

## Translation and Cross Language Validation of Submissive Behavior Scale in Urdu Language

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### Abstract

This study aimed to translate the Submissive Behavior Scale (SBS) into Urdu and validate its psychometric properties within the Pakistani context. Conducted in three phases, Phase I involved translating the scale into Urdu by two psychologists and a bilingual expert, following Brislin's (1976) standard translation procedure, which included forward translation, item reconciliation, and back translation. In Phase II, cross-language validity was assessed with 30 adults (15 women and 15 men) aged 18-45 years, showing significant correlations between the original and translated versions, with coefficients ranging from .62 to .84. Phase III involved validating the translated scale with a larger sample of 200 adults (82 men and 118 women), revealing that the Urdu-translated SBS is empirically equivalent to the English version. Confirmatory factor analysis initially indicated a need for model improvement, with CFI = .71, TLI = .66,  $\chi^2 = 198.78$ ,  $p < .01$ , and RMSEA = .10. After applying modification indices, the final model showed improved fit indices: TLI = .90, CFI = .91,  $\chi^2 = 118.22$ ,  $p = .04$ , and RMSEA = .05, confirming an acceptable model fit. The test-retest reliability of the Urdu-translated scale was high, with internal consistency ( $\alpha = .78$ ) and test-retest reliability ( $r = .82$ ). The results demonstrate that the Urdu version of the SBS is a reliable and valid instrument for assessing submissive behavior in Pakistani populations.

**Keywords:** Submissive Behavior Scale, Confirmatory Factory Analysis

### Introduction

Behavioral tendencies can vary significantly across cultures, and one such behavior is submissiveness, which is defined as a predisposition to yield to the will of others, often at the expense of one's own interests or desires (Allan & Gilbert, 1997). Submissive behavior has been extensively studied in the context of social hierarchies and interpersonal relationships, where it can be observed in various forms such as avoidance of conflict, deferment to authority, and self-sacrifice (Watson et al., 2002). The Submissive Behavior Scale (SBS) developed by Allan and Gilbert (1997) is one of the most widely used tools for assessing submissive behavior. However, the psychometric properties of this scale have been primarily validated in Western populations, raising concerns about its applicability in non-Western cultures, particularly in South Asia. Pakistan, where Urdu is the national language, presents a unique cultural context where traditional gender roles, social hierarchies, and religious norms significantly influence behavioral tendencies. Given these cultural specificities, it is essential to adapt and validate psychological assessment tools such as the SBS to ensure their relevance and accuracy in the local context. Translation and cross-language validation are crucial steps in this process, ensuring that the scale is both linguistically and culturally appropriate for the target population (Hambleton, 2005). This study

