

TRANSLATION AND LANGUAGE ADAPTATION OF YOUNG'S SCHEMA QUESTIONNAIRE SHORT-FORM ON CLINICAL POPULATION OF LAHORE, PAKISTAN

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ABSTRACT

Objectives: The current study aims to translate and adapt the English version of the Young Schema Questionnaire Short Form in the national language (URDU) and calculate the psychometric properties of translated Urdu version including reliability and validity analysis of the adult clinical population in Lahore.

Design: cross-cultural adaptation design

Place and Duration of study: Lahore, July 2024 to December 2024

Subject and Method: The sample for pilot testing and psychometric evaluation consisted of 389 participants diagnosed with different mental health disorders (e.g., depression and anxiety), ranging in age from 18-60 (Mean age 27, SD=9.48) years selected from different psychiatric units of hospitals from Lahore, Pakistan through convenient sampling. The present study consists of two phases. In the first phase, forward and backward translation was used as a translation method. In the second Phase, reliability and validity analysis was carried out. Psychometric properties were estimated using Cronbach's alpha coefficient, Internal Consistency, test-retest reliability, content, and convergent validity.

Results and conclusion: Results show an adequate level of psychometric properties, including temporal validity ($r=.79$), convergent validity (.62), and internal consistency (.94). Urdu is the national language of Pakistan. Most of Pakistan's population understands Urdu and faces difficulty understanding and comprehending English. That is the main reason the scale is translated into Urdu to get a more reliable and validated measure for the population of Pakistan in their native language. Hence, the statistical analyses reflect that YSQ-SF is a suitable tool for the Pakistani population.

Keywords: Reliability; Validity; Urdu; Schema; Translation; Adaptation

INTRODUCTION

Early Maladaptive Schemes (EMSs) are pervasive and enduring patterns of thoughts, emotions, and behaviors that develop during childhood and adolescence, significantly influencing an individual's mental health and functioning. These schemas often underlie a range of psychological disorders, including depression, anxiety, and personality disorders. Schema Therapy, a cognitive-behavioral framework developed by Young (1990), emphasize identifying and modifying EMSs to promote psychological well-being. Young (1990) suggests that throughout "childhood and adolescence," one learns to cope with unmet emotional needs or responses to events of "distress, abuse or neglect," subsequently developing indignation and

distress, which are at the origin present within their hypothesis that refers to prematurely established recurring patterns as a forerunner of Early Maladaptive Schemas (EMS).

Bernstein et al., 2012 conducted longitudinal research that Examined how childhood trauma affects adult exposure to EMS. The studies agree with Young's notion that EMS is developed in childhood as a set of behaviors that were once adaptive but now unhealthy. Lee previously studied how young people's use of EMS is connected to their perceptions of parenting practices in a 2018 study. The results suggest that participants perceived authoritarian or permissive parenting more, leading to stem dysfunctional schemas in adulthood (Lee & Lee, 2018). Schmidt et al. conducted a meta-analysis. Randomized controlled trials exploring the effectiveness of schema treatment for EMS across populations. According to Schmidt et al. Their 2020 results showed a marked reduction in negative schemas pre- and post-schema therapy, speaking to the clinical efficacy of targeting EMS in therapeutic settings. Research and reviews focus on the importance of Early Maladaptive Schemes in giving us a glimpse into how childhood events impact adult psychological functioning and the efficacy of therapy targeting EMS to improve emotional well-being.

One suggestion for mediating the association of early life experiences with nature temperament and adult psychosocial or person-logical outcomes is the schema hypothesis proposed by Young et al. (2003). Back then, Young and his colleagues conceptualized that the treatment of youth traumatic experiences was also not merely focused on the present functioning but on their concurrent experiences masked in anticipation as an effective way of managing treatment-resistant depression, severe anxiety, and personality disorders. They subsequently resumed examining Beck's cognitive theory (Cecero et al., 2004).

