

Development of the Hindi version of a Self-Report Altruism Scale

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Summary—The present study sought to develop the Hindi version of the Self-Report Altruism Scale (SRA-scale) devised by Rushton, Chrisjohn and Fekken (1981; *Personality and Individual Differences*, 2, 292–302). Statements of the original SRA-scale, apart from being adapted to Indian culture, were presented in general response format wherein the subjects could “imagine” themselves in different situations and report the amount of help they could render. The Hindi SRA-scale bore high equivalence to the original scale and was found to have high internal consistency, split-half and test–retest reliability, criterion-related and construct validity. The scale promises to be a useful tool for measuring altruism in the Indian milieu.

INTRODUCTION

The belief that individual differences in altruistic behavior could be directly measured through self-report questionnaires (Rushton, 1980) led Rushton, Chrisjohn and Fekken (1981) to construct the Self-Report Altruism Scale (SRA-scale). The SRA-scale contains 20 statements that *Ss* endorse in view of the frequency with which they have engaged in several altruistic acts using the categories “never”, “once”, “more than once”, “often”, and “very often”. The goal was to measure altruism in a behaviorally concrete manner. The SRA-scale was found to have psychometric stability, internal consistency and discriminant validity.

The SRA-scale was found to predict such criteria as peer-ratings of altruism, completing an organ donor card, and paper-pencil measures of prosocial orientation. Later in a study of 573 pairs of twins, individual differences in the SRA-scale were found to be about 50% heritable (Rushton, Fulker, Neale, Nias & Eysenck, 1986). However, the possibility was raised by Rushton *et al.* (1981) that the scale may not represent a maximally effective way of measuring altruism by virtue of its specificity. Respondents were constrained to make highly particular statements as to their past behavior. Such concrete and specific items were found to be predictive of each other and of global measures. Notwithstanding this, Rushton *et al.* (1981) went on to propose that it might be more useful to employ a more general and global response format than the one originally used to develop the SRA-scale. For example, one could ask respondents to “imagine” they were in a situation where they “could” engage in the sort of items on the SRA-scale and then to estimate the probability that they would do so.

Following this line of thinking, an attempt was made to develop the Hindi version of the SRA-scale, in a generalized format, which could be suitable for use in the Indian culture.

METHOD

Translation and modification of the SRA-scale into Hindi

The initial phase of the Hindi translation was completed with the help of teachers from university departments and colleges situated at Rohtak (Haryana), India. In total, 10 teachers acted as judges, their subjectwise break-up being: English = 2, Hindi = 2, Sanskrit = 2 and Psychology = 4. While the original scoring system, as used in the SRA-scale, for determining altruism was simply retained in translated form, a tentative Hindi translation of the SRA-scale was prepared after incorporating an imaginary situation in each statement as suggested by Rushton *et al.* (1981). In order to stimulate respondents' imagination, care was taken to replace original statements characteristic of Western culture with those typifying Indian culture and lifestyle and also to relax the rigidity about the sex of the “needy” person involved in the imaginary situations so as to facilitate identification and genuine reply.

The finally-prepared statements were given to judges with the request to review each Hindi statement *vis-à-vis* the English one and give their views regarding the adequacy of translation and appropriate modification. For certain statements, multiple choice words were given and the judges ticked the most appropriate choice word. The 20 statements were modified according to the majority view of the judges. The final version of the Hindi SRA-scale as translated into English is given in Table 1. Opinions from judges were also taken to finalize the English translation of the adapted Hindi SRA-scale and the same translation was used by Senedjani (1989) in a cross-cultural study of altruism in Indians and Iranians.

Standardization of the Hindi SRA-scale

The Hindi SRA-scale, in its finalized form, was administered along with the original English SRA-scale, to 100 bilingual postgraduate students (50 males, 50 females) of the Maharshi Dayanand University, all with a good knowledge of both English and Hindi. The scales were presented in a counterbalanced order over two sequences (Sequence 1: Hindi SRA-scale followed by English SRA-scale; Sequence 2: English SRA-scale followed by Hindi SRA-scale) to 50 *Ss*, assigning an equal

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Table 1. English translation of the Hindi SRA-scale with instructions to read and imagine a situation and tick the answer on the right that conforms to the frequency with which you 'could' engage in the helpful behavior

