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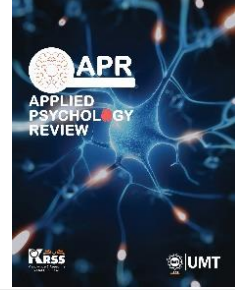
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Translation and Validation of the Negative Core Beliefs Inventory (NCBI) in Urdu

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Abstract

The recently developed Negative Core Beliefs Inventory (NCBI) aligns with Beck's theoretical framework on negative core beliefs. It assesses two key dimensions: self-related and other-related negative core beliefs, along with four sub-dimensions specific to self-related beliefs. Despite its widespread utility, the NCBI had not been translated into Urdu. Therefore, this study aimed to translate and validate the NCBI for Urdu-speaking populations. The forward-backward translation approach was employed to obtain a precise and context-specific translation. The factor structure of NCBI Urdu translation was confirmed using confirmatory factor analysis (CFA) and structural equation modeling (SEM) with Amos, based on a sample of 421 young adults (aged 17-25). The CFA results demonstrated acceptable fit indices for subfactors of belief about self and a decent fit for the factor solution of the NCBI translation. Moreover, SEM also demonstrated a significant fit to the first and second-level factors of the NCBI Urdu Translation, showing excellent psychometric properties. The convergent and discriminant validity were determined using sample of 279 young adults, wherein the NCBI original scale and its Urdu translation were used as concurrent validity measure, while Satisfaction with Life Scale (SWLS) was used as a discriminant validity measure. The results revealed a marked positive correlation between the NCBI and its Urdu translation, in contrast, the NCBI Urdu translation showed a significantly high negative correlation with SWLS. Thus, the NCBI Urdu translation proved to be a valid measure for a non-clinical Pakistani normative sample, although it still needs to be evaluated on a clinical population.

Keywords: CBT, CFA, negative core beliefs, SEM, translation, validation

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Introduction

Negative core beliefs are central constructs in the cognitive theory of psychopathology (Beck, [2020](#)). According to cognitive models, early life experiences shape the development of fundamental assumptions individuals hold about them, others, and the world (Beck, [2020](#)). These negative core beliefs are hypothesized to influence how individuals interpret and respond to stressful events, contributing to the development and maintenance of psychological distress (Beck & Haigh, [2014](#); Clark & Beck, [2011](#)). The ultimate goal of cognitive behavior therapy (CBT) is to change deeply ingrained negative core beliefs. CBT works most effectively when deep-rooted beliefs are challenged and replaced with adaptive beliefs (Tolin, [2024](#)).

The assessment of negative core belief still needs more clarity as belief, schema, and cognitive distortion have previously overlapped because beliefs and schemas are considered similar constructs, but emerging explanations suggest that they are distinctive (Beck, [2020](#)). Even Beck did not create a contrast between belief, schema, and cognitive distortion. For example, the Dysfunctional Attitude Scale (DAS) developed by Beck and his colleagues in 1978, was intended to measure negative beliefs. It did not include a similar theoretical component of beliefs for instance DAS measures perfectionism, dependency, need for approval, achievement, self-criticism, avoidance of failure, and autonomy concern subfactors which are unparallel to old and recent theoretical descriptions of beliefs. For instance, Beck ([2020](#)) suggested negative core beliefs towards self, others, and the world. Due to such ambiguous explanations, valid assessment of negative core beliefs has historically been challenging due to a lack of valid assessment measures. Nevertheless, the Negative Core Beliefs Inventory (NCBI), developed by Osmo et al. ([2018](#)), is a comparatively new scale for assessing negative core beliefs and seems to align with the CBT contemporary theoretical explanation of negative (dysfunctional) core beliefs. It appears to align more strongly with the modern cognitive-behavioral therapy (CBT) explanation of negative core beliefs than other measures, such as the Dysfunctional Attitude Scale (Weissman & Beck, [1978](#)) and the Young Schema Questionnaire (Young & Brown, [1998](#)).

