



Urdu Translation and Psychometric Evaluation of Core Self-Evaluation Scale for Adolescents

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Abstract

Core Self-evaluation (CSE) is a higher-order construct comprising broad and evaluative features, such as generalized self-efficacy and self-esteem, collectively representing people's fundamental assessments of their worth and ability (Judge et al., 1998). This study aimed to translate and validate the 12-item Core Self Evaluations Scale (CSES; Judge et al., 2003) for adolescents. In the study's initial phase, the Core Self-Evaluation scale was translated into Urdu by following the International Testing Commission (ITC, 2019) standards. The findings of the study indicated that Cronbach's alpha was excellent ($\alpha=.90$). Additionally, there was a strong inter-correlation between the scores on the CSES forward, backward and Urdu translations ranging from .88 to .92. Based on the original criteria for model fit, i.e., item loading $>.35$, a confirmatory factor analysis was carried out with 300 adolescent sample to investigate the original model with a two-factor structure (Positive and Negative core self-evaluations) that demonstrated a good fit for the data with six items in each subscale. The items' factor loadings varied from .33 to .89. Negative CSES shows higher AVE, while Positive CSES remains distinct per Fornell and Larcker's (1981) criterion. High composite reliability confirms its convergent validity. In conclusion, the CSES was shown to have excellent psychometric features, and CFAs helped identify a model that fits well. The CSES is correlated with various health-related factors like pain, fearfulness, sadness, and subjective well-being, and it is a good prospect for research and screening tools in the fields of clinical and health psychology in addition to industrial and organizational psychology.

Keywords: Core Self-Evaluation, Confirmatory Factor Analysis, Adolescents

Introduction

Psychologists recognize that individuals acquire subconscious evaluations of the phenomena in their environment (Packer, 1985, 1986). While acknowledging that assessments take place on several levels, Packer also posited the presence of a fundamental, deep-level assessment that forms the basis of and influences almost all other assessments that individuals make about people, things, and events. According to Packer (1985), this fundamental evaluation is called one's core evaluation. Packer used the example of a tree to illustrate his point. Just as a tree's stem determines the type of branches and foliage, it will grow precisely as an individual's core assessments impact and dictate all additional evaluations the individual produces and keeps up to date. A higher-level personality concept known as "core self-evaluations" (CSE) was first postulated more than ten

years back by Judge et al. (1998). A recently developed approach emphasizes a personality characteristic of core self-evaluations (Judge et al., 1998). People have key beliefs about who they are and how they operate in the environment (Judge & Larsen, 2001). Judge et al. (1997) made the case based on research from a variety of fields that someone's assessments of the outside world are influenced by their presumptions about the world, other people, and themselves in addition to the characteristics of objects and people's desires regarding those objects.

Four specifically tailored lower-order features make up the higher-order idea of core self-evaluations. The key features of core self-evaluation include: (1) self-esteem, which is characterized as a person's core assessment of themselves and their overall value being an individual; (2) generalized self-efficacy, which is an estimate of an individual's fundamental capacity to perform; and deal with life's challenges, and achieve success; (3) locus of control is an estimation of people that they have control over their circumstances; and (4) neuroticism, or the propensity to display poor emotional regulation and feel unfavorable emotions like anger, fear, and depression (Goldberg, 1990).

As Johnson et al. (2008) noted, people with high CSE also have a positive self-image, a sense of control over their lives, and self-assurance. Conversely, people with impoverished core self-evaluations lack confidence, feel powerless over their lives, and have a negative self-perception. As a result, CSE is widely used to assess personality and can capture the essential elements of personal assessment. Previous studies have found substantial evidence for the validity of the CSES concept, which was first put up as an explanatory variable of career contentment (Judge & Bono, 2001; Judge et al., 2000, 1998). In addition to satisfaction with a job, CSE is also related to motivation, job performance, and a sense of well-being (Chang et al., 2012; Heilmann & Jonas, 2010; Bono & Judge, 2003); contentment and the favorable ability to experience affects (Rey et al., 2012; Gardner & Pierce, 2010; Stumpp et al., 2010), lower stress levels and positive characteristics of making career decision (Di Fabio et al., 2012; Luria & Torjman, 2009; Brunborg, 2008) and healthier functioning (Hilbert et al., 2014; Yagil, et al., 2008; Tsaousis et al., 2007). Research examining the relationship between disposition and work outcomes reveals that the CSE concept is a reliable indicator of both subjective and objective job outcomes.

