personality disorders (Bach et al., 2015; Sava, 2009). Distinguishing trait-like beliefs from state-dependent fluctuations is also difficult, as stress and mood episodes may temporarily accentuate schemas (Bueno et al., 2022). Response biases are another challenge which includes social desirability and acquiescence, and it further complicate measurement (Paunonen & LeBel, 2012). Cross-cultural concerns add another layer, as linguistic differences and cultural norms around emotion, disclosure, and stigma can affect measurement invariance (Dong & Dumas, 2020; Lacko et al., 2022). Thus, adaptation processes must ensure conceptual equivalence, replicated factor structures, and reliability across subgroups (Lacko et al., 2022).

The Personality Belief Questionnaire (PBQ) originates from Beck’s cognitive theory of personality pathology. It was developed to operationalize the belief systems (schemas) identified in Cognitive Therapy of Personality Disorders (Beck & Freeman, 1991). The PBQ was first published (Beck &

Beck, 1991) as a self-report measure including scales for nine DSM Axis II personality disorders (avoidant, dependent, obsessive-compulsive, narcissistic, paranoid, etc.), each scale containing 14 belief items, with a total of 126 items (Beck et al., 2001; Beck & Beck, 1991). Then Butler et al. (2006) developed PBQ-Short Form (PBQ-SF) to provide a briefer instrument, reducing items by selecting for each personality belief scale the seven items with the highest item-total correlations, thereby creating a 65-item measure covering ten personality disorder belief scales (Avoidant, Dependent, Passive-Aggressive, Obsessive-Compulsive, Antisocial, Narcissistic, Histrionic, Schizoid, Borderline, Paranoid). Each scale comprises of seven beliefs. Its original psychometric properties in psychiatric outpatient samples satisfied acceptable internal consistencies (Cronbach’s  $\alpha$  in the range  $\sim .79-.91$  for the scales), good criterion validity, and demonstrable associations with other constructs, including depression, neuroticism, dysfunctional attitudes, etc (Butler et al., 2006). Factor analyses in the original development largely supported the intended multi-scale structure. (Butler, Beck, & Cohen, 2007).

Globally, the PBQ-SF has been successfully adapted in diverse non-Western contexts, including Turkish, Korean, and Persian populations, demonstrating reliability and validity across cultures (Park et al., 2016; Sahin et al., 1993; Taheri et al., 2021). The PBQ-SF is increasingly used in both clinical and research settings. Researchers have used it to screen dysfunctional beliefs in psychiatric outpatient populations, to explore correlates between personality pathology and general psychopathology, to evaluate changes in beliefs across therapy, or to compare personality belief profiles in non-clinical samples (Arntz et al., 2003; Beck et al., 2001; Jintanachote et al., 2024; Ryan et al., 2014; Sava, 2009). However, in Pakistan,

therapists and researchers face a persistent challenge, that is the lack of culturally and linguistically validated psychological assessment tools. Most available measures are direct translations of Western instruments, which often leads to conceptual and semantic discrepancies (Ahmer et al., 2007; Anjam et al., 2013). Although Urdu, the national language, holds strong sociolinguistic significance (Rahman, 1996), few instruments have been systematically adapted to assess personality beliefs or schemas. Existing studies indicate that translation is feasible and factor structures tend to hold, yet samples remain limited to educated, urban populations (Khan et al., 2003). The construct validity is frequently challenged by cultural and linguistic nuances. For instance, idiomatic expressions, collectivist values, and context-specific meanings (Kleinman & Teresi, 2016). Cultural factors like social desirability and the emphasis on maintaining interpersonal harmony are often neglected by the Western scoring norms (Ahmer et al., 2007). Cross-cultural research underscores that personality factor structures may diverge across societies unless measurement invariance is established (Cheung et al., 2011). Consequently, Western-derived findings cannot be uncritically generalized to Pakistan, where collectivism, honor, and interdependence shape self-concept, emotional expression, and interpersonal expectations (Oyserman et al., 2002; Young et al., 2019).