Following a rigorous psychometric evaluation, the NCBI demonstrated excellent reliability and a two-factor structure comprising negative beliefs

about the self and others. The self-domain includes four sub-factors: helplessness inferiority, helplessness vulnerability, unlovable, and worthlessness. Additionally, an extra domain related to helplessness, not fully explained in traditional cognitive conceptualizations of beliefs, was identified (Beck, [2020](#)). Initial validations have supported the widespread use of the NCBI in Western cultures (Duran et al., [2021](#); Osmo et al., [2018](#)) However, NCBI has not yet been translated into Urdu, which highlights the need for translation and validation of NCBI.

Despite the widespread use of Cognitive Behavioral Therapy (CBT) among both clinical and non-clinical populations, there remains a scarcity of standardized assessment tools for therapeutic evaluation. Notably, there is a lack of indigenously developed measures for assessing negative core beliefs, indicating a limited empirical understanding within Indigenous contexts. Hence this study aimed to translate the NCBI into Urdu and evaluate its psychometric properties in young adults. Psychometric validation of translated measures demonstrates cross-cultural applicability (van de Vijver & Tanzer, [2004](#)).

The valid translation would be a valuable addition to standardized measures for clinical and non-clinical population that will measure the intensity of negative core beliefs according to a recent theoretical explanation of CBT (Beck, [2020](#)). More likely, this valid and reliable translation NCBI will use for research purposes as the general population in Pakistan cannot comprehend English well, especially for clinical population translated questionnaires are required. Moreover, the findings from this study could potentially facilitate the dissemination of culturally cognitive interventions for the Urdu-speaking population. By keeping the following objectives this study was designed.

Methodology

Sample

The sample primarily consisted of university students representing a range of socioeconomic backgrounds. A total of 421 participants ($M = 20.39$, $SD = 1.99$) were recruited using a convenient sampling technique, with 210 males and 211 females between the ages of 17 to 25. This sample size fulfils the adequacy requirement according to Kline's ([2023](#)) rule, which suggests at least 10 participants per estimated parameter in the model.

Measures

The Negative Core Beliefs Inventory (NCBI) (Osmo et al., [2018](#)) translated version was used to assess negative core beliefs which had mainly two factors belief about self and others. Negative Core Beliefs about the Self scale are further divided into four sub-scales: Self Helplessness/Inferiority, Self-Helplessness/Vulnerability, Unlovability, and Self Worthlessness. Participants rated each 32 items on a 4-point Likert scale, with the response option “*does not describe me*” 1 to “*describe me very well*” 4.

Study 1

Procedure

This study was completed in two phases. Phase 1 focused on the translation of NCBI into Urdu, while Phase II involved data collection confirming the factor structure of translation of NCBI.

In Phase I, the translation procedure of the NCBI followed the International Test Commission (ITC, [2021](#)) guidelines to ensure the conceptual and semantic equivalence of the translated version. The forward-backward translation method was employed. In the forward translation phase, two translators independently translated the NCBI into Urdu, focusing on conceptual rather than literal translation. Any discrepancies between the two translations were identified and resolved by a review committee. Following this, the two translated versions were reconciled and critically evaluated by two senior lecturers experienced in translation and adaptation. Their feedback was incorporated into the forward translation. The preliminary Urdu version was then back-translated into English by two bilingual translation experts. The back-translated versions were compared with the original NCBI by a bilingual expert panel comprising three experts proficient in both languages. This expert panel reviewed both forward and backward translations to ensure minimal discrepancies in the semantic, conceptual, and contextual meaning between the original English and translated Urdu versions. Finally, a pilot test was conducted with 20 bilingual individuals to identify any items requiring rephrasing or clarification. The participants reported no difficulties in understanding the translated items, confirming the clarity and accuracy of the Urdu translation of the NCBI.

In Phase II, the psychometric properties of the translated NCBI were evaluated to confirm its reliability and validity. This phase involved administering the Urdu version of the NCBI to an independent sample, to test the internal consistency and factor structure of the translation. Confirmatory factor analysis (CFA) was conducted to verify whether the factor structure of the translated version aligned with the original scale. Additionally, the internal consistency of the scale was assessed using Cronbach's alpha to determine the reliability of each factor.