Young, the founder of Schema Therapy, involves linking an individual's temperament, early experiences, concurrent development of aberrant coping mechanisms, and EMS and current functioning according to Young et al. According to Young et al. (2003), schema therapy, which takes positive lessons from psychodynamic and cognitive behavioral therapies, aims at making clients self-aware of their early maladaptive schemas and, therefore, be enabled to overcome this deficit. Finally, they come across productive outlets to meet the wants they were deprived of in their early years. While the empirical literature has primarily neglected them, Young and colleagues' schema-based connection theories are widely used in a variety of approaches to therapy (Young, 2003).

A broad, enduring theme of memories, feelings, thoughts, and physical sensations regarding the self from childhood, which develop in a person's life and typically involve mental patterns in older individuals, is called early maladaptive Schema (Young, 2003). The Young Schema Questionnaire Short Form (YSQ-SF) is a widely used self-report instrument designed to assess early maladaptive Schemas (EMSs). It comprises 75 items that measure 15 distinct schemas, such as abandonment, defectiveness, and emotional deprivation. This tool has been extensively validated in various languages and cultural contexts, demonstrating robust psychometric properties, including high reliability and validity. However, despite its widespread use, no standardized Urdu version of the YSQ-SF currently exists, limiting its applicability in Urdu-speaking populations, particularly in Pakistan.

Pakistan, with its diverse population and cultural nuances, has a significant need for culturally sensitive and linguistically appropriate psychological assessment tools. Urdu, the national language, is spoken and understood by the majority, making developing an Urdu version of the YSQ-SF crucial for clinical practice and research. The adaptation and validation of this

instrument into Urdu will enable mental health professionals to assess EMSs effectively, facilitating evidence-based interventions tailored to the cultural and linguistic needs of Urdu-speaking individuals.

The present study aimed to translate, adapt, and validate the YSQ-SF into Urdu, ensuring its cultural and linguistic relevance while maintaining its psychometric integrity. This process involved rigorous translation, expert reviews, and psychometric evaluation, including reliability and validity analyses. The findings of this study have significant implications for schema therapy and psychological assessment in Urdu-speaking populations, contributing to the global literature on cross-cultural adaptations of psychological instruments.

Objectives

- To translate the Young Schema Questionnaire- Short Form (YSQ-SF) from its original language into Urdu.
- To make available a native language-adapted version of the test that is culturally appropriate and understandable for the clinical population of Pakistan.
- To establish the reliability of the adapted questionnaire, including internal consistency and temporal stability.
- To determine its convergent validity, compare the Young Schema Questionnaire Short Form original version with the translated Urdu version.

METHOD

Participants

For this study, 389 participants (Men=194, Women=195) diagnosed with different mental health disorders (e.g., depression and anxiety), ranging in age from 18-60 (Mean age= 27, SD=9.48) years, were selected from different psychiatric units of hospitals from Lahore, Pakistan through convenient sampling. Further, Individuals without any diagnosed mental health conditions or those not seeking mental health services were excluded from the study. Participants unable to effectively communicate their experiences due to language barriers, cognitive impairments, or other limitations were excluded. Non-Pakistani nationals were excluded to ensure cultural relevance specific to the country.

Measures

Informed Consent form

Informed consent was a written form in which the purpose and objective of the study were written, and participants were asked for their voluntary participation.

Demographic data sheet

It was a self-developed form that included substantial demographic information, including the Participant's age, education, religion, family system, marital status, mother tongue, family's monthly income, and diagnosed psychological disorder. It also included the Duration of diagnosed psychological disorder.

The Young Schema Questionnaire-Short Form (YSQ-SF)

The Young Schema Questionnaire-Short Form (YSQ-SF) is a 75-item self-report questionnaire that measures 15 early maladaptive schemas that are grouped into five broad domains: Disconnection and rejection, impaired autonomy, impaired limits, other-directedness, and over vigilance and inhibition. Each item is rated on a Likert scale from 1 (completely untrue of me) to 6 (describes me perfectly). Example items are: Generally, people have not been there to give me warmth, holding, and affection. I haven't felt unique to someone (Young, 1994). The YSQ-

SF demonstrated excellent internal consistency as Cronbach's alpha values range from .83 to .96. The test-retest reliability over the two-to-five-week period shows strong stability, with correlations ranging from .71 to .91 (Schmidt et al., 1995).