In Pakistan, the clinical prevalence data on personality disorders are rare, an archival study by Hasan et al. (2011) reviewed 3,917 clinic registrants, 88 (2.22%) diagnosed with PDs, with Borderline, Histrionic, and Narcissistic PDs being among those more commonly diagnosed in that clinical sample. In community or non-clinical Pakistani samples, there is almost no published psychometric validation of measures specifically targeting personality beliefs or

schemas. These gaps suggest that there has been no published study translating and validating the PBQ-SF into Urdu or performing, full psychometric evaluation in a large non-clinical Pakistani sample. Prior studies with personality instruments indicate that when factor structure is examined in South Asian contexts, either some scales exhibit low reliability, or factor loadings deviate, or some items perform poorly, possibly due to linguistic or cultural mismatch (De Fruyt et al., 2009; Huang et al., 1997; John et al., 2019).

Keeping in view, all the potential gaps in the literature, this study was designed to translate the PBQ-SF into Urdu using standardized procedures, to culturally adapt its items using Delphi method, to evaluate content validity, and to validate its psychometric properties in a large non-clinical Pakistani sample, including convergent validity with the Urdu BFI-10, internal consistency (Cronbach's  $\alpha$ ), and factorial validity using Confirmatory Factor Analysis. These objectives aim to address the gap that no Urdu version of PBQ-SF has been validated in a non-clinical population, ensuring that the measurement of personality beliefs is valid, reliable, and culturally appropriate in Pakistan.

## Method

### Research Design

A descriptive cross-sectional research method was used in this study.

### Research Participants

A sample of  $N=610$  non-clinical individuals was recruited from the general population by using convenience sampling strategy. Sample size was determined using G\*Power 3.1.9.7 (Faul et al., 2007). A minimum of 550 participants for confirmatory factor analysis was indicated by Power analysis ( $f^2 = 0.15$ ,  $\alpha = .05$ ,  $1-\beta = .80$ ). This sample was increased to  $N=610$  to offset potential data loss. The final sample exceeded the recommended 10-15 participants per item (Nunnally & Bernstein, 1994) and met the criteria for

robust Structural Equation Modeling (Hair et al., 2019). The sample included diverse Urdu-speaking individuals residing in different areas of Lahore, spanning all ages, genders, educational levels, and socioeconomic backgrounds.

Table 1 showed that the sample  $N = 610$  had a mean age of 27.15 years ( $SD = 8.7$ ) and was

nearly balanced by gender. Most of the participants were single (64.8%), urban residents (86.7%), and from nuclear families (62.1%). Majority of the participants held undergraduate or bachelor's degrees. None of them reported a personal psychiatric history, though 10.8% indicated a family history of psychiatric illness.

**Table 1**  
*Frequency and Percentage of Demographics of Non-Clinical Sample (N=610)*

Variables	<i>F</i>	(%)	<i>M (SD)</i>
Age of Participants			27.15 (8.7)
≤ 18 yrs	90	14.7%	
19–24 yrs	129	21.2%	
25–29 yrs	137	22.4%	
30–34 yrs	123	20.2%	
≥ 35 yrs	131	21.5%	
Gender			
Men	298	48.9%	
Women	312	51.1%	
Education Level			
Matric	42	6.9%	
Intermediate	126	20.7%	
B.A/BS.c	178	29.2%	
Undergraduate	192	31.5%	
Postgraduate	72	11.8%	
Marital Status			
Single	395	64.8%	
Married	197	32.3%	
Divorced	18	2.9%	
Family System			
Nuclear	379	62.1%	
Joint	231	37.9%	
Residential Area			
Urban	529	86.7%	
Rural	81	13.3%	
History of Psychiatric illness			
Present	0	0%	
Absent	610	100%	
History of Psychiatric illness in Family			
Present	66	10.8%	
Absent	544	89.2%	

*Note.* *f*= Frequency; %= Percentage; *M*= Mean; *SD*= Standard Deviation

## Measurement Tools

### Socio-Demographic Questionnaire

A socio-demographic questionnaire was developed in the Urdu language to collect demographic information, which included age, gender, education level, marital status, family structure, residential area, and personal or family history of psychological illnesses.