Participants were recruited from different public and private universities. Before participation, all eligible participants were informed about the nature of the study, including the purpose, procedures, potential risks, and their right to withdraw at any time without any Requirement. Participants were assured that their responses would remain confidential. Volunteering participants provided informed consent and completed the Urdu-translated NCBI form. Missing data were removed from the dataset before analysis, ensuring that only complete cases were included in the analyses. The final refined data was first analyzed using SPSS v27 to assess descriptive statistics and conduct preliminary reliability analyses. After these initial analyses, the data were exported to AMOS to conduct confirmatory factor analysis (CFA). Exploratory factor analysis (EFA) was not conducted because the original factor structure of the NCBI had already been well-established in previous research. Moreover, we have only translated NCBI and were not required to make changes in Urdu translation. Therefore, confirmatory factor analysis (CFA) was deemed more appropriate for this study to verify the integrity of the translation's factor structure (Rogers, [2024](#)).

Results

CFA was performed in separate two-factor solutions high factor structure (Self and Other) and lower-order factor structure (Self and related domains). Following the confirmation of structure, SEM was employed to confirm the factor structure of the NCBI, which includes both the Negative Core Beliefs about the Self and Negative Core Beliefs about Others scales. Several fit indices were examined to evaluate the model fit, including the chi-square test (χ^2), the comparative fit index (CFI), the Tucker-Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR), as

recommended by Kline (2023). Cronbach's alpha was also calculated for the NCBI's subscales to determine internal consistency.

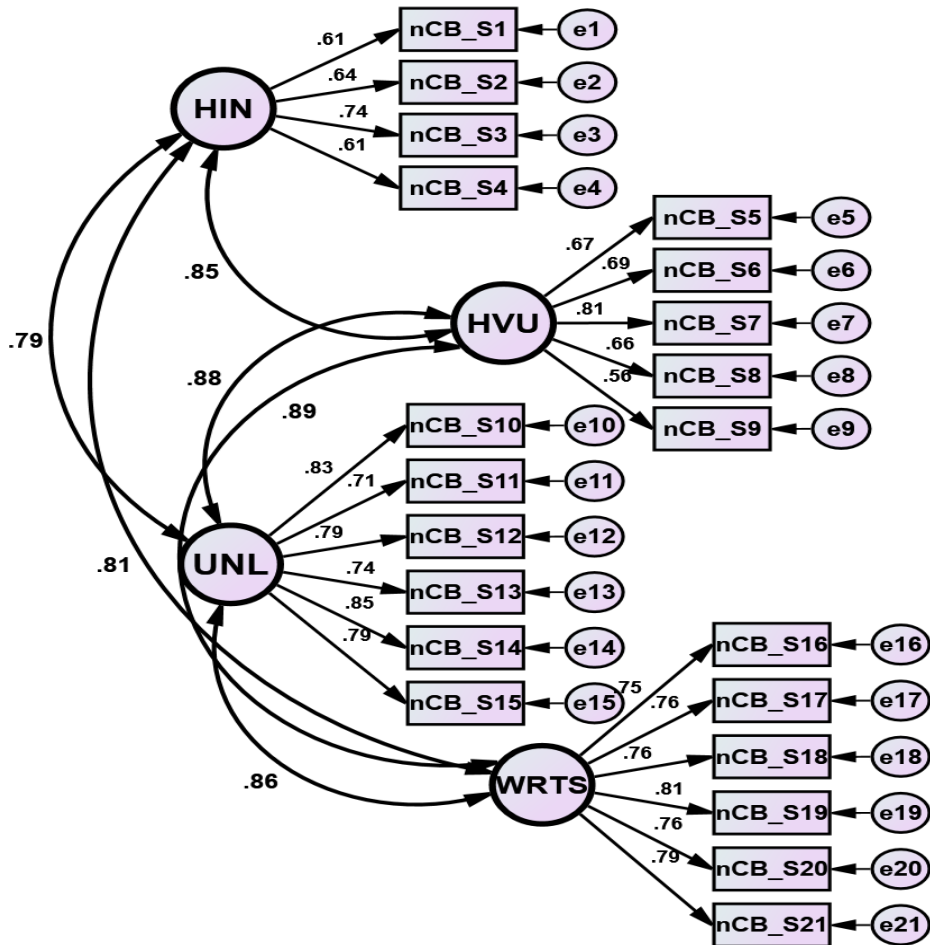
CFA for Negative Core Belief about Self and its Subdomains