Core self-evaluation has traditionally been described as general and basic self-evaluation (Judge et al., 2003; Judge & Bono, 2001). A significant number of researchers, however, have described core self-evaluation as universal, essential, and effective self-evaluation. Many more self-evaluations are generic and fundamental, but they have not yet been placed beneath the roof of core self-evaluation, and many of these structures are negative self-evaluations. Individuals might have generally positive attitudes or negative perceptions about themselves; having both positive and negative evaluations is conceivable. Both these positive and negative assessments may even contradict, as in the scenario of dissonance (Wicklund & Brehm, 2013; Festinger, 1962), implying that positive and negative self-evaluations are not merely inverse. In our present study, we additionally endeavor to determine the factors of the core self-evaluation scale.

Literature Review

The significance of CSE for numerous research inquiries has led to the translation of CSES into multiple languages. For instance, the Spanish translation of the Core Self-Evaluations Scale was tested with a group of Spanish-speaking employees. It was found that individuals with high Core Self-Evaluation (CSE) scores reported greater job satisfaction and better performance. This study was among the first to demonstrate the CSES's cross-cultural applicability and supported its use within Spanish-speaking populations (Judge et al., 2004).

An additional investigation examined the Core Self Evaluations Scale's (CSES) psychometric properties in Iranian workers. Two hundred and nineteen randomly chosen employees participated in the survey. There was strong internal consistency, as evidenced by the Cronbach alpha of 0.71, and the scale's validity was verified in several methods. First, confirmatory factor analysis showed that all CSES items, with the sole exception of one, loaded significantly on a single component. Second, the CSES showed convergent validity as it was negatively connected with neuroticism and favorably correlated with locus of control, generalized self-efficacy, and self-esteem. Overall, the findings demonstrated that the CSES is a reliable and accurate scale for assessing core self-evaluations in the Iranian population (Sheykhshabani., 2011). These study results are consistent with other research showing the Core Self-Evaluation Scale's worldwide applicability across English-speaking nations (Chang et al., 2012; Stumpp et al., 2010; Dormann et al., 2006).

A study was carried out to validate the Core Self-evaluations Scale among the Korean population. The study evaluated a core self-evaluation scale on two samples (Sample 1 N = 181; Sample 2 N = 280), and validity and reliability estimates were established. The results demonstrated satisfactory internal consistency in two separate samples, indicating its reliability. Overall, the findings indicate that Core self-evaluation is a viable measure in Eastern cultures (Holt & Jung, 2008).

Another study examined the relative validity of core self-evaluations (CSE) in predicting happiness, life satisfaction, and work satisfaction in a non-Western culture (Japan). The 349 participants in the study filled out the questionnaires. These findings imply that assessments of pleasure and satisfaction in non-Western cultures have a dispositional origin and provide preliminary evidence for the generalizability of CSE in a culture that is very different from Western cultures (Piccolo et al., 2005). The primary objective of Chen et al. (2022) study was to investigate whether adolescents' self-esteem affected the mediating role of purpose in life in the relationship between core self-evaluation and subjective well-being. The study's findings showed that interventions including improving adolescents' core self-evaluation and encouraging them to comprehend the purpose of their existence might enhance subjective well-being and that adolescents with low self-esteem require more attention.