### Personality Belief Questionnaire Short Form

The Personality Belief Questionnaire-Short Form (PBQ-SF; Butler et al., 2007) is a 65-item self-report tool assessing dysfunctional beliefs across ten personality subscales, rated on a 5-point Likert scale. It demonstrates strong reliability ( $\alpha = .97$ ) and validity, with subscale alphas ranging .81 to .92, and was translated into Urdu for this study.

### Big Five Inventory-version 10

The Big Five Inventory-10 which was culturally adapted in Urdu (BFI-10; Sabih & Sadiq, 2022), assesses five major personality traits: openness, conscientiousness, extraversion, agreeableness, and neuroticism. It has ten items on a 5-point Likert scale and showed strong internal consistency ( $\alpha = .71-.88$ ) and validated convergent and discriminant properties ( $p < .05$ ) for quick personality assessment.

## Procedure

### Phase I: Translation

Brislin's (1970) guidelines were followed during the translation procedure for cross-cultural instrument adaptation. Four bilingual translators independently did the forward translation, two of which were the postgraduates in English and two postgraduates in Clinical Psychology. They

all had demonstrated expertise in translation work. One synthesized translation was made by the researchers through systematic discussion and consensus in order to resolve discrepancies while ensuring semantic and cultural appropriateness. Back-translation was subsequently performed by two independent translators who were unaware of the original English version. In order to ensure the translation accuracy and identify potential semantic inconsistencies, these translators converted the unified Urdu version back into English

### Phase II: Cultural Adaptation using the Delphi Method

An expert panel consisting of ten members evaluated the cultural appropriateness and content validity of the translated instrument following the procedure used by Dragostinov et al. (2022). Five PhD-qualified Psychology professors (minimum 15 years' experience in scale translation) and five clinical psychologists (minimum 10 years' clinical experience) were included in the panel. Each item was rated on seven parameters which were derived from established translation literature. (1) sensitivity and bias, (2) item structure, (3) item relevance, (4) cultural relevance, (5) linguistic equivalence, (6) grammar and clarity, and (7) sense of meaning. Ratings were provided on a 10-point scale, with items scoring  $\geq 70\%$  consensus retained unchanged. Items failing to meet this threshold underwent revision through iterative expert consultation (Table 2). Two Delphi rounds were completed to achieve a satisfactory consensus. Content validity was calculated to assess agreement among panel members.

**Table 2***Expert Consensus Ratings Across Two Delphi Rounds for Each Subscale (N = 10)*

Subscale	<i>k</i>	Delphi Round 1			Delphi Round 2				
		<i>M</i> ( <i>SD</i> )	Consensus ( <i>n</i> , %)	Items Revised	Items Retained	<i>M</i> ( <i>SD</i> )	Consensus ( <i>n</i> , %)	Items Revised	Items Retained
Avoidant	7	7.8 (1.4)	5 (71.4%)	2	5	8.6 (0.9)	7 (100%)	0	7
Dependent	7	8.2 (1.2)	6 (85.7%)	1	6	8.9 (0.7)	7 (100%)	0	7
Passive-Aggressive	7	7.0 (1.6)	4 (57.1%)	3	4	7.9 (1.1)	7 (100%)	0	7
Obsessive-Compulsive	7	8.5 (0.9)	6 (85.7%)	1	6	9.0 (0.6)	7 (100%)	0	7
Antisocial	7	6.9 (1.8)	4 (57.1%)	3	4	7.7 (1.2)	7 (100%)	0	7
Narcissistic	7	7.6 (1.5)	5 (71.4%)	2	5	8.4 (1.0)	7 (100%)	0	7
Histrionic	7	8.1 (1.3)	6 (85.7%)	1	6	8.8 (0.8)	7 (100%)	0	7
Schizoid	7	7.3 (1.7)	5 (71.4%)	2	5	8.0 (1.1)	7 (100%)	0	7
Paranoid	7	7.1 (1.6)	4 (57.1%)	3	4	8.2 (1.0)	7 (100%)	0	7
Borderline	7	7.9 (1.3)	6 (85.7%)	1	6	8.7 (0.9)	7 (100%)	0	7

*Note.* Ratings across 7 evaluation parameters, based on a 10-point scale. Consensus was defined as  $\geq 70\%$  agreement among experts.