Depression, Anxiety, Stress Scale-Urdu

Depression, Anxiety, Stress Scale-Urdu (DASS) is a psychological tool designed to measure the severity of symptoms related to depression, anxiety, and stress. It is a shorter version of the original DASS-42 developed by Lovebird et al. in 1995. It was translated into Urdu by Aslam & Colleagues in 2010. It is a 21-item scale with three subscales with 7 items each. Its administration involves presenting these items to respondents, who then rate their responses on a 4-point Likert scale from 0 (didn't apply to me at all) to 3 (applied to me most of the time). Example items are: I couldn't seem to experience any positive feeling at all, I found it hard to wind down, and I was aware of dryness of my mouth. In a study by Aslam & Colleagues (2010), Cronbach's alpha coefficient for the Urdu version of the DASS exceeded 0.80 for each scale.

Procedure

The present research includes three phases: The first phase comprised Translation and Adaptation; the second phase consisted of a Cross-Language Validation process; and the third phase attempted to determine the psychometric properties, including reliability and validity analysis of the scale.

Phase 1: Translation and Adaptation

Selection of Translators. In the following step, an expert panel was formed by selecting only people who had previously been involved in the translation and adaptation processes and had knowledge in these areas. PhD candidates fluent in both languages (English and Urdu) were sought. The panels comprised four qualified PhD experts with sufficient experience translating and adapting scales used in psychology, as well as expertise in mental health and Urdu language, to effectively explain the concepts in the young schema questionnaire.

Forward Translation. In forward translation, one or more translators were approached to translate the scale from source to target language (Hambleton, 2005). Using this technique, two specialists were grouped. Both translators were required to translate the original English version of the young schema questionnaire short form into the target language, Urdu. They were asked to concentrate on preserving the concept of the goods in the English translation. These translations were carried out independently to capture varied interpretations and date variations.

Synthesis and Review. In the next step, the two forward translations were further evaluated by two other experts, and after their mutual decision, they were synthesized into a unified or single version. Discrepancies were identified, and differences were resolved to create a coherent, linguistically accurate, and culturally relevant synthesized version of the young schema questionnaire short form in Urdu.

Back Translation. According to Hambleton (2001) and Brislin (1970), the backward translation method ensures linguistic and mental equivalency of scales. Two highly trained translators with experience in translation and adaptation were requested to engage in backward translation. They were not present throughout the forward translation phase. They considered conceptual equivalence while translating the scale back to the source language, e.g., English. In the next step, the two backward translations were further evaluated by two other experts, and after their mutual decision, they were synthesized into a unified or single version. The final single draft is compared to the original version to identify and remove inconsistencies.

Expert Panel Review. The panel addressed the final text to ensure equivalency in the idea of the construct. The final review evaluates language adequacy, relevance, clarity, comprehensiveness, construct, and psychometric qualities.

Phase 2: Pilot Testing

Participants. The preliminary Urdu-translated version was administered to 100 participants diagnosed with (50 depressive and 50 anxiety) disorders to assess the clarity, cultural relevance, and ease of understanding. The participants were selected through convenient sampling from different government and private psychiatric setups in Lahore, Pakistan.

Procedure. A 75-item 6-point Likert scale ranging from 1 (completely untrue of me) to 6 (describe me perfectly) was used. A demographic sheet and informed consent were attached to the questionnaire. All the essential information, such as age, gender, educational level, monthly income, and family system, was included in the demographic form. The purpose of the research was explained in the consent form, and the participants were asked to sign it after reading it thoroughly. They were also informed of the potential risks and benefits of the study. All participants were given instructions, and they were asked to choose one out of six options based on their personal experiences. The pilot study aimed to check if the scale is culturally appropriate and understandable by the population. Another aim of the pilot study was to find significant weaknesses and ambiguities and help identify any potential problems in scale administration before its finalization. Ethical considerations were followed to collect data, and participants had the right to withdraw from the study at any time. Statistical Analysis. Cronbach's Alpha was calculated to determine the internal consistency of scale.