Previous studies also confirmed the predictive efficacy, reliability, and validity of core self-evaluation across the adolescent population. Studies also demonstrate the usefulness of the core self-evaluation scale for examining adolescents' psychological well-being and academic achievement (Zhao et al., 2021; Yang et al., 2021). Additionally, the adaptation of core self-evaluation in the Eastern culture confirms its utilization across different cultural contexts also emphasizing its global importance through cross-cultural validation (Gardner & Pierce, 2010). Therefore, considering the importance of the construct's validity for many contexts, this scale needs empirical validation in the Pakistani context, to assess its applicability to adolescents in a variety of contexts in keeping with basic self-evaluation adaptation across cultural diversity. Thus, this study's goal is to validate the CSES's psychometric qualities in a population sample that is representative of adolescents.

Method

The study was conducted in two distinct phases. The CSE scale's translation was completed in the first phase, and its psychometric qualities were assessed in the following phase.

Phase I: Urdu Translation of Core Self-Evaluation Scale

The departmental Board of Studies (BOS), the Faculty Board, and the Ethical Review Committee (ERC) all gave their formal approval for the research project. The scale was translated and validated in Urdu for the adolescent sample with permission from the author of the original CSES. The translation process complied with ITC (2019) guidelines, which included committee review, pilot testing, and forward and backward translation. The following are the specifics of the translation procedure:

Step 1: Forward Translation

The CSES was to be translated into Urdu while maintaining its meaning by a committee of five experts, including two assistant professors from the Linguistic Department with five to seven years of teaching experience, four assistant professors of applied psychology, and an associate professor of applied psychology with seven years of academic experience. During this process, it was ensured that they carefully evaluated the Urdu translations and confirmed that the content was understandable and free of syntactic and grammatical problems.

Step 2: Committee Approach

After a thorough evaluation and committee-based selection of the top-scale item translations determined by the author's original expression, the highest-rated translations were retained. The items for the Urdu version of CSES were finalized by an associate professor and an assistant professor with seven years of teaching experience at Government College University Faisalabad's Department of Applied Psychology. The Urdu version was determined to have a satisfactory consensus after the review processes. All the experts confirmed that the translation was accurate.

Step 3: Backward Translation

To determine accuracy, this process involved translating the Urdu measure back into English. According to Brislin et al. (1973), the back-translation approach is a thorough procedure intended to reduce biases and translation errors. Two PhD students from Government College University's Linguistic Department in Faisalabad, Pakistan, were to translate the measure's Urdu version into English. The translators selected for the back-translation step were not familiar with the measure's original items since they had not previously taken part in the forward-translation step.

Step 4: Committee Approach

Afterward, the same committee carefully examined the backward translations to ensure that the original and backward-translated versions of the CSES were similar in both language and theory. The committee ensured that an equivalence was found between both versions (original and back-translated). In conclusion, we had three versions of the CSE scale (i.e., original/ English, forward and backward translations).

Step 5: Pilot Testing

During pilot testing, the final Urdu version of the scale was administered to ten adolescent participants aged between 15 and 19 years. The sample included an equal number of boys' and girls' participants, all native Urdu speakers attending school or college. The pilot testing aimed to evaluate their comprehension of the Urdu version of the scale, identifying any errors in phrasing, arrangement, or instructions, and assessing their ability to complete the questionnaire independently. Most of the participants reported no confusion while completing the scale. An expert committee subsequently reviewed the results of this phase.

Phase II: Cross-Language Validation of Core Self-evaluation Scale Participants and Procedure

To establish cross-language validity, 30 adolescents were divided into three equal groups of ten individuals each. One group was first given the original English version of the CSES, followed by the backward-translated version and then the Urdu-translated version. The second group received the Urdu version first, followed by the backward-translated version and then the original English scale. The third group completed the backward-translated, original, and Urdu versions in that order. To control learning effects and previous experiential influences, a gap of at least three to four days was maintained between using these versions. This procedure was employed to identify any discrepancies and assess the equivalency among the three versions (original, forward/Urdu, and backward translated) and within the same version.

Phase III. Structural Validation of Core- Self-Evaluation Scale Participants

The third phase involved evaluating the psychometric properties using a sample of 300 adolescents aged 15 to 19 ($M_{age} = 17.50$, $SD = 1.32$). Using a convenient sampling technique, these participants were selected from public and private schools and colleges in Sargodha city. Generally, it is recommended to have more than 250 samples since the more significant the sample, the less error; however, 250 samples yield an 8% or less error, which is usually acknowledged in the fields of Social Sciences (Reyes & Ghosh, 2013). Every sample size over 300 is considered sufficient (Thompson, 2004).