### Phase III: Pilot Testing

In the pilot testing phase, both the Urdu-translated and original English versions of the scale were administered to the bilingual Master 's-level Clinical Psychology students ( $N = 50$ ). structured feedback on item clarity and cultural relevance was provided by the participants through open-ended questions. Scale's preliminary psychometric performance was assessed by the statistical analyses. The Cronbach's  $\alpha$  values were in the acceptable range of .60-.83 for all of the subscales of the original English and translated Urdu versions.

### Phase IV: Developing Psychometric Properties

In the final validation phase, the culturally adapted scale was administered to a large, demographically diverse sample representative of the target population ( $N=610$ ). IBM SPSS Statistics (Version 26) and AMOS (Version 26) were used to

perform all statistical analyses. The four sequential steps in the analytical approach included: (1) identifying and removing outliers based on standardized z-scores by screening data, missing values were addressed using series mean imputation to minimize bias, and the descriptive statistics were calculated. (2) Confirmatory factor analysis to evaluate structural validity, (3) assessing the internal consistency using Cronbach's alpha, and (4) construct validity evaluation by doing convergent validity analysis.

### Ethical Considerations

Approvals from the Board of Studies, Ethical Review Committee of the Department of Psychology, and Institutional Review Board Government College University, Lahore were taken. Permission was obtained from the author to translate and adapt PBQ-SF through email. Informed consent, confidentiality, and participant's autonomy

were ensured. To align the research with ethical guidelines for sensitive clinical and

psychological contexts, respectful treatment was ensured to minimize harm.

## Results

**Table 3**

*Descriptive Statistics for the Measures used in the Study (N=610)*

Measures	M (SD)	$\alpha$	Skewness	Kurtosis	Range Potential	Actual
Urdu PBQ-SF						
Avoidant	16.2 (5.05)	0.64	0.62	-0.88	0-28	4-28
Dependent	13.1 (5.32)	0.72	0.98	-0.54	0-28	0-28
Passive-Aggressive	15.9 (4.91)	0.60	0.41	-0.63	0-28	4-28
Obsessive-Compulsive	18.0 (4.78)	0.68	-0.82	-0.21	0-28	4-28
Antisocial	14.3 (6.01)	0.78	0.53	-0.95	0-28	0-28
Narcissistic	13.7 (6.12)	0.79	0.74	-0.87	0-28	1-28
Histrionic	12.5 (5.72)	0.78	1.02	-0.65	0-28	0-28
Schizoid	17.9 (5.15)	0.69	-0.88	-0.94	0-28	6-28
Paranoid	16.1 (6.03)	0.83	-0.91	-0.82	0-28	1-28
Borderline	12.4 (5.63)	0.72	0.89	-0.72	0-28	0-28
Urdu BFI-10						
Neuroticism	5.72 (1.39)	0.68	-0.14	0.48	2-10	3-10
Conscientiousness	6.41 (1.61)	0.61	0.33	-0.22	2-10	4-10
Extraversion	7.11 (1.77)	0.63	-0.54	-0.44	2-10	2-10
Openness	5.23 (1.65)	0.71	-0.91	0.68	2-10	4-10
Agreeableness	7.04 (1.94)	0.69	-0.41	-0.53	2-10	2-10

Note.  $\alpha$ = Cronbach's Alpha;  $k$ = No. of Items

PBQ-SF Urdu version demonstrated acceptable internal consistency in the non-clinical sample ( $N = 610$ ), with  $\alpha$  values ranging from .60 to .83, as the results showed.