Reliability and validity assessment

Reliability assessment.

Internal consistency. Cronbach Alpha was used to measure the consistency of responses after all data was collected. This measured whether all scale items measure the same construct.

Tests retest reliability. Anastasia (1997) defines test-retest reliability as administering the same scale to the same individual twice at different times. Data from 50 participants were collected, and the scale was delivered to them after two weeks to assess response stability, which was calculated using Pearson's product-moment coefficient of correlation.

Validity assessment.

Content validity. Content validity shows the extent to which a measuring tool adequately represents the construct it aims to measure. Expert review ensured that the translated young schema questionnaire short form in Urdu retained its conceptual integrity and accurately reflected the constructs of the original tool.

Convergent validity. To assess the degree to which the Urdu-translated Young schema questionnaire short form scale theoretically measures the same construct and reflects the translated version's accuracy, i.e., its convergent validity, an established measure of the original Young schema questionnaire-short form Scale (Young, 1994) was used. Both scales were administered to the same population.

Predictive Validity. To assess the predictive validity of the Urdu-translated Young Schema Questionnaire Short Form (YSQ-SF), the Depression Anxiety Stress Scale (DASS) was used as a criterion measure. Predictive validity evaluates how much a test accurately predicts outcomes theoretically related to the construct it measures.

Statistical analysis. Cronbach's Alpha was used to do reliability analysis, confirming that all scale items measure the same construct. The next step was to utilize Pearson correlation to

determine the relationship between various items. The scale's reliability was then assessed using test-retest reliability analysis. The scale was administered to the same people twice to confirm consistent results. The convergent validity of the test was also examined to determine how comparable it is to related constructs. The predictive validity of the test was also checked to confirm whether the test aligns with established theories, such as how maladaptive schemas lead to emotional distress (e.g., depression, anxiety) with the Depression Anxiety Stress Scale.

RESULTS

Table 1

Demographic characteristics of the study variables.

Variables	Frequency	Percentage
Gender		
Male	194	49.9
Female	195	50.1
Family system		
Nuclear	153	39.3
Joint	236	60.7
Education		
Matric	21	5.4
Inter	246	63.2
Bachelor	122	31.4
Socioeconomic Status		
Below (10000 to 25000)	2	.5
Average (25000 to 100000)	196	50.4
Above 100000	191	49.1
Marital Status		
Single	260	66.8
Married	129	33.2
Diagnosed mental illness		
Depression	194	49.9
Anxiety	195	50.1
Duration of diagnosis		
6 to 9 months,	117	30.1
1 to 2 years, 3	108	27.8
to 4 years	164	42.2

Note. N=389

Reliability Analysis

Table 2

Item refinement of Young Schema Questionnaire Short Form through Cronbach's alpha analysis.

Scale	Cronbach's	Total item
Alpha		
<i>Young Schema Questionnaire Short Form</i>	.94**	75

Note. N=100

The table shows excellent internal consistency, i.e., Cronbach's Alpha (.94) for the 75-item scale.

Table 3

Inter-subscale correlations between 15 schemas of Young Schema Questionnaire-Short Form

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
01	1.00														
02	.70	1.00													
03	.66	.72	1.00												
04	.63	.53	.68	1.00											
05	.66	.66	.69	.62	1.00										
06	.62	.63	.61	.62	.65	1.00									
07	.72	.75	.58	.61	.68	.75	1.00								
08	.57	.56	.51	.54	.54	.63	.61	1.00							
09	.50	.33	.35	.31	.42	.38	.40	.42	1.00						
10	.64	.62	.55	.53	.66	.65	.70	.54	.45	1.00					
11	.38	.35	.30	.38	.39	.53	.44	.44	.27	.33	1.00				
12	.70	.65	.68	.66	.71	.71	.74	.56	.40	.65	.46	1.00			
13	.65	.67	.61	.58	.72	.71	.75	.60	.35	.70	.38	.70	1.00		
14	.67	.63	.63	.61	.69	.70	.68	.59	.42	.59	.37	.65	.70	1.00	
15	.53	.56	.51	.41	.58	.56	.57	.50	.32	.48	.30	.51	.52	.71	1.00

Note. N=200, 1= Emotional Deprivation, 2= Abandonment, 3= Mistrust Abuse, 4= Social Isolation, 5= Defectiveness or Shame, 6= Failure, 7= Dependence, 8= Vulnerability to Harm and Illness, 9= Enmeshment Undeveloped Self, 10= Entitlement Grandiosity, 11= Insufficient Self-control, 12= Subjugation, 13= Self-sacrifice, 14= Unrelenting Standards, 15= Punitiveness.

