Translation and validation of Gujarati version of Rosenberg Self-Esteem Scale

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Abstract: The Rosenberg Self-Esteem Scale (RSES) is widely used for measuring self-esteem. Self-esteem is a psychological trait that may develop in interaction with dentofacial esthetics. It has been administered in at least 53 nations and translated into at least 28 languages. The study aimed to translate the English version of RSES into Gujarati language and validate a translated Gujarati version of RSES. The English version of RSES was translated into Gujarati language using the forward-translations and back-translation method according to WHO. After translation, the questionnaire was completed by 242 individuals (123 males and 119 females) aged 18–48 years (mean age: 28.59+7.68 years). Unpaired t-test was done to compare the results of two questionnaires. The results on the reliability and validity of the Gujarati version of RSES were measured using Internal reliability index Cronbach's alpha and Pearson Correlation coefficient test. All the 10 questions showed no statistically significant difference between the English version of RSES and the translated Gujarati version of RSES. Results of Unpaired t-test (P = 0.7804) were statistically insignificant. The results on the reliability and validity of the RSES were satisfactory as the internal reliability index Cronbach α was 0.98 and Pearson Correlation coefficient was 0.965 suggesting that the translated Gujarati version was highly correlated to the original English version. The translated Gujarati version of RSES demonstrated good reliability and validity. Its sufficient discriminative and evaluative psychometric properties provide the theoretical evidence for further use in research study among Gujarati population.

Key Words: Validity, Reliability, Rosenberg Self-Esteem Scale.

Introduction:

In social psychology, major research is being done on Self-esteem.[1] Its importance is so much that sometimes low self-esteem is seen as the cause of all bad and high self-esteem as the cause of all high-quality.[2] Self-esteem is related with despair, nervousness, inspiration and general happiness by one's existence.[3] The idea is well-known that raising a human being's self-esteem would be useful for human and culture.

By definition self-esteem is a person's approach in relation to himself or herself, relating self-estimation beside an optimistic or unenthusiastic dimension.[4] Self-esteem consigns to a personality's on the whole constructive appraisal to the self.[5] It is collectively made up of two different dimensions, i.e. competency and value. The competency dimension refers to the extent to which individuals perceive themselves as competent and efficient. The value dimensions refer to the extent to which persons believe they are the people to be valued.

When discussing about Quality of living and psychosocial happiness, the self-esteem topic is obligatory. The evaluative element of self represents self-esteem. Individuals with high self-esteem are more pleased by their life; they are approximated to be more contented, fewer unhappy, and more knowledgeable at occupation or school, and they are emotionally and bodily healthier.[6]

The Rosenberg Self-Esteem Scale (RSES) is usually used to measure self-esteem; it is administered in 53 nations and translated into 28 languages.[7] The RSES contains ten questions out of which 5 are positive and 5 are negative. These questions use a Likert scale in which the answers for the positive and negative items are weighed independently on a four-point scale, with strongly agree, agree, disagree, and strongly disagree. The total sum of the scale varies from 0 to 30. The elevated the score, more is the self esteem.

After searching the literature databases such as Pubmed, Scopus, Sciencedirect, Ebscohost, etc. till 31st May, 2016 didn't found any study on the translated Gujarati version of Rosenberg Self-Esteem Scale. As a result this scale was not able to be used in Gujarati population who knows only Gujarati language. Therefore the present study was taken up to translate the Rosenberg Self-Esteem scale from English to Gujarati language. Thus, this Gujarati version of RSES would be useful to measure the self-esteem of Gujarati population, who understands only Gujarati language.

The study aimed to translate the RSES from English to Gujarati language and validate a translated Gujarati version of RSES.

Materials and methods:

An observational study design was adopted. The study was started after obtaining the ethical clearance from Institutional Ethics Committee. The participants were selected based on the inclusion and exclusion criteria designed for the study. These participants were registered for the study after obtaining the written informed consent form. The participants were provided with a participant information sheet. The samples included in our study were 242 individuals. The inclusion criteria were subjects aged 18 years and above and knowledge of both English and Gujarati language. Subjects who were not willing to take part in the study were excluded.

Process of translation of questionnaire:

For translation of Rosenberg Self-Esteem Scale from English language to Gujarati language, a forward-translations and back-translation method according to WHO[8] was used. This method included forward translation, expert panel, back-translation and testing of the questionnaire.

Forward translation

A translator who knows both English and Gujarati language was chosen to translate the questionnaire from English to Gujarati language.