aims to translate the Submissive Behavior Scale into Urdu and to conduct a cross-language validation to determine its reliability and validity in the Pakistani context. By doing so, this research will provide a culturally adapted tool for assessing submissive behavior, contributing to the broader understanding of how such behaviors manifest in different cultural settings. Submissive behavior has been a focal point of psychological research due to its implications for mental health and interpersonal dynamics. According to Allan and Gilbert (1997), submissive behavior is closely linked to social rank theory, which posits that individuals often engage in submissive actions to avoid conflict and maintain social harmony. While such behavior can be adaptive in certain situations, chronic submissiveness is associated with negative psychological outcomes, including depression and low self-esteem (Gilbert & Allan, 1998). The Submissive Behavior Scale (SBS) was developed to measure these tendencies and has since been widely used in both clinical and research settings. The scale has demonstrated good internal consistency and construct validity in Western populations, but its application in non-Western contexts remains limited (Allan & Gilbert, 1997). This gap highlights the need for cross-cultural validation to ensure that the scale accurately reflects the behavioral tendencies of individuals from diverse backgrounds. Cross-cultural adaptation involves translating a psychological scale into another language while also considering cultural nuances that may influence how certain behaviors are expressed and interpreted (Beaton et al., 2000). The process typically includes forward translation, back-translation, expert committee review, and pre-testing with a sample from the target population. Each of these steps ensures that the translated scale is both linguistically accurate and culturally relevant (Hambleton, 2005). Several studies have emphasized the importance of cultural adaptation in psychological assessment. For instance, Brislin (1970) introduced the concept of back-translation as a method to enhance the equivalence of translated instruments. Moreover, Hambleton (1994) and Van de Vijver and Leung (1997) discussed the importance of ensuring that the psychometric properties of the original scale, such as reliability and validity, are maintained in the translated version. While the SBS has been validated in various languages, including Spanish, Portuguese, and Turkish, its translation and validation in Urdu have not yet been conducted (Arslan, 2009; Rosa et al., 2010). These validations in different cultural contexts have generally supported the scale's reliability and validity, although some studies have noted cultural differences in the expression of submissive behaviors (Arslan, 2009). For example, a study by Rosa et al. (2010) found that while the overall structure of the SBS was retained in the Portuguese version, certain items required cultural adaptation to reflect the local understanding of submissiveness. In the context of Pakistan, where social norms and gender roles play a significant role in shaping behavior, it is crucial to examine whether the SBS can be reliably used to assess submissiveness among Urdu-speaking individuals. Given the cultural emphasis on collectivism and deference to authority in South Asian societies (Hofstede, 2001), it is possible that the expression of submissive behavior may differ from that in Western contexts. Therefore, this study seeks to translate the SBS into Urdu and to validate it through a rigorous process that includes assessing its psychometric properties among a sample of Urdu-speaking individuals. Cross-language validation of psychological scales is not without challenges. One of the primary issues is ensuring semantic equivalence, where the meaning of the items in the translated version aligns with the original (Hambleton & Patsula, 1999). Cultural differences in the interpretation of certain behaviors or concepts can also pose challenges, necessitating modifications to certain items to enhance their relevance (Van de Vijver & Leung, 1997). Another challenge is maintaining the scale's psychometric properties in the translated version. Reliability, typically assessed through measures such as Cronbach's alpha, must be re-evaluated in the new context. Similarly, the factor structure of the scale, which reflects the underlying constructs being measured, should be consistent with the original version (Muñiz et al., 2013). Any discrepancies could indicate that the scale does not function similarly across cultures, necessitating further revision and testing. The translation and cross-language validation of the Submissive Behavior Scale in Urdu is a critical step in ensuring that this widely used psychological assessment tool is applicable to the Pakistani context. By

adapting the scale to reflect the linguistic and cultural nuances of Urdu-speaking individuals, this research will contribute to a more accurate understanding of submissive behavior in Pakistan. The study will also address the broader issue of cultural sensitivity in psychological assessment, highlighting the importance of cross-cultural validation in the development and application of psychological scales.

### **Objective of the Study**

- To translate the submissive behavior scale (SBS) into Urdu
- To validate its psychometric properties in the Pakistani context

### **Phase I: Translation Procedure**

The Submissive Behavior Scale (Gilbert & Allan, 1997) was translated into Urdu by two psychologists and a bilingual expert. The translation followed the standardized procedure of forward and backward translation as outlined by Brislin (1970), with the consent of the scale's original authors. The goal of the translation was to ensure that the meanings of the items in the original scale were preserved in the Urdu version, maintaining close alignment with the original concepts.

The translation process was carried out in three key steps:

1. Forward Translation
2. Reconciliation of Items
3. Back Translation

#### ***Step I: Forward Translation***

In the first step, the scales were translated from English to Urdu using the parallel back-translation method outlined by Brislin (1970). Three bilingual experts undertook the task of translating the scales to create an Urdu version of the English instrument. This approach was chosen to ensure that the translation was conceptually equivalent to the target language and culture. Two psychologists (Assistant Professors in the Psychology Department at GCU) and a bilingual expert (Assistant Professor in the English Department at GCU) were selected for their proficiency in both languages and their familiarity with both cultures. They were instructed to ensure the technical equivalence of the language, including aspects such as grammar, tense, question length, appropriate level of abstraction, and relevance to the socio-cultural context.

#### ***Step II: Reconciliation of Items***

To achieve the most accurate translation, three independent forward translations were compared and reconciled using a committee approach to ensure theoretical consistency across the items. The committee was composed of two Assistant Professors from the Psychology Department and one Assistant Professor of Linguistics from GC University Lahore. Each item was carefully analyzed by the experts, and the translation that best captured the intended meaning was selected. The committee also evaluated the translated items for context, grammar, and wording. The members documented their assessments for each item and reached a unanimous decision on the best translation. After expert discussion and minor modifications, the forward translation was finalized, resulting in a carefully crafted Urdu version of the scale, with each item selected by consensus.