### Confirmatory Factor Analysis

The ten-factor structure of the Personality Belief Questionnaire-Short Form (PBQ-SF) based on Beck's cognitive theory of personality pathology has been consistently supported by the prior research (Butler et al., 2007). Therefore, to examine whether the hypothesized ten-factor model adequately fit the Urdu-translated version in the current non-clinical sample ( $N = 610$ ), Confirmatory Factor Analysis (CFA) was conducted, rather than Exploratory Factor Analysis (EFA), The hypothesized model demonstrated excellent

Paranoid, narcissistic, histrionic, and antisocial subscales showed the strongest reliability, while others showed moderate consistency.

global fit,  $\chi^2(2240) = 3895.42$ ,  $p < .001$ , CFI = .97, TLI = .96, GFI = .95, RMSEA = .043 (90% CI = .041-.045), and SRMR = .042, all of which exceeded conventional benchmarks for acceptable to strong fit (Hu & Bentler, 1999). The factorial validity and structural soundness of the scale is confirmed by these indices collectively. The ten-factor structure, comprised of Avoidant, Dependent, Passive-Aggressive, Obsessive-Compulsive, Antisocial, Narcissistic, Histrionic, Schizoid, Paranoid, and Borderline belief domains, was retained without modification. Each domain,

with standardized factor loadings ranging from moderate to high, contributed significantly to the overall model.

**Table 4***UPBQ-SF Item Loadings (N=610)*

Items	Factors									
	<i>AVO</i>	<i>DEP</i>	<i>PAS</i>	<i>OBS</i>	<i>ANT</i>	<i>NAR</i>	<i>HIS</i>	<i>SCI</i>	<i>PAR</i>	<i>BOR</i>
Avoidant										
UPBQ-SF1	.28*									
UPBQ-SF2	.42*									
UPBQ-SF5	.55*									
UPBQ-SF31	.68*									
UPBQ-SF33	.49*									
UPBQ-SF39	.60*									
UPBQ-SF43	.52*									
Dependent										
UPBQ-SF15		.41*								
UPBQ-SF18		.30*								
UPBQ-SF44		.50*								
UPBQ-SF45		.47*								
UPBQ-SF56		.63*								
UPBQ-SF62		.58*								
UPBQ-SF63		.60*								
Passive-Aggressive										
UPBQ-SF4			.45*							
UPBQ-SF7			.47*							
UPBQ-SF20			.42*							
UPBQ-SF21			.40*							
UPBQ-SF41			.52*							
UPBQ-SF47			.55*							
UPBQ-SF51			.57*							
Obsessive-Compulsive										
UPBQ-SF6				.53*						
UPBQ-SF9				.44*						
UPBQ-SF11				.29*						
UPBQ-SF19				.42*						
UPBQ-SF30				.56*						
UPBQ-SF40				.63*						
UPBQ-SF57				.66*						
Anti-Social										
UPBQ-SF23					.61*					
UPBQ-SF32					.48*					
UPBQ-SF35					.62*					
UPBQ-SF38					.69*					
UPBQ-SF42					.65*					
UPBQ-SF59					.70*					

UPBQ-SF61	.65*	
Narcissistic		
UPBQ-SF10	.43*	
UPBQ-SF16	.58*	
UPBQ-SF26	.65*	
UPBQ-SF27	.70*	
UPBQ-SF46	.54*	
UPBQ-SF58	.72*	
UPBQ-SF60	.61*	
Histrionic		
UPBQ-SF8	.57*	
UPBQ-SF22	.51*	
UPBQ-SF34	.63*	
UPBQ-SF37	.65*	
UPBQ-SF52	.56*	
UPBQ-SF54	.61*	
UPBQ-SF55	.63*	
Schizoid		
UPBQ-SF12		.31*
UPBQ-SF25		.60*
UPBQ-SF28		.59*
UPBQ-SF29		.61*
UPBQ-SF36		.57*
UPBQ-SF50		.60*
UPBQ-SF53		.44*
Paranoid		
UPBQ-SF3		.67*
UPBQ-SF13		.64*
UPBQ-SF14		.53*
UPBQ-SF17		.62*
UPBQ-SF24		.68*
UPBQ-SF48		.70*
UPBQ-SF49		.59*
Borderline		
UPBQ-SF31		.63*
UPBQ-SF44		.50*
UPBQ-SF45		.48*
UPBQ-SF49		.60*
UPBQ-SF56		.62*
UPBQ-SF64		.52*
UPBQ-SF65		.42*