The findings from CFA, conducted on the Negative Core Beliefs about the Self-scale to verify the factor structure of its four subscales: (1) Helplessness/Inferiority (HIN), (2) Helplessness/Vulnerability (HVU), (3) Unlovability (UNL), and (4) Worthlessness (WRTS), showed that the minimum value of the chi-square statistic was 321.66 with 183 degrees of freedom. This value was statistically significant ($\chi^2(188) = 321.66, p < .001$), indicating good model fit (Kline, 2023). The CMIN/DF value was 1.76, which falls below the recommended cutoff of 3, providing additional support for a good model fit. Several fit indices were examined to further evaluate the model fit. The comparative fit index (CFI) value was .97, above the recommended threshold of .90, indicating a good incremental fit of the four-factor model relative to the independent model (Hu & Bentler, 1999). The Tucker-Lewis index (TLI) value of .97 also exceeded .90, providing additional evidence of a good incremental fit. Finally, the root mean square error of approximation (RMSEA) was 0.04, below the cut-off of 0.08 providing empirical support that the four-factor model demonstrated a good fit to the data and can be considered a valid representation of the underlying factor structure within the Negative Core Beliefs about Self and its subdomain. As all values fell within the range of acceptable fit, as recommended by Hu and Bentler (1999) and Kline (2023), it was confirmed that no modifications were necessary. It is also important to mention here that due to significant model fit indices, no modification indices or items were excluded from the analysis (Kline, 2023).

These findings support that the four subscales are distinct but related domains that contribute to the overall construct of negative self-beliefs in the translated version, just as in the original version.

Figure 1

Confirmatory Factor Analysis (CFA) for Negative Core Belief about Self and Subdomains of NCBI Urdu Translation



The relationship between observed variables and latent constructs for the Negative Core Beliefs about Self and its subdomains of NCBI Urdu Translation is shown in above Figure. All factor loadings exceeded the minimum threshold of 0.56, indicating a strong relationship between items and their respective latent factors. Each subdomain (Helplessness/Inferiority (HIN), Helplessness/Vulnerability (HVU), Unlovability (UNL), and Worthlessness (WRTS) distinctively predicts negative core beliefs about the self, as reflected by higher regression coefficients.

CFA for Self and Others Related Negative Core Beliefs

CFA was conducted to evaluate the fit of a two-factor model comprising the Negative Core Beliefs about the Self and Others scales of the NCBI (See Figure 3). The model demonstrated an acceptable fit to the data: $\chi^2(464) = 1226.78$, $p < .001$; comparative fit index (CFI) = .90, Tucker-Lewis's index (TLI) = .89, root mean square error of approximation (RMSEA) = .06. The ratio of chi-square to degrees of freedom (2.64) was below the recommended cut-off of 3, providing empirical support that the two-factor model comprising the Negative Core Beliefs about the Self and Others is a reasonable representation of the underlying factor structure in the data. These fit statistics met commonly used cut-off criteria suggesting an acceptable model fit (Hu & Bentler, 1999). The ratio of chi-square to degrees of freedom (2.64) was below the recommended cut-off of 3 providing empirical support that the two-factor model comprising the Negative Core Beliefs about the Self and Others is a reasonable representation of the underlying factor structure on the data. The CFA results support the construct validity of measuring these as distinct but related factors. The two-factor model was confirmed as a valid representation of the data. These findings align that negative core beliefs about the self and others are distinct but interrelated constructs in the Urdu-translated version, consistent with the original version of the NCBI.