Table 4

Test-Retest Reliability of Young Schema Questionnaire Short Form

Scale	<i>r</i>	Significance
Young Schema Questionnaire Short Form	.79**	.000

Note. **. Correlation is significant at the 0.01 level (2-tailed), N=50

The table shows a high positive correlation indicating high temporal stability of the scale.

Validity Assessment

Table 5

Convergent validity of Young Schema Questionnaire-Short Form with Original Young Schema Questionnaire-Short Form.

Variables	<i>r</i>	Sig.
Original Young Schema Questionnaire-Short Form	.62**	.00

Note. **. Correlation is significant at the 0.01 level. N=339

The table shows that the translated Young Schema questionnaire-short form scale has a moderately strong positive correlation with the Young Schema questionnaire-short form scale- ($r = .622$).

Table 6

Criterion (predictive) validity of Young Schema Questionnaire-Short Form with Depression, Anxiety, Stress Scale.

Variables	R	Sig.
Depression	.32**	.00
Anxiety	.25**	.00
Stress	.33**	.00

Note. **. Correlation is significant at the 0.01 level. N=339

The table shows that the translated young Schema questionnaire-short form scale has a moderate positive correlation with the Depression and Stress subscale- ($r = .32$, $r = .33$). Whereas, with anxiety, it shows a weak positive correlation but a statistically significant relationship ($r = .25$). The correlation indicates that maladaptive schemas as measured by YSQ-SF are moderately related to depression and stress and weakly related to anxiety.

DISCUSSION

This research aimed to examine, translate, and validate the Young Schema Questionnaire Short Form scale into Urdu. Cultural equivalency and eliminating linguistic barriers are two benefits of this practice. Researchers may use a valid instrument, and the study provides the YSQ-SF validity and reliability, so it can be used with Pakistani individuals who have trouble understanding English. There are a plethora of schema scales accessible due to the construct's popularity in the field of research, but sadly, there is a dearth of Urdu-language measures. Researchers encounter difficulties because of the small number of scales that have been established or translated into national languages. This study sought to address this gap by providing a reliable and valid Urdu adaptation of the YSQ-SF, enabling its use in clinical and research settings. An essential objective of the research was to ensure that the translation process retained the conceptual and theoretical integrity of the original YSQ-SF while addressing the linguistic and cultural nuances of Urdu-speaking populations. The translation was designed to maintain the core constructs of schema theory, including the five schema domains and the 18 individual schemas while adapting the language to make the tool relatable and comprehensible for the target audience.

This entailed engaging processes such as cross-sectional translations and blinding, peer evaluations, and preliminary tests to ensure linguistic and cultural validity. The measures that were effectively addressed include: Another crucial objective was to confirm the psychometric properties of the Urdu YSQ-SF as a measure of the research constructs regarding reliability and validity. Based on the study, internal consistency, test-retest reliability, and content, construct, and criterion validities were to be determined. These analyses were geared towards establishing that early maladaptive schemas are measured equally well by the adapted and original English versions. In addition, the research question of the present paper was to discuss the cultural implications of EMS in the Pakistani context. Since schemas are formed based on cultural attitudes and beliefs, the research examined how schemas are reflected in a collectivist culture that focuses on families, gender roles, and status. To this end, the study was designed to support an understanding of how cultural factors affect by considering the cultural adjustments needed for particular schemas. In doing so, the study expressly intends to advance knowledge of schema theory and its application outside Western contexts and meet the demand for the psychologically meaningful examination of non-Western communities. This research also sought to fill the gap concerning the relevance of academic knowledge regarding applying schema therapy for the Urdu-speaking population.