*Note.*  $t$ -value = \* $p < .05$ ; UPBQ-SF=Urdu Personality Beliefs Questionnaire-Short Form; AVO= Avoidant; DEP= Dependent; PAS= Passive-Aggressive; OBS= Obsessive-Compulsive; ANT= Antisocial; NAR= Narcissistic; HIS=Histrionic; SCH= Schizoid; PAR= Paranoid; BOR=Borderline

Table 4 shows standardized factor loadings. Most items showed moderate to strong associations with their intended factors, ranging from .26 to .72 across subscales. Specifically, Avoidant items loaded between .20 and .65; Dependent items .27-.57; Passive-Aggressive items .31-.47;

Obsessive-Compulsive items .26-.62; Antisocial items .38-.68; Narcissistic items .35-.71; Histrionic items .47-.63; Schizoid items .21-.58; Paranoid items .48-.68; and Borderline items .30-.60. The results strongly supported the ten correlated structure of the PBQ-SF.

**Convergent Validity**

**Table 5**

*Pearson Product-Moment Correlations Between PBQ-SF Subscales and BFI-10 Personality Subscales (N=610)*

<b>Subscales</b>	<b>Neuroticism</b>	<b>Conscientiousness</b>	<b>Extraversion</b>	<b>Openness</b>	<b>Agreeableness</b>
Avoidant	.52**	-.34**	-.41**	-.18*	-.29**
Dependent	.49**	-.32**	-.36**	-.15*	-.27**
Passive-Aggressive	.46**	-.28**	-.39**	-.21*	-.33**
Obsessive-Compulsive	.38**	.42**	-.22**	-.09	-.18*
Anti-Social	.41**	-.36**	-.31**	-.12	-.37**
Narcissistic	.44**	-.22**	.28**	.19*	-.34**
Histrionic	.47**	-.29**	.33**	.34**	-.26**
Schizoid	.40**	-.31**	-.45**	-.14	-.22**
Paranoid	.50**	-.33**	-.37**	-.17*	-.35**
Borderline	.55**	-.30**	-.29**	-.20*	-.32**

*Note.* \*\* $p < 0.01$ ; \* $p < 0.05$

The PBQ-SF subscales were significantly associated with the Big Five personality traits. All of the personality beliefs were positively linked with Neuroticism and negatively associated with adaptive traits such as Extraversion, Agreeableness, and Conscientiousness. In contrast, certain

personality beliefs, such as Obsessive-Compulsive, Narcissistic, and Histrionic, displayed positive associations with traits like Conscientiousness, Extraversion, and Openness. Overall, the convergent validity of the Urdu PBQ-SF is supported by the pattern of correlations.

**Table 6***Intercorrelations Among Personality Belief Questionnaire Short-Form Subscales (N = 610)*

Subscales	AVO	DEP	PAS	OBS	ANT	NAR	HIS	SCI	PAR	BOR
Avoidant	-	.591**	.639**	.580**	.658**	.662**	.567**	.459**	.584**	.674**
Dependent		-	.602**	.387**	.558**	.619**	.697**	.287**	.451**	.636**
Passive-Aggressive			-	.596**	.614**	.662**	.563**	.551**	.559**	.652**
Obsessive-Compulsive				-	.566**	.554**	.360**	.606**	.605**	.454**
Antisocial					-	.631**	.591**	.607**	.673**	.645**
Narcissistic						-	.654**	.444**	.580**	.647**
Histrionic							-	.268**	.501**	.647**
Schizoid								-	.598**	.405**
Paranoid									-	.581**
Borderline										-

Note. \*\* $p < 0.01$ ; \* $p < 0.05$ ; AVO= Avoidant; DEP= Dependent; PAS= Passive-Aggressive; OBS= Obsessive-Compulsive; ANT= Antisocial; NAR= Narcissistic; HIS=Histrionic; SCH= Schizoid; PAR= Paranoid; BOR=Borderline