Structural Equation Modelling (SEM) for NCBI Translation

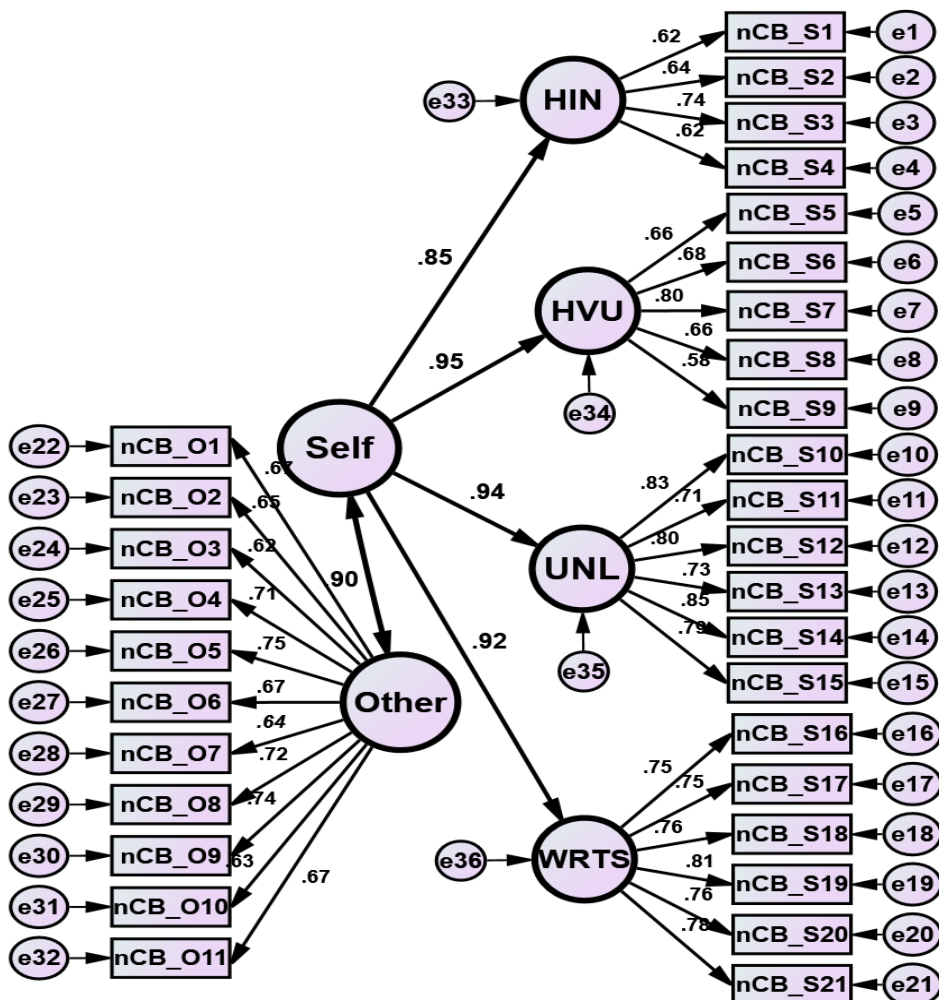
Structural equation modelling was carried out to test a hypothesized two-factor higher-and lower-order model of Negative Core Beliefs comprising self and other domains, with four lower-order subscales under self (see Figure 2). The model demonstrated a good fit to the data. The comparative fit index (CFI), incremental fit index (IFI), and Tucker-Lewis's index (TLI) exceeded 0.95, indicating a very good fit after accounting for complexity (Hu & Bentler, 1999). The root mean square error of approximation (RMSEA) of 0.04 met the criterion of 0.05 or below, reflecting good population fit while adjusting for simplicity (Browne et al., 2002). Although the χ^2 was significant, χ^2 is sensitive to sample size so other fit indices were relied on more (Kline, 2023). Additional indices supported fit, like the goodness of fit index meeting 0.90 (Goretzko et al., 2024). The normalized fit index and relative fit index approached 0.90. Most importantly, the minimum discrepancy/degree of freedom ratio was 1.63, demonstrating acceptable

parsimony. Overall, the fit indices confirmed that the higher-order two-factor model with its four lower-order facets adequately represented the data structure.

These results demonstrate that the translated version replicates the factor structure of the original version, with the two higher-order factors and four subscales under the self-domain contributing to the overall construct of negative core beliefs as expected.

Figure 2

Structural Equation Modelling (SEM) Higher and Lower Order Factors of NCBI Urdu Translation



The higher and low order factor structure of the Negative Core Beliefs Inventory (NCBI) Urdu translation, with the overarching constructs of negative core beliefs about self and others represented by their respective subscales (Helplessness/Inferiority (HIN), Helplessness/Vulnerability (HVU), Unlovability (UNL), and Worthlessness (WRTS)). The path coefficients range from .85 to .95, indicating strong relationships between items and their associated latent factors.