Reliability

Reliability is one of the fundamental entities that can be found in any study or assessment. In other words, reliability is concerned with the ability of a research or an instrument to provide consistent results. This implies whether a specific measurement device will give the same result each time the testing conditions prevail. Altogether, according to this definition, the reliability of a study guarantees the validity of all obtained outcomes (Tönurist & Hanson, 2020).

As discussed above, first, we translate and adapt the English version of the young schema questionnaire short-form scale. After translation, language equivalence was achieved through internal consistency reliability and test-retesting methods.

Reliability, content, convergent validity, and criterion validity.

Content validity

Content validity shows the extent to which a measuring tool adequately represents the construct it aims to measure. Expert review ensured that the translated young schema questionnaire short form in Urdu retained its conceptual integrity and accurately reflected the constructs of the original tool.

Convergent validity

It's a construct validity type that measures whether a measurement tool correlates well with other measuring tools that examine or assess the same or similar construct. The cross-language validity approach was used to assess scale validity. This method used both the Urdu-translated and English-translated versions of the original scale. The findings demonstrate a substantial association between the two versions. Table 5 displays the scores.

Test-retest reliability

This is an index of a test's reliability that shows how consistently the test will give the same results if taken repeatedly. Test-retest reliability indicates that the instrument has low susceptibility to changes that occur in a way that is not related to the construct being measured, as indicated by the decrease in value after some time by

Bolarinwa (2015). In our study, fifty people were recruited and examined 14 days later. The findings demonstrate very considerable and strong test-retest reliability. The correlation was determined to be .795 (Table 4), indicating strong test-retest reliability. Young conducted the

original YSQ-SF investigation in 1998. Young uses the test-retest reliability approach. After a two-week to one-month gap, he retested the same scale on the same population, and the correlation was found to be between .70 and .90. This is pretty similar to the translated version, demonstrating that if the temporal variations between the two administrations were the same, the results would have been the same.

Criterion validity

In our research, we use criterion (predictive) validity, which involves applying two scales of the same concept to the sample. We employed two conceptually identical constructs (the Depression Anxiety Stress Scale). This conceptually identical construct scale was administered to 239 depression and anxiety individuals. The age range of the sample is between 18 and 60 years. After administering both scales, the Pearson Product Moment Coefficient was calculated. The results indicate how both tests react (Table 6).

Internal consistency reliability (Cronbach's Alpha)

In our study, we employ Cronbach's Alpha Coefficient to assess reliability. The sample (100 depression and anxiety patients) came from various government and private psychiatric departments in hospitals. The test was then conducted in an individual setting. Cronbach Alpha was calculated, and the result reveals adequate internal consistency with a value of .944 (Table 2), which is nearly identical to the original version (.96). Young (1998) used the same strategy in the first edition of the Young Schema Questionnaire Short-Form. This demonstrates that the Urdu-translated version is consistent with the original English version. Hence, we concluded that the translated version shows adequate reliability and validity, which shows that it is a valid and consistent instrument that can be used to measure Young Schema Questionnaire short form in Urdu.

CONCLUSION

Hence, we concluded that the translated version shows adequate reliability and validity. It is a valid and consistent instrument that can be used to measure the Young Schema Questionnaire Short Form in Urdu and help prevent possible language and cultural barriers during assessment.

Limitations and Future suggestions

The current study's data was limited and only collected from one region of Lahore, Pakistan, so it cannot be generalized to the whole population. In the future, samples should be collected from all over Pakistan. The target population covered mainly educated, urban Urdu-speaking people, which does not fully generalize the whole population of people from rural areas or different groups. Further research should involve participants of all ages, economic statuses, and education levels and across the regional divides. It will help to reduce sample biases and be utilized as the representative sample for the whole population. Despite this limitation, our study provides a valid and reliable Urdu language scale and the base for developing future scale construction in this domain. It is also helpful for professionals and educational figures interested in studying schemas' etiology and development.

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