Table 6 showed that the PBQ-SF subscales demonstrated moderate to strong positive intercorrelations which ranging from small ( $r = .26$ ) to moderately high ( $r = .67$ ). The associations reflect both the expected comorbidity across personality disorder beliefs and the distinctiveness of each belief domain. For example, consistent with the shared interpersonal sensitivity and fear of

abandonment, Avoidant, Dependent, and Borderline beliefs showed stronger associations. Although several subscales correlated in the moderate-to-high range (e.g., Antisocial with Narcissistic, Borderline with Dependent), none reached levels that would indicate redundancy.

## Discussion

This study aimed to translate, culturally adapt, and validate the Personality Belief Questionnaire-Short Form (PBQ-SF; Beck & Beck, 1991) for use in Urdu-speaking populations in Pakistan. To culturally adapt the scale without compromising its theoretical integrity, two Delphi rounds were done. A few items required contextual reformulation to enhance clarity and cultural resonance. For instance, the original item 9 was “If I don’t have systems, everything will fall apart”, and in order to align with familiar cultural notions of personal order, the word “systems” was adapted to “*nazm-o-zab*”. Moreover, item 38, “People will get at me if I don’t get them first,” was changed as “*Agar mein logon par qabu na paun tou wo meray*

*khilaf hojayan gy*” to capture the defensive and mistrustful tone in a better way, consistent with Urdu idiomatic use. These changes were made to ensure that the Urdu PBQ-SF retained the beliefs consistent with the Beck’s cognitive model for personality disorders while also aligning with sociolinguistic context of Pakistani society. A small number of items displayed relatively weak loadings ( $< .30$ ), particularly within the Avoidant, Dependent, Obsessive-Compulsive, and Schizoid subscales. These items were nevertheless retained due to their theoretical importance in Beck’s cognitive model and their contribution to content validity.

The ten-factor model originally proposed by Beck and colleagues, was supported by

Confirmatory factor analysis which demonstrated excellent global model fit across multiple indices (CFI = .97, TLI = .96, GFI = .95, RMSEA = .043, SRMR = .042). These findings indicate that the Urdu translation retained the multidimensional structure of the PBQ-SF and effectively represents distinct dysfunctional belief systems associated with personality pathology. The strength of the item to construct relationships was supported by the factor loadings that were generally moderate to high. Minor cross-loadings were exhibited on conceptually adjacent factors, such as PBQ-SF5 (“I cannot tolerate unpleasant feelings”), originally part of the Avoidant subscale, also showed a suggested secondary loading on the Dependent factor. As both domains reflect heightened emotional sensitivity and difficulty managing distress, this overlap appears theoretically consistent (Hirschfeld et al., 1990). Similarly, PBQ-SF41 (“Making deadlines, complying with demands, and conforming are direct blows to my pride and self-sufficiency”), originally a Passive-Aggressive subscale item, demonstrated a suggested association with the Antisocial factor. This highlights the shared cognitive themes of resistance to authority and opposition to external control (Kafetsios & Zafiropoulou, 2007). However, these associations were theoretically interpretable and consistent with cognitive-behavioral models emphasizing shared schemas across personality traits (Beck et al., 2001; Livesley, 2012). Therefore, to preserve the conceptual integrity and maintain the factorial distinctiveness of the PBQ-SF structure, each item was retained within its original theoretical subscale. No post hoc modifications were made.

As reported in prior validations across cultures, the internal consistency estimates of the Urdu PBQ-SF subscales ranged from acceptable to high reliability coefficients (Butler et al., 2007; Taheri et al., 2021).

Particularly stronger reliability was demonstrated by Paranoid, Narcissistic, and Histrionic subscales, whereas Passive-Aggressive and Avoidant domains showed slightly lower but still adequate consistency. These findings suggest that the Urdu version is psychometrically stable and suitable for research as well as clinical use within non-clinical populations in Pakistan.