Measures

This study employed the following measures:

Demographic Information Sheet

It includes socio-demographic information such as the adolescent participant's gender, age, grades, parent's occupation, family system, number of family members, number of friends, and number of siblings.

The Core Self-Evaluations Scale (CSES; Judge et al., 2003). The CSES is a 12-item scale divided into six positive and six negative items, scored on a five-point Likert-type scale, where one represents strongly disagreed with, and five represents strongly agreed with. Reverse scoring was used for the six negative items (such as items 2, 4, 6, 8, 10, and 12). While the other six items were rated positively (such as items 1, 3, 5, 7, 9, and 11). For example, the item "I am confident I get the success I deserve in life" had a positive score. However, "Sometimes, I do not feel in control of my work" received a negative score. The English version of the CSES's Cronbach's alpha value was reported as .83 (Judge et al., 2003). The Urdu version of CSES translated during the first phase was used in this phase.

Procedure

The data of this phase was collected after obtaining consent from principals of the educational institutions (schools and colleges). The study participants also provided their consent to become part of this research. The nature and key goals of the research were thoroughly elaborated to the study participants. Participants in the study were then given a demographic information sheet and the Core Self-Evaluation Scale (CSES). They were instructed to respond to the assessments attentively and honestly. Ethical measures during data collection preserve the confidentiality and anonymity of the participants. Following data collection, every participant in the study was acknowledged for their proactive contribution. The researcher responded to all questions posed by study participants during the data collection process.

Results

The study data was analyzed using the Statistical Package for Social Science (SPSS version 28) to perform descriptive and inferential statistics. The frequency of demographic data was determined for categorical variables, and the mean and standard deviation were computed for continuous variables. Internal consistency was used to compute the reliability analyses and intra-class correlation coefficients. The Core Self-Evaluation Scale (CSES) Urdu version's measurement model and factor structure were established using Confirmatory Factor Analysis (CFA) through Analysis of Moment Structures (AMOS-28). The current study used several indices and criteria (including Root Mean Square Error of Approximation (RMSEA), Non-Normed Fit Index (NFI), and Comparative Fit Index (CFI)) to determine the best model fit.

CFA was performed to investigate the original model with a two-factor structure (Positive and Negative CSE) considering the initial model fit criteria, i.e., loading of items ± 0.30 is deemed to meet the minimum level of the required degree of structure interpretation (Hair et al., 2006). Hu and Bentler's (1999) recommended guidelines are followed when estimating the model fit indices of the two-factor model. Moreover, composite reliability and discriminant validity of the Urdu version of CSES were also determined.

The socio-demographic characteristics of the participants included age ($M = 17.56$, $SD = 1.33$), number of family members ($M = 7.56$, $SD = 2.67$), number of siblings ($M = 3.62$, $SD = 2.07$), and birth order ($M = 2.20$, $SD = 1.18$). Among this study's 152 boys (50.7%) and 148 girls (49.3%) participants, 205 (67.7%) belonged to the nuclear family system, while 95 (32.3%) were from the combined family system. Half (50%) of the study participants were drawn from government institutions, and the other half (50%) were drawn from private institutions.

Phase I: Cross-language Validation

Table 1 Reliability Coefficients and Summary of Inter-correlation among Scores on the English Version, Backward Translation, and Urdu Version of CSES (N=30)

Scale Versions	1	2	3	A
1. English	-			.77
2. Backward	.92***	-		.85
3. Urdu	.88***	.90***	-	.90

Table 1 shows inter-correlation between the scores on the English, Backward Translation, and Urdu Versions of CSES suggesting that the English version positively correlates with the backward version ($r = .92^*$) and the Urdu version ($r = .88^*$), indicating excellent reliability (Koo & Li, 2016). Correlations above .90 are generally considered excellent, while values between .80 and .90 indicate good reliability (Cicchetti, 1994). The study findings of the reliability of the three versions of the instrument demonstrated that the value of Cronbach's alpha ($\alpha = .77$) for the English version

is acceptable. The Backward translated version alpha value ($\alpha=.85$) is considered as good (George & Mallery, 2003), whereas, for the Urdu version of the CSES scale, the reliability coefficient value is found to be excellent ($>.90$) (Hulin et al., 2001).