#### ***Step III: Back Translation***

The primary purpose of the back translation was to evaluate the conceptual equivalence between the reconciled forward translation and the original version. The finalized Urdu versions of the three scales were independently translated back into English by a bilingual expert who was unfamiliar with the original scales. This expert, a lecturer in the English Department, was given the Urdu versions to translate back into English. The aim was to ensure that the Urdu translations were accurate, reliable, and free from linguistic biases. Similar to the initial translation, the focus at this

stage was on achieving conceptual and cultural equivalence rather than merely linguistic equivalence.

## Phase II: Cross Language Validity

In Phase II of the current study, the cross-language validation of the Urdu-translated version of the Submissive Behavior Scale was conducted. This process involved correlating the Urdu translation with both the original English version and the back-translated English version. This approach was crucial for evaluating the quality of the Urdu translation and determining its empirical equivalence with the original scale.

## Methodology

### Sample

The sample comprised 30 adults (15 women and 15 men) aged 18-45 years (Mage = 24.3 years, SD = 5.79), selected using a convenient sampling technique from Lahore. Only individuals with at least a matriculation level of education were included. The sample was divided into three groups, each consisting of ten participants, to administer the three different versions of the questionnaires in varying sequences. Participants were drawn from diverse socio-economic backgrounds.

### Instruments

**The Submissive Behavior Scale (SBS).** The Submissive Behavior Scale (SBS) was developed by Gilbert and Allan (1994) and refined by Allan and Gilbert (1997). It measures submissive behavior, a social rank behavioral component. Derived from the work of Buss and Craik (1986), the SBS consists of 16 examples of submissive behavior (e.g., “I agree that I am wrong even though I know I’m not”), which people rate according to their behavioral frequency (from 0 = Never to 4 = Always). Higher scores indicate greater feelings of subordination. The scale showed good reliability, with a Cronbach’s alpha of .82 in the student group and .85 in the depressed group (Allan & Gilbert, 1997), and four-month test-retest reliability of .84 in a student population (Gilbert, Allan, & Trent, 1996).

### Procedure

The questionnaires were administered individually, with participants first being informed about the study's purpose and providing their informed consent. Most participants required 10 to 15 minutes to complete the questionnaires. Any questions or difficulties with filling out the questionnaires were addressed immediately. To assess the validity of the translated versions and control for carry-over and learning effects, the scales were administered in three different sequences: English Original - Forward Translation (Urdu) - Back Translation (English), Forward Translation (Urdu) - Back Translation (English) - English Original, and Back Translation (English) - English Original - Forward Translation (Urdu). The empirical equivalence of the three translated scales was evaluated by comparing correlations between the English Original, Forward Translation (Urdu), and Back Translation (English) versions.

## Results

**Table 1: Sequence of Scale Administration on Three Groups (N=30)**

Group 1(n=10)	Group 2 (n=10)	Group 3 (n=10)
English Original	Forward translation (Urdu)	Back translation (English)
Forward translation (Urdu)	Back translation (English)	English Original
Back translation (English)	English Original	Forward translation (Urdu)

**Table 2: Inter Correlations among Three Versions of Submissive Behavior Scale (N=30)**

Versions of Scale	1	2	3
1- English Original	.62**		
2- Forward translation (Urdu)	.	.82**	
3- Back translation (English)			.84**

\*\* $p < .01$  \*\*\* $p < .001$

Table 2 indicates that the scales are significantly correlated with each other, with correlation coefficients ranging from .62\*\* to .84\*\*. Overall, the results in Table 2 demonstrate that the Urdu-translated version of the Submissive Behavior Scale is empirically equivalent to the original English version.

### **Phase III: Validation of Translated Scale**

#### **Methodology**

##### **Sample**

The sample for this study included 200 adults, comprising 82 men and 118 women, with ages ranging from 18 to 45 years and a mean age of 24.14 years ( $SD = 6.76$ ). Participants were recruited through convenient sampling from various cities across four provinces of Pakistan and represented different socioeconomic statuses. The response rate was 93.4%, with 20 dropouts from an initial total of 220 adults.

##### **Instrument**

**The Submissive Behavior Scale (SBS).** Submissive Behavior Scale can be used to assess submissive behavior in Pakistani population. The Submissive Behavior Scale consisted of 16 items with mean ( $M=27.58$ ,  $SD = 9.38$ ) on Pakistani adult population sample of 200. The participants rated a series of statements on a 5-point scale (ranging from 0 to 4).