Situations	Answer categories				
	Never	Once	More than once	Often	Very often
1. A stranger's scooter is stuck in a pit. Would you help him/her take it out?					
2. A person needs some loose currency. Would you make it available to him/her?					
3. A poor man does not have sufficient clothing. Would you give a few clothes to him in charity?					
4. An injured person needs a blood transfusion. Would you donate blood to save his/her life?					
5. Someone has lost the way. Would you put him/her on the right path?					
6. A few orphan children have come to seek your help. Would you contribute some money to them?					
7. A religious institution needs a few volunteers. Would you serve it without remuneration?					
8. At a railway platform you find a weak man/woman to be unable to lift a heavy load. Would you lend him/her a helping hand?					
9. The shop-keeper has handed to you more change than was due. Would you return the extra amount?					
10. A stranger approaches you for monetary assistance. Would you give him/her a little money?					
11. An old fellow is unable to get on to the bus all by himself/herself. Would you help him/her?					
12. One of your acquaintances whom you do not know well wants to borrow your cycle. Would you lend it to him/her?					
13. You are rushing on your motorbike/scooter to do an urgent work. If a stranger requests you for a lift, would you oblige him/her?					
14. To help handicapped children, items like fancy candles, greeting cards, etc. made by them are being sold. Would you buy such presentations?					
15. Someone needs to catch a train urgently. Would you let him take your place in the queue to get a ticket soon?					
16. A classmate, who is not your friend, needs your help in studies. Would you lend him/her your notes?					
17. A disabled person is unable to cross the street. Would you help him/her get across?					
18. Your neighbour's son/daughter is not good at studies. Would you tutor him/her without charging a fee, if requested?					
19. In an overcrowded bus, a lady is finding it difficult to travel while standing. Would you offer her your seat?					
20. Your friend is shifting to a new house. Would you help him/her move belongings to the new place?					

number of males and females to each sequence. Subsequently, mean, SD and *t* ratio for scores on the Hindi and English SRA-scales were obtained. Equivalence of both the scales for Ss randomly assigned to Sequences 1 and 2 was also evaluated for each sequence separately and both the sequences combined. Differences in scores obtained on the two SRA-scales over different sequences were also determined by means of the *t* test.

The internal consistency reliability of the Hindi SRA-scale was determined by means of coefficient alpha reliability and item-total correlations for each of the 20 items. The split-half reliability of the Hindi SRA-scale was also found out by computing correlations between scores obtained by 100 Ss on the odd- and even-numbered items of the scale, correcting these correlations later using Spearman-Brown. To obtain stability coefficients of the said scale, correlations between the test and a 40 day retest for 25 Ss was obtained.

According to Edwards (1959), pure criterion measures are generally not available and, as a result, self-ratings or ratings by peers are frequently substituted for the pure criterion measures. Hence, the criterion-related validity of the modified SRA-scale was determined by means of correlating the altruism scores of 25 Ss with the ratings of their peers. The peers (one for each of the 25 Ss) were asked to rate the Ss on a 5-point scale in view of four global ratings of altruism, i.e. how caring, how helpful, how considerate of others' feelings and how willing they were to make a sacrifice? In addition, a general assessment of Ss in respect of different aspects of altruistic behavior as depicted in the SRA-scale was solicited from the peers. Scores obtained on the Hindi SRA-scale were also tested for concurrent validity in terms of their correlation with another measure of altruism, viz., the Altruism Scale constructed and standardized by Rai and Singh (1984) that was given to 25 Ss pretested on the Hindi SRA-scale.

In order to further determine construct validity, scores on a test may be validated against those on other measures of the same theoretical construct or trait. Accordingly, in the present study, construct validity of the Hindi SRA-scale was determined by means of validating the altruism scores of 25 Ss against their performance in the form of suggestions contributed to help rehabilitate drug addicts. The dependent variable was the amount of time (minutes) taken to write down suggestions as the Ss were found to differ little in terms of number of suggestions contributed.