Phase II: Structural Validation of CSES through Confirmatory Factor Analysis

Figure 1 Final Model of CSES Urdu Version (N=300)

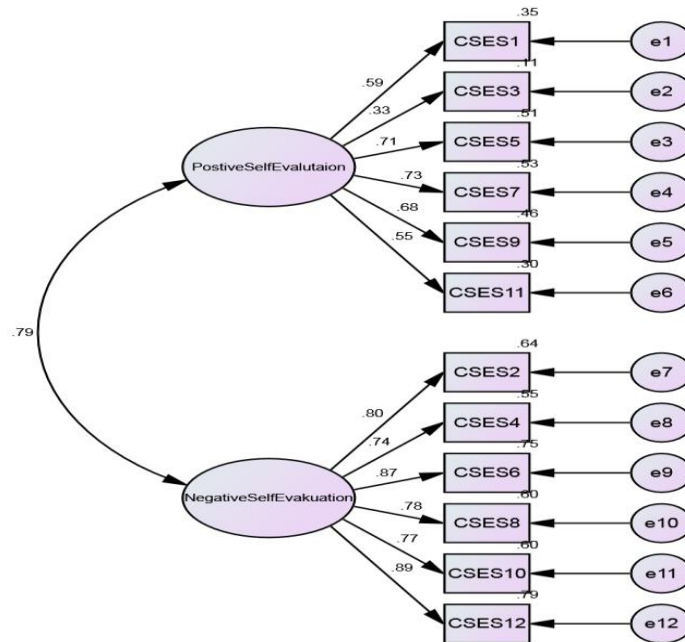


Table 2 Fit Indices of CFA for the Core Self-Evaluation Scale

Model	χ^2	df	χ^2/df	CFI	NFI	TAG	RMSEA	PCLOSE
Model Fit	170.12	53	3.21	.93	.91	.92	.086	.05

Note. N=300, $\chi^2 >.05$, CFI=Comparative Fit Index, NFI = Non-normed Fit Index, TLI= Tucker Lewis Index, RMSEA=Root Mean Square Error of Approximation, PCLOSE: P value of Close Fit.

Table 2 presents the model fit indices for the Confirmatory Factor Analysis (CFA) conducted to validate the measurement model. The chi-square value ($\chi^2 = 170.12$, $df = 53$) with a chi-square/degree of freedom ratio (χ^2/df) of 3.21 indicates an acceptable model fit, as values below 5 are considered indicative of a reasonable fit (Marsh & Hocevar, 1985).

The Comparative Fit Index (CFI) is .93, the Normed Fit Index (NFI) is .91, and the Tucker-Lewis Index (TLI) is .92. According to Hu and Bentler (1999), values greater than .90 suggest a good model fit, indicating that the current model fits the data well. The Root Mean Square Error of Approximation (RMSEA) is .086 with a PCLOSE value of .000. While an RMSEA value below .08 is typically preferred (Browne & Cudeck, 1993), values up to .10 can still indicate a moderate

fit, particularly in complex models. However, the PCLOSE value of .05, which tests the null hypothesis of close fit ($RMSEA \leq .05$), indicates a borderline significant result, suggesting that the model is on the threshold of close fit.

Importantly, the model was retained without any modifications, as the fit indices were within acceptable ranges (Hu & Bentler, 1999). Factor loadings for the items ranged from .33 to .89, all exceeding the recommended threshold of .30, confirming strong item contributions to the latent constructs (Hair et al., 2010). The model's stability and robustness were demonstrated by the fact that neither item deletions nor error covariances were required (Kline, 2015). Overall, the findings show that the measurement model fits the data satisfactorily, hence confirming the scale's construct validity.