Psychometric properties of NCBI translation were calculated and showed excellent internal consistency of translated scale, as in Table 1 displays descriptive and reliability analysis results that show belief about self-items Cronbach alpha coefficient was .95 with mean = 37.01, SD = 10.56. Similarly, the sub-domain of negative core belief about self, yields a robust reliability coefficient for instance computed descriptive and alpha coefficient for helplessness inferiority ($M= 7.50, SD = 2.17, \alpha = .75$), helplessness vulnerability ($M= 9.43, SD = 2.76, \alpha = .81$), unlovability ($M= 10.51, SD = 3.63, \alpha = .90$), and worthlessness ($M= 9.73, SD = 3.38, \alpha = .90$) remain above .75. The belief about other factors provides an excellent alpha level ($\alpha = .90$) with a descriptive score ($M= 21.92, SD = 5.90$). The overall NCBI translation alpha value ($\alpha = .96$) even provided better internal consistency, adequate mean, and scores ($M= 58.62, SD = 15.82$). The internal consistency of the translated NCBI was also evaluated across gender subgroups. Cronbach's alpha values for both male and female participants indicated high reliability across both groups, confirming the robustness of the translation. No significant differences in reliability were found between genders, except for a minor trend suggesting slightly higher reliability scores among male participants across all subdomains and the overall scale.

Table 1

Psychometric Properties of NCBI Urdu (Translated) Version (N=421)

Scale	<i>k</i>	<i>M</i>	<i>SD</i>	Range	α
Self	21	37.01	10.56	21-60	.95
Helplessness Inferiority	4	7.53	2.17	4-15	.75
Helplessness Vulnerability	5	9.42	2.76	5-16	.81
Unlovability	6	10.51	3.63	6-19	.90
Worthlessness	6	9.73	3.38	6-18	.90
Other	11	21.92	5.90	11-35	.90
NCBI	32	58.63	15.82	32-91	.96

The findings from Study 1 demonstrated that the Urdu translation of the Negative Core Beliefs Inventory (NCBI) retained its psychometric properties similar to the original English version. Confirmatory factor analysis (CFA) confirmed the validity of the four subscales measuring negative core beliefs about the self: Helplessness/Inferiority (HIN), Helplessness/Vulnerability (HVU), Unlovability (UNL), and Worthlessness (WRTS). The model demonstrated a good fit, indicating strong relationships between items and their respective factors. Additionally, a two-factor model comprising negative core beliefs about the self and others also showed an acceptable fit to the data. Finally, structural equation modelling (SEM) confirmed the overall factor structure of the translated scale, showing that the higher and low-order factors of self and others, along with the subscales, adequately represented the data. These results confirm that the translated version of the NCBI is a reliable tool for measuring negative core beliefs in Urdu-speaking populations, replicating the structure and reliability of the original version.

Study 2

In Study 2, concurrent and discriminant validity of the Urdu-translated version of the Negative Core Beliefs Inventory (NCBI) were assessed using self-report measures. Concurrent validity was evaluated following the criteria laid out by Cronbach and Meehl (1955), and discriminant validity was assessed based on the guidelines proposed by Campbell and Fiske (1959).

Measures

The validation study utilized three main self-report measures. The English and Urdu versions of the NCBI were used to assess concurrent validity, while the Satisfaction with Life Scale (SWLS) was employed to assess discriminant validity.

Negative Core Beliefs Inventory (NCBI)

The NCBI is a self-report scale designed to measure deeply held negative core beliefs about oneself and others. The scale consists of 32 items, divided into two primary factors: (1) Negative Core Beliefs about the Self, with subscales for Self-Helplessness/Inferiority, Self-Helplessness/Vulnerability, Unlovability, and Self-Worthlessness; and (2) Negative Core Beliefs about Others. Participants rate each item on a 4-point Likert scale from 1 (*does not describe me*) to 4 (*describes me very*

well). The NCBI has demonstrated strong internal consistency and reliability in previous studies (Cronbach's $\alpha = .91$ for the total scale). In this study, both the Urdu and English versions were administered to bilingual participants to test concurrent validity.