Expert panel

A bilingual (in English and the Gujarati language) expert panel was convened which included the forward translator, health experts, as well as professionals with skill in questionnaire development and translation. The changes were done in the translated questionnaire based on the suggestions of the expert panel.

Back-translation

The obtained questionnaire was back translated into English language by an independent translator, who knows both English and Gujarati language and had no information of the original questionnaire which was in English language.

Testing of the questionnaire

A Gujarati version of Rosenberg Self-Esteem Scale was given to 242 participants who fulfilled the inclusion and exclusion criteria. After a week, the same participants were also given the English version of Rosenberg Self-Esteem Scale to fill it.

Results:

Descriptive statistics:

The subjects recruited in the study were 242 individuals out of which 123 were males and 119 were females (Table 1). The age of the sample ranged from 18–48 years with mean age of 28.59+7.68 years (Table 2).

Table 1: Frequency of sex

Sex	Frequency (N=242)	Percentage (%)
Females	119	49.17
Males	123	50.83

Table 2: Age group

	N	Min.	Max.	Mean	Std. Deviation
Age (years)	242	18	48	28.59	7.68

Analysis of Dependence:

All the 10 questions showed no statistically significant difference between the English version of RSES and the translated Gujarati version of RSES. The results of Unpaired t-test were statistically insignificant (P = 0.7804) (Table 3, 4).

Table 3: Unpaired samples t-test

	N	Mean	S.D.	95% CI	
				Lower	Upper
English questionnaire	242	20.06	6.80	19.20	20.92
Gujarati questionnaire	242	20.23	6.55	19.40	21.06

Table 4: Comparison of means with Unpaired samples t-test

Mean difference	S.D.	95% CI of difference		t	df	*P* value
		Lower	Upper			
0.16	0.60	-1.02	1.36	0.27	482	0.78

Inferential statistics

The convergent validity and reliability analysis were done.

Convergent validity

The Pearson Correlation Coefficient was 0.965 which suggests that the two questionnaires were significantly positively correlated (Table 5).

Table 5: Pearson Correlation Coefficient

N	Correlation coefficient r	95% CI for r		*P* value
		Lower	Upper	
242	0.965	0.95	0.97	*P*<0.0001

Reliability analysis:

The internal reliability of the tool was evaluated with Cronbach's alpha. This analysis showed high consistency of the tool, as the index had a value of 0.9825 which is larger than 0.7 necessary for the overall consistency of each instrument (Table 6).

Table 6: Internal reliability consistency Cronbach's alpha

N	Cronbach's alpha	95% lower confidence limit
242	0.9825	0.9784

Discussion:

The aim of this study was to translate, validate, and analyze the psychometric properties of RSES in a sample of Gujarati population. The results show that the scale presents excellent levels of internal reliability. The samples recruited in the study were 242 individuals out of which 123 were males and 119 were females (Table 1). The age of the sample ranged from 18–48 years with mean age of 28.59+7.68 years (Table 2).

Unpaired t-test was done to compare the means of the two questionnaires. There was no statistically significant difference in all the 10 questions between the English version of RSES and the translated Gujarati version of RSES. The results of Unpaired t-test were statistically insignificant (P = 0.7804) (Table 3, 4).

The results demonstrated a high and considerable positive association between the two questionnaires in terms of construct validity. The Pearson Correlation Coefficient was 0.9656 which suggests that the two questionnaires were significantly positively correlated (Table 5). The present study corroborates the results of validation studies carried out in other countries and with altered self-concept tools.[9]

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Further studies should be undertaken to learn the dynamic configuration of RSES in Gujarati people taking into consideration the sex variable to find out whether there are diverse structures according to sex. On the former side, it would be exciting to contrast a positive version of the tool with the original version and a negative version in diverse samples (clinical, educational, and work settings). It is obligatory to carry out cross-cultural studies with similar samples by means of different variables for instance self-perception, age, sex, or level of studies to set up the construct validity of the tool and its effectiveness to recognize dissimilarities in self-esteem in diverse socio-cultural context.

Our results validate the uni-dimensional construction of the RSES planned by Rosenberg (1989). Internal reliability and test-retest association were excellent, supporting the consistency of the scale. Additionally, we deem that there is adequate proof to support the construct validity of the scale. Therefore, the results give validation to make use of RSES in the Gujarati population to measure self-esteem.

Conclusion:

The translated Gujarati version of RSES confirmed excellent consistency and strength. Its satisfactory discriminative and evaluative psychometric properties offer the hypothetical evidence for further application in research study among Gujarati adults.

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