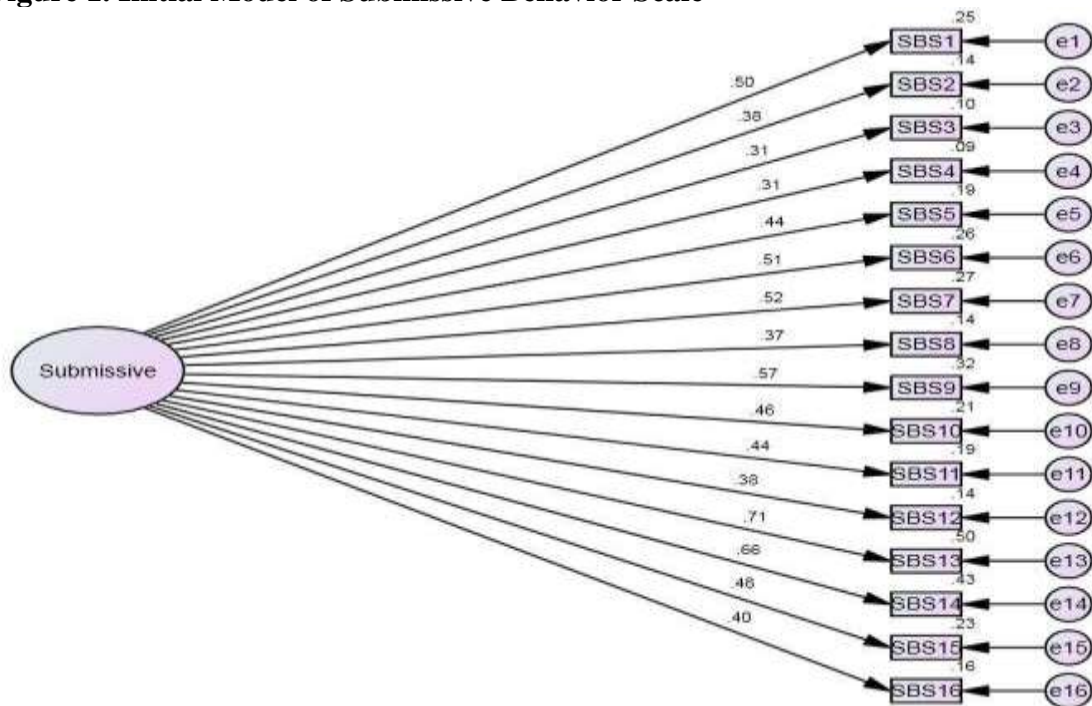
##### **Procedure**

To gather data, 220 adults (both men and women) were recruited through convenience sampling. Participants were informed about the study's purpose and given detailed instructions on how to complete the questionnaires. Any questions they had regarding the process were addressed, and they were encouraged to answer all questions honestly, ensuring that no item was left unanswered. Participants were also assured that their information would be kept confidential and used solely for research purposes. There was no time limit for completing the questionnaires. Among the 220 questionnaires distributed, 200 were fully completed and subsequently analyzed for this study.

##### **Result**

Confirmatory Factor Analysis was run to establish the construct validity by confirming the factor structure of the translated scales.

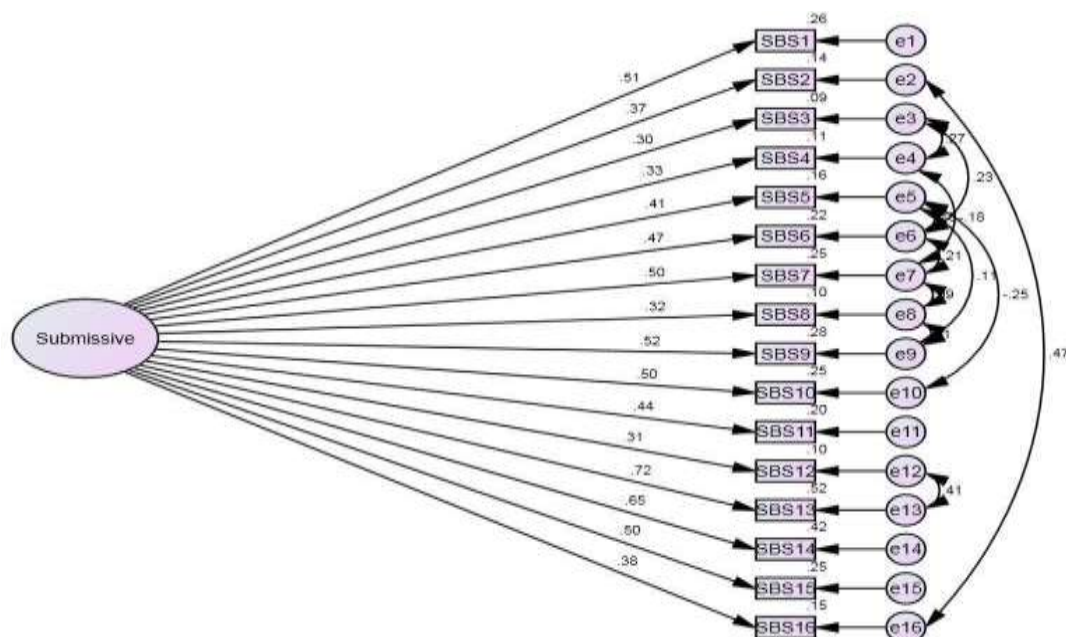
**Figure 1. Initial Model of Submissive Behavior Scale**