Satisfaction with Life Scale (SWLS)

The SWLS, developed by Diener et al. (1985), is a widely used measure of life satisfaction that consists of 5 items. Participants rate their agreement with each item on a 7-point Likert scale, ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The SWLS has demonstrated excellent psychometric properties, including high internal consistency (Cronbach's $\alpha = .87$). The SWLS was used in its English version in this study to assess discriminant validity against the Urdu-translated NCBI, as life satisfaction is theoretically distinct from negative core beliefs.

Sample

A total of 279 individuals participated in the study, with ages ranging from 18 to 25 years ($M = 21.96$, $SD = 1.79$). The sample included a higher proportion of female participants, and the majority were university students. All participants were bilingual, allowing for the comparison of responses between the English and Urdu versions of the NCBI for assessing concurrent validity. The sample size was determined using G*Power analysis.

Procedure

The same procedure was followed as in Study 1, including informed consent, and data handling like removing missing data sets, except that, the participants in this study completed demographic information forms, the Urdu and English versions of the NCBI, and the Satisfaction with Life Scale (SWLS). Missing data, biased and inadequate responses were removed before analysis to ensure complete and clean datasets. Descriptive statistics were conducted using SPSS v27, and Pearson correlations were calculated to assess concurrent validity between the Urdu translation of NCBI and original NCBI, as well as discriminant validity by correlating the Urdu-translated NCBI with the SWLS.

Results

Concurrent Validity

Table 2 reveals that correlations between the English and Urdu versions of the Negative Core Beliefs Inventory (NCBI) indicated strong concurrent validity. NCBI scores of the English and Urdu versions showed a highly significant positive correlation ($r = .95, p < .001$), confirming that the translated version mirrors the original scale. The subdomains of negative self-beliefs also demonstrated significant positive correlations, ranging from $r = .65$ to $r = .75$. Additionally, negative beliefs about others showed a similarly high correlation between the two versions ($r = .84, p < .001$), further proving strong evidence that the NCBI and NCBI Urdu translation measured the same constructs.

Discriminant Validity

The discriminant validity of both the English and Urdu versions of the Negative Core Beliefs Inventory (NCBI) was assessed by examining its correlation with the Satisfaction with Life Scale (SWLS) as shown in Table 2. As expected, significant negative correlations were found between the NCBI (both English and Urdu versions) and the SWLS, indicating that higher levels of negative core beliefs are associated with lower life satisfaction. The total negative core beliefs score for the English version showed a moderate negative correlation with SWLS ($r = -.45, p < .001$), while the Urdu version also exhibited a strong negative correlation ($r = -.41, p < .001$). Each of the NCBI subdomains (Helplessness/Inferiority (HIN), Helplessness/Vulnerability (HVU), Unlovability (UNL), and Worthlessness (WRTS)) also showed significant negative correlations with life satisfaction in both versions. These results confirm that the NCBI measures constructs that are distinct from life satisfaction, providing strong evidence for the discriminant validity of the scale in both languages.

Table 2

Correlations Between Original NCBI and Urdu Translated Versions of the NCBI and SWLS (N=279)

Variables	1	2	3	4	5	6	7
NCBI Original	1	.95*	.84*	.84*	.96*	.91*	-.45*
NCBI Urdu		1	.78*	.86*	.91*	.97*	-.41*

Variables	1	2	3	4	5	6	7
nCBO-Original			1	.68*	.64*	.76*	-.36*
nCBO-Urdu				1	.81*	.72*	-.40*
nCBS-Original					1	.87*	-.44*
nCBS-Urdu						1	-.38*
SWLS							1

Note. NCBI = Negative Core Beliefs Inventory, nCBO= Negative Core Beliefs About Others, nCBO= Negative Core Beliefs About Self, SWLS = Satisfaction with Life Scale, * $p < .001$ for all correlations

Discussion

This study aimed to validate the Urdu translation of the Negative Core Beliefs Inventory (NCBI). The findings demonstrate that the translated version retains the essential psychometric properties of the original English version, making it a reliable tool for Urdu-speaking populations.