Convergent and Divergent Validity of CSES

Table 3 *Discriminant Validity and Composite Reliability of the Translated Version of CSES (N=300)*

	CR	AVE
Positive CSES	0.78	0.43
Negative CSES	0.91	0.65

Note. CR= Composite Reliability, AVE =Average Variance Extracted.

The discriminant validity of the scale derived from the CFA approach was assessed using the factor loading of items. To achieve this, the validity evaluation standards set forth by Fornell and Larcker (1981) were adhered to. CR and AVE are used to assess convergent validity, and the square root estimate of AVE is used to assess discriminant validity. Concerning these criteria, $AVE > .50$ (Fornell & Bookstein, 1982; Fornell & Larcker, 1981) and $CR > .70$ (Lee et al., 2005). The subscales measuring positive and negative core self-evaluation have CR values of 0.78 and 0.91, respectively. Furthermore, the value of AVE for Negative CSES (0.65) is more significant than 0.50, while in contrast, the AVE value of Positive CSES (0.43) is less than 0.50. Fornell and Larcker (1981) state that if a construct's AVE is less than .50 but its CR is more significant than .70, the .40 AVE value is acceptable. Therefore, in line with this criterion, the construct of Positive CSES is not integrated into another construct, and this establishes the specified construct because its composite reliability is more significant than .70, thereby meeting the idea of convergent validity.

Discussion

The current study aimed to translate the CSES measure into Urdu and examine its psychometric properties for the Pakistani adolescent population. The instrument was previously found to be a highly reliable and valid assessment of constructs for the English population (Judge et al., 2003). Most of the targeted population specifically adolescents in our country understands the native language Urdu better (Syed, 2023; Shamim & Allen, 2000) and feels more at ease addressing scale items in it. Hence, there was an acute need to translate such instruments into Urdu. The

instrument was translated according to the rules of the International Testing Commission (ITC, 2019).

Cross-language validity of CSES, an important step of the translation process, is found by comparing the Urdu version of the scale to the original version. For this purpose, the three versions of the scale- English, backward, and Urdu- were administered to adolescents. The findings demonstrated a substantial positive relationship between these three versions of scales (see Table 1). These correlation coefficient values demonstrate that the vocabulary used in the Urdu version of CSES was easy to understand for the target Pakistani population. Moreover, to make sentences comprehensible, words are appropriately combined to explain the scale's construct. Regarding the internal consistency of CSESs, Cronbach's alpha values of all versions reveal that the scale's reliability was found between satisfactory to excellent levels. This result is consistent with the findings of previous studies (Judge et al., 2003; Judge et al., 2004; Stumpp et al., 2010) and provides additional evidence of the CSES's psychometric properties. Consequently, CSES can be offered as a practical instrument to assess the concept of core self-evaluation among adolescents within the cultural context of Pakistan.

The scale's factor structure was validated using CFA and model fit to data acquired from the Pakistani population (see Figure 1). The final model's CFA results demonstrate a good model fit to the data (see Table 2) and yield good model fit indices i.e., CFI, NFI, RMSEA, and χ^2/df (Hu & Bentler, 1999). The final model fit results are consistent with previous investigations of CSES (Gardner & Pierce, 2010; Zenger et al., 2015). The Core Self Evaluation Scale item number 3, "When I try, I generally succeed," has low factor loading (Figure 1), but we retain it because factor loadings greater than .30 are typically considered appropriate for most of the Social Sciences research (Tabachnick et al., 2013; Field, 2013). An item measuring self-efficacy with a low factor loading in the Pakistani cultural context necessitates a sophisticated comprehension of self-efficacy and the cultural dynamics that might affect how Pakistani adolescent respondents perceive and react to the scale item.