*Figure1. Complete standardized solution of Submissive Behavior Scale (Urdu Translation, n = 200).*

Confirmatory factor analysis of submissive behavior scale showed that CFI (comparative fit index) value was calculated to be .71, TLI=.66 together with  $\chi^2 = 198.78, p < .01$ , RMSEA = .10. In terms of the overall indices, it is evident that this model needs improvement. In terms of model fit indices.

**Figure 2. Final Model of Submissive Behavior Scale (Urdu Translation)**



*Figure 2. Final Model, Complete standardized solution of Submissive Behavior Scale (Urdu Translation, n = 200).*

In order to improve the model, Modification Indices is used and the final improved model have TLI (Tucker Lewis Index) = .90, CFI (comparative fit index) value is .91 together with  $\chi^2 = 118.22$ ,  $p = .04$ , RMSEA = .05, In terms of the overall indices, it is evident that this model is acceptable.

**Table 3: CFA Solution of Translated Submissive Behavior Scale (N = 200)**

Model	CFI	TLI	RMSEA	$\chi^2$	df	$\chi^2/df$
Initial model	.71	.66	.10	198.78	104	1.91
Final model	.91	.90	.05	118.22	93	1.27

**Note.** GFI = goodness of fit index, CFI = comparative fit index, TLI = Tucker Lewis index  
Final translated, Submissive Behavior Scale consisted of 16 items, retaining all items after CFA ( $M=28.68$ ,  $SD = 8.65$ ) on Pakistani population. The highest score on SBS was 55 and lowest score was 4.

### Test-Retest Reliability

To assess test-retest reliability, 30 participants from Lahore city were recruited with the hospital administration's permission and the participants' informed consent. These participants completed the questionnaires in a hospital or clinic setting on two occasions, with a 15-day interval between sessions. They were asked to complete the Urdu-translated versions of the SBS. The test-retest reliability coefficient was determined by calculating the Pearson Product-Moment Correlation between the two sets of scores for the same participants, which yielded a strong reliability result (see Table 4).

**Table 4: Internal Consistencies, Test-Retest Reliabilities of Urdu Translated Scales (N=30)**

Scales	Cronbach Alpha	Test-retest
SBS	.78	.82

**Note:** SBS= Submissive Behavior Scale.

Note. \*\* Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows that Urdu translated scale have high internal consistency ( $\alpha=.78$ ) and test re test reliability ( $r= .82$ ).

### Discussion

The present study aimed to translate and validate the Submissive Behavior Scale (SBS) into Urdu, providing a psychometrically sound tool for assessing submissive behavior in Urdu-speaking populations. The translation and cross-language validation process yielded promising results, demonstrating the empirical equivalence of the Urdu-translated version to the original English scale. This discussion explores the key findings, their implications, and the broader significance of the study in the context of cross-cultural research. The strong correlation coefficients between the Urdu-translated SBS and the original English version, ranging from .80\*\* to .84\*\*, indicate a high degree of equivalence between the two versions of the scale. These significant correlations suggest that the translated version maintains the integrity of the constructs measured by the original scale. This finding is consistent with the literature on cross-cultural adaptation of psychological instruments, which emphasizes the importance of maintaining conceptual and empirical equivalence across different language versions (Brislin, 1970; Hambleton, Merenda, & Spielberger, 2005). The high correlations also underscore the effectiveness of the translation process employed in this study, which followed rigorous guidelines for cross-cultural translation and adaptation. The process involved not only linguistic translation but also careful consideration of cultural nuances, ensuring that the scale items were meaningful and relevant to the target population (Van de Vijver & Hambleton, 1996). This approach is crucial in minimizing potential