Confirmatory factor analysis (CFA) confirmed the original two-factor structure, with negative beliefs about the Self and Others, showing good model fit indices. This suggests that the scale is applicable in non-Western contexts, maintaining its conceptual integrity (Kline, 2023). Additionally, the domain of negative self-beliefs demonstrated a strong and independent factor structure. These findings support the potential for administering the self-belief subscale independently, as it remains psychometrically sound when used separately. This flexibility enhances the scale's utility, allowing clinicians and researchers to focus on self-beliefs alone when needed. Structural equation modelling (SEM) further validated the two-factor structure across multiple levels, confirming the robustness of the translated version. The internal consistency of the Urdu NCBI was excellent across all domains, with Cronbach's alpha values indicating high reliability (Mallery & George, 2003). Concurrent validity was established through significant positive correlations between the English and Urdu versions, particularly for the total scores and subdomains of negative self-beliefs.

Discriminant validity was confirmed through significant negative correlations between the Urdu NCBI and the Satisfaction with Life Scale (SWLS) (Diener et al., 1985). This indicates that individuals with stronger negative core beliefs are more likely to report lower life satisfaction, aligning with the cognitive-behavioural framework that positions these beliefs as central to psychological distress (Beck, 1967). The separation

between negative self-beliefs and general well-being reinforces the scale's discriminant validity, supporting its use in identifying cognitive vulnerabilities in individuals prone to depression or anxiety. As suggested in previous literature, the results showed particularly strong links between negative self-beliefs and lower well-being (Beck, [2020](#)).

Overall, the findings provide strong support for the Urdu NCBI as an adapted measure that retains the essential psychometric properties for Urdu-speaking populations. The higher and low order factor structure of the Negative Core Beliefs Inventory (NCBI) Urdu translation, with the overarching constructs of negative core beliefs about self and others (Items 22-32) representing self by respective subscales (Helplessness/Inferiority (HIN- Items 1-4), Helplessness/Vulnerability (HVU Items 5-9), Unlovability (UNL Items 10-15), and Worthlessness (WRTS Items 16-21)) was conformed just like Original Scale by Osmo and companions in 2018. This study contributes to the literature by demonstrating the acceptance of negative core beliefs across cultural contexts. By validating the Urdu NCBI, we provide a tool that can be utilized in both clinical and research settings, where validated psychometric tools are limited. The independent use of the self-belief subscale adds flexibility for clinicians who may want to focus specifically on self-related cognitive distortions, particularly in therapy settings where cognitive restructuring is a core intervention. The Urdu NCBI has practical implications for mental health interventions in Pakistan and other Urdu-speaking regions. It can be used as a screening tool in preventive mental health programs or adapted for digital health platforms, enabling broader access to cognitive assessments in underserved areas. By identifying negative core beliefs early, clinicians can implement timely interventions, potentially mitigating the development of more severe psychological distress.

The Urdu NCBI has been validated as a reliable and flexible tool for assessing negative core beliefs in Urdu-speaking populations. It demonstrated excellent internal consistency, concurrent validity, and discriminant validity, confirming its utility in both clinical and research contexts. Notably, the independent use of the self-belief subscale is supported, enhancing the scale's flexibility for targeted assessments. As no other validated measure for negative core beliefs exists in Urdu, this scale addresses an important gap in psychological assessment. However,

further studies are needed to evaluate its effectiveness in more diverse populations and demographic groups. Future research should focus on validating the scale in clinical settings to extend its applicability further.

Limitations and Suggestion

Several limitations of this study should be noted. First, resource constraints limited sample diversity, potentially affecting representation. Second, while validated for non-clinical populations, testing the Urdu NCBI in clinical settings could provide insights into its effectiveness for clinical sample. Future research should focus on addressing these issues, aim for greater diversity, and explore the evolution and stability of negative core beliefs over time through longitudinal studies.

Conclusion

A valid and reliable Urdu translation of NCBI has been completed which has consistent factor's structure and dimensions loading with excellent psychometric properties. Moreover, translated version of NCBI robustly correlated with NCBI original version and negatively related with life satisfaction prove its concurrent and discriminant validity. Hence NCBI Urdu translation is meeting the psychometric pre-requisites to use it for further research work.

Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

Data Availability

The data associated with this study will be provided by the corresponding author upon request.

Funding Details

No funding has been received for this research.

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