Significant moderate correlations were revealed by convergent validity analyses between PBQ-SF subscales and dimensions of the Big Five Inventory-10 Urdu Version (BFI-10; Sabih & Sadiq, 2022). It supported the theoretical alignment between maladaptive belief systems and broad personality traits. Mirroring the previous cross-cultural findings, positive associations were seen between higher dysfunctional beliefs and Neuroticism while being inversely related to Agreeableness, Conscientiousness, and Extraversion, (Soto & John, 2016). Consistent with the view that maladaptive schemas are distinct yet interconnected cognitive structures underlying personality pathology, intercorrelations among PBQ-SF subscales ranged from moderate to strong (Beck et al., 2001; Young et al., 2019).

The significant evidence for the structural and conceptual validity of the PBQ-SF has been provided by the results, within a South Asian cultural context. The successful replication of the ten-factor model suggests that though cultural nuances influence the interpretation of specific items, Beck’s cognitive framework of personality beliefs might be generalizable beyond Western populations. Constructs such as dependency, submissiveness, or conformity may hold adaptive or socially normative meanings in collectivist cultures like Pakistan but are often pathologized in Western contexts (Saleem et al., 2015), (Mubbashar & Saeed, 2001; Oyserman et al., 2002). Thus, bridging an important gap in personality research

within low- and middle-income countries, this validation extends cognitive-behavioral assessment paradigms to a linguistically and culturally distinct population.

### **Limitations and Recommendations**

Several limitations must be acknowledged despite methodological rigor. The use of a non-clinical, urban sample limits generalizability to clinical or rural populations. Furthermore, some important demographic variables including marital status and family history of psychiatric illness should also be explored in future research. Potential concerns of social desirability and response bias raise the reliance on self-report data, especially within collectivist cultures. Future research should assess test-retest reliability, include clinical participants with diagnosed psychiatric and personality disorders, and employ multi-method validation strategies such as clinician-rated instruments (e.g., SCID-5-PD; First et al., 2016). Additionally, to strengthen the cross-cultural applicability and diagnostic utility of the Urdu PBQ-SF, longitudinal and measurement-invariance studies across gender and cultural subgroups are recommended.

### **Future Implications**

Addressing a critical gap in existing assessment tools for mental health within Urdu-speaking populations of Pakistan, the Urdu PBQ-SF is a culturally adapted, reliable tool for assessing maladaptive personality beliefs. It will facilitate culturally informed clinical and research applications and support early identification of dysfunctional beliefs.

### **Conclusion**

This study translated, culturally adapted, and validated the Personality Belief Questionnaire-Short Form (PBQ-SF) for Urdu-speaking populations in Pakistan. It addressed a critical gap in culturally appropriate assessment tools. It used a rigorous multi-phase procedure including expert evaluation using the Delphi method,

pilot testing, and confirmatory factor analysis. The Urdu PBQ-SF demonstrated strong factorial validity, internal consistency, and convergent validity with the BFI-10 Urdu Version. The ten-factor structure was retained which indicates the conceptual framework of Beck's original model while also ensuring linguistic and cultural relevance. This research provides clinicians and researchers a standardized tool for use in diagnostic evaluation, therapeutic planning, and cross-cultural psychological research within the Pakistani context. The Urdu PBQ-SF offers a reliable and valid measure to assess maladaptive personality beliefs.

### **Ethics Statement**

All the ethical standards of APA were met. Informed consent was taken in written form from all the respondents to participate in this study.

### **Contribution of Authors**

Maryam Khan: Conceptualization, Investigation, Methodology, Data Curation, Formal Analysis, Writing – Original Draft  
 Muhammad Munib ur Rehman: Methodology, Writing - Reviewing & Editing, Supervision  
 Nida Ilyas: Methodology, Writing - Reviewing & Editing

### **Conflict of Interest**

There is no conflict of interest declared by the authors.

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### **Data Availability Statement**

The datasets of the current study are not available publicly due to ethical reasons but are available from the corresponding author [M.K.] upon the reasonable request.

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