Table 2. Means, SDs and *t* ratios of scores obtained by males (*n* = 50) and females (*n* = 50) on the Hindi and English SRA-scales

Ss	Hindi SRA-scale		English SRA-scale		<i>t</i>
	Mean	SD	Mean	SD	
Males	74.70	12.96	56.86	19.53	5.39*
Females	72.08	11.02	46.92	12.13	10.89*
Males + Females	73.39	12.04	51.89	17.60	10.09*

**P* < 0.01.

RESULTS AND DISCUSSION

Table 2 shows the means, SDs, and *t* ratios of scores obtained by male and female Ss, separately and together, on the Hindi and English SRA-scales. As is evident, both males and females, separately as well as together, obtained bigger mean altruism scores on the Hindi SRA-scale as compared to their scores on the English SRA-scale (see also Erdle, Sansom, Cole & Heapy, 1992). Contrary to common findings obtained in altruism studies, the comparatively bigger mean altruism score of males could be attributed to the fact that the present study was conducted by a female investigator whom the male Ss may have tried to impress by giving more altruism responses. In retrospect it would have been useful to have employed both male and female testers, as well as a Lie Scale (Eysenck & Eysenck, 1975) to control these variables. There may also be cross-cultural differences in social desirability responding and personality (Barratt & Eysenck, 1984).

Apart from the mean altruism scores which were higher for the Hindi SRA-scale, the SDs obtained by the Ss were found to be higher for the English SRA-scale than the Hindi SRA-scale. Clearly, Ss were more responsive to, and showed less variability with regard to, the Hindi SRA-scale which was quite natural because Hindi was their mother-tongue. Significant *t* ratios for all the three sets of mean scores also substantiate high familiarity of Ss with the Hindi SRA-scale items. Significant mean differences could further be attributed to the fact that the Hindi SRA-scale was well-improvised, with different imaginary situations incorporated in its items which elicited higher altruism responses. Further analysis revealed the equivalence of the two SRA-scales in scores obtained over Sequence 1 and 2 (each entailing 50 Ss) and Sequences 1 and 2 combined (entailing 100 Ss).

Ss gave a higher mean altruism score on the Hindi SRA-scale ($\bar{X} = 73.88$) than the English SRA-scale ($\bar{X} = 53.28$) over the two sequences, separately and combined ($t = 10.33$; $P < 0.01$). The sequence of presentation of the two scales made little difference in terms of mean altruism score obtained on them as the mean scores under different sequences were comparable in magnitude. The mean differences in scores obtained by Ss on the two scales were found to be highly significant as evidenced by all the three *t* ratios significant beyond the $P < 0.01$ level which could be attributed largely to the different formats in which the two scales were presented. However, despite being significantly different, both the sets of altruism scores were highly correlated together reflecting their basic similarity with each other.

The internal consistency (coefficient alpha) reliability in the case of the Hindi SRA-scale items for the total sample of 100 Ss was found to be 0.83. The item-total correlations for the 20 items were 0.46, 0.38, 0.55, 0.45, 0.40, 0.50, 0.40, 0.66, 0.43, 0.54, 0.40, 0.19, 0.48, 0.41, 0.32, 0.39, 0.54, 0.33, 0.18 and 0.51, respectively. The high coefficient alpha and high item-total correlations signify that the items constituting the Hindi SRA-scale are quite homogeneous and that the Ss showed consistency of performance across items. The corrected split-half reliability correlation coefficient for the Hindi SRA-scale was found to be 0.73 and the test-retest reliability over 40 days was 0.72.

Finding out the criterion-related validity of the Hindi SRA-scale involved correlating altruism scores of 25 Ss obtained on the scale with their peer-ratings which yielded a highly significant correlation ($r = 0.60$, $df = 23$, $P < 0.01$) in view of four global ratings of altruism and a general assessment of altruistic behavior. In their studies of deceit, self-control and organization of character, Hartshorne, May and Maller (1929) pointed out that the correlations between test scores and ratings for intelligence seldom run higher than 0.50. The correlation between the original SRA-scale and the peer-rated SRA-scale altruism scores was 0.35. In the present study, a higher correlation obtained between the self- and peer-rating in altruism indicating a better than chance agreement between one's own report of his or her altruistic behavior and his/her peers' ratings. The correlation ($r = 0.42$, $df = 23$, $P < 0.01$) obtained between the Hindi SRA-scale and the Altruism Scale constructed by Rai and Singh (1984) demonstrated additional validity of the Hindi SRA-scale.

As indicated earlier, for determining the construct validity of the Hindi SRA-scale, the present study used an altruism simulation situation that involved Ss help obtained in the form of suggestions written to facilitate the rehabilitation of drug addicts. The altruism scores of 25 Ss significantly correlated with the mean time (minutes) they gave to write suggestions ($r = 0.45$, $df = 23$, $P < 0.01$).

From the foregoing discussion, it can be concluded that an internally consistent, reliable and valid Hindi version of the Rushton *et al.* (1981) SRA-scale has been developed. The Hindi SRA-scale can be freely used in the Indian culture.

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