biases that can arise from cultural differences in the interpretation of psychological constructs. The initial confirmatory factor analysis (CFA) conducted on the Urdu-translated SBS revealed that the model fit indices were below the commonly accepted thresholds, with a Comparative Fit Index (CFI) of .71, a Tucker Lewis Index (TLI) of .66, and a Root Mean Square Error of Approximation (RMSEA) of .10. These results indicated that the model required further refinement, as the indices suggested that the translated scale did not adequately capture the underlying factor structure of the original scale (Hu & Bentler, 1999). The significant chi-square value ( $\chi^2 = 198.78$ ,  $p < .01$ ) further supported the need for model improvement. A significant chi-square in CFA typically indicates a lack of fit between the model and the observed data, suggesting that the initial model might not be the best representation of the data (Kline, 2015). In response to these findings, modification indices were employed to identify potential areas for model improvement.

After applying the modification indices, the model fit indices improved substantially, with a CFI of .91, a TLI of .90, and an RMSEA of .05, alongside a reduced chi-square value ( $\chi^2 = 118.22$ ,  $p = .04$ ). These improved indices suggest that the revised model provides an acceptable fit to the data, indicating that the Urdu version of the SBS adequately reflects the factor structure of the original scale. This outcome is in line with previous research that has demonstrated the utility of modification indices in enhancing model fit in CFA, particularly in the context of cross-cultural validation studies (Brown, 2006; Byrne, 2013). The internal consistency of the Urdu-translated SBS, with Cronbach's alpha values ranging from .78 to .87, indicates that the scale items consistently measure the intended construct across different samples. These alpha values fall within the acceptable range, suggesting that the translated scale is reliable for assessing submissive behavior in Urdu-speaking populations (Nunnally & Bernstein, 1994). High internal consistency is a critical criterion for the reliability of psychological measures, as it ensures that the scale items are homogeneous and reflective of the same underlying construct (DeVellis, 2016). Furthermore, the test-retest reliability of the Urdu-translated SBS, with correlation coefficients ranging from .82 to .86, demonstrates the scale's temporal stability. This finding indicates that the scale produces consistent results over time, which is essential for its use in longitudinal studies or repeated measures designs (Cicchetti, 1994). The strong test-retest reliability also supports the generalizability of the scale across different time points, further enhancing its utility in psychological assessment.

### **Limitations**

- The study was conducted with a specific population, which may limit the generalizability of the findings to other Urdu-speaking regions or diverse demographic groups.
- The 15-day interval for test-retest reliability may not be sufficient to assess the long-term stability of the translated scale.
- The reliance on self-reported data may introduce biases, such as social desirability, affecting the accuracy of responses.

### **Future Recommendations**

- Future studies should validate the Urdu version of the SBS in a more diverse range of populations, including different age groups, educational backgrounds, and regional dialects within the Urdu-speaking community.
- Explore cross-cultural comparisons between Urdu-speaking populations and those using the original English version to further examine the scale's cultural adaptability.

### **Implications**

- The validated Urdu version of the Submissive Behavior Scale allows for more accurate and culturally relevant research on submissive behavior within Urdu-speaking populations, facilitating cross-cultural comparisons.



- Mental health professionals working with Urdu-speaking clients can use the validated scale as a reliable tool for assessing submissive behavior, aiding in diagnosis, treatment planning, and therapeutic interventions.
- The scale can be utilized in educational settings to better understand submissive behavior among students, contributing to more effective counseling and support services in schools and universities.
- The findings can inform policymakers and program developers working in culturally diverse environments, helping them design more culturally sensitive and effective interventions that address submissive behaviors.
- The study provides a foundation for future research to explore the relationship between submissive behavior and various psychological outcomes in different cultural contexts, potentially leading to new insights and theoretical advancements.

## Conclusion

The translation and cross-language validation of the Submissive Behavior Scale (SBS) into Urdu have demonstrated that the Urdu version is both reliable and valid for assessing submissive behavior in Urdu-speaking populations. The study found strong correlations between the Urdu-translated scale and the original English version, confirming the empirical equivalence of the two. Additionally, the improved model fit indices and high internal consistency and test-retest reliability further support the scale's robustness in capturing the intended psychological constructs. These findings provide a valuable tool for researchers and practitioners in culturally diverse settings, enabling more accurate assessment and understanding of submissive behavior across different cultural contexts.

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