As Pakistan is widely regarded as a country with a collectivistic culture (Ali & Ahmed, 2009). Regarding this, an individual's self-efficacy ideas may not be as protruding in Pakistani society, which strongly focuses on family, community, and external factors. Success is also frequently viewed as the product of God's power or the combined efforts of others rather than individual effort solely, as many Pakistanis also incorporate their religious views into their perspective about the world. Furthermore, this notion is supported by Bandura's (1997) concept of self-efficacy, emphasizing the construct's universality while recognizing that cultural influences might affect how people view and react to self-efficacy assessments.

The squared root estimates of AVE for all measured constructs, including Positive CSES and Negative CSES, exceeded their corresponding squared correlation (Fornell & Larcker, 1981). The CFA procedure was utilized to derive factor loadings of items to evaluate convergent validity (see Table 3). Furthermore, the value of AVE for Negative CSES is more significant, while the AVE value for Positive CSES is low. Therefore, in line with the criterion suggested by Fornell and Larcker (1981), the construct of Positive CSES remains distinct from other constructs, confirming its validity. Its high composite reliability supports convergent validity, demonstrating that the construct measures what it intends to assess. The earlier study also demonstrates that both the discriminant validity coefficients meet the required standards (Sharma & Misra, 2017). The results of composite reliability for the current study suggested that the items of the CSE scale measure the

same construct in our cultural setting. On the other hand, the discriminant validity results show that the scale investigates the aspects of the construct that differ from the other constructs.

In conclusion, the CSES was shown to have excellent psychometric features, and CFA helped identify a model that fits well per standardized parameters. The CSES is found to be correlated with various health-related factors like pain, fearfulness, sadness, and subjective well-being, and it is a good prospect for research and screening in these areas (George & Collard, 2024; Gu et al., 2024). Therefore, this measure serves as a valuable tool in clinical, health, and personnel psychology, particularly for adolescents in educational and counseling settings. Its applicability in these domains enhances the assessment of psychological well-being, academic motivation, and emotional resilience among adolescents, reinforcing its significance for both empirical research and targeted interventions.

Implications

For the Pakistani community, translating the Core Self-Evaluations Scale (CSES) into Urdu has broad implications for psychological research, and mental health evaluation, and is considered as a culturally appropriate psychological instrument. The findings of this study have ensured that psychological constructs (here the components of CSE) like self-efficacy, emotional stability, and self-esteem can be measured in a culturally appropriate way further making this instrument more accessible to a broader range of populations. The Urdu version of CSES can not only be used to assess teenagers' emotional stability and sense of self explicitly in general educational settings but the Pakistani clinical and counseling psychologists can also utilize it in the clinical/ counseling settings for evaluation of negative core self-evaluations among those who face mental health challenges like depression and anxiety. This preliminary evaluation could lead to improved diagnosis and treatment planning in specifically clinical settings.

Moreover, this scale can be utilized to explore gender disparities in self-evaluations in the Pakistani context, providing insights into the impacts of gender inequality on psychological well-being. Using the translated scale in educational institutions and organizational settings in Pakistan can not only boost students' well-being but also enhance employees' workplace happiness and promote employee development. This approach can foster both professional and personal growth in the local environment.

Limitations and Suggestions

The current study has a few limitations. The study's data is limited to Sargodha city and cannot be generalized to the rest of Pakistan's adolescent population. To improve the scale's construct validity, the validation study should include a more representative sample of adolescent respondents from other Pakistani provinces. Second, the data was acquired solely from educational institutions; the general population of adolescents was not considered, which limits the generalizability of the study findings.

Conclusion

The study concludes that the English and Urdu versions of CSES have conceptual equivalence with the construct. Moreover, the Urdu vocabulary utilized in the scale is easily understandable, meaningful phrases reflect well the core self-evaluation concept and the items are soundly expressed. The cross-language and structural validation of the Urdu version of the CSES shows that the measure is a psychometrically sound tool for the assessment of core self-evaluation in the Pakistani adolescent population. Thus, the study's findings increase the researcher's confidence in

implementing the CSES's Urdu version to Pakistani adolescents without encountering variations in the scale's concepts and interpretation. In short, CSES is found not to be a culturally bound but equally reliable measure across all cultures.

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