

Translation and Contrasted Group Validation of Social Dominance Orientation (SDO7-16 Items) Scale into Local Language

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ABSTRACT

The study was primarily concerned with the translation of Social Dominance Orientation (SDO7-16 items) scale into local language. The study was conducted to examine the reliability and validity of the Urdu translated scale. The 250 Pakistani students (59 males and 191 females), with the age range of 19-35 years were selected. The significantly comparable mean $M = 41.09$ and standard deviation $SD = 16.20$ were found. The results revealed significant, positive correlations ($r = .87$) between items. The contrasted group validation for socio-economic status on social dominance was analyzed for the present study sample. The results show that there is a relationship between socio-economic status and social dominance orientation-dominance (SDO-D) among adolescents. The implications of Urdu version of SDO-7 scale in educational, social, and research settings are discussed in the study.

Keywords: Social dominance orientation, Confirmatory factor analysis, contrasted group validation, Dominance.

INTRODUCTION

The social dominance theory related studies have taken much importance in the field of social psychology. The important construct of this theory known as Social Dominance Orientation (SDO) is widely used in researches related to social psychology. The predicting role of SDO was found significant in men's reaction toward romantic rejection and female sexuality related attitude. The hostile sexism and belief about subordinate role of women essentiality to be disciplined were explained as mediators (Kelly, Dubbs, & Barlow, 2015). The role of SDO is considered a powerful construct in predicting intergroup behaviors and attitudes. Although SDO works as a unitary construct in social situations, it consists of two dimensions: SDO-D and SDO-E. The preference to dominate others for some groups is called SDO-Dominance, while a preference for intergroup relations having non-egalitarian behavior is called SDO-Egalitarianism (Ho et al., 2012). Both dimensions are theoretically proved through criterion validity and confirmatory factor, so they are best predictors of intergroup outcomes (Ho et al., 2015).

The association of SDO and prejudice was discussed while highlighting hierarchy-attenuating national norms about colorblindness and multiculturalism (Levin et al., 2012). The reactions of Black and White claimants of discrimination may be differentially predicted by SDO. The evidence suggests the

idea about their reactions that they may serve a role in challenging or reinforcing racial inequality respectively (Unzueta, Everly, & Gutiérrez, 2014).

The scores on SDO reflect the attitude of individuals towards the specific context a person is having in mind during completion of scale. A generalized orientation towards a hierarchy based on group is represented by SDO. Any specific instructions for participants regarding SDO are not dependent on whether to think in general about certain group or not (Kteily, Ho, & Sidanius, 2012). The mediating role of SDO between Political conservatism, the denial of gender related anthropogenic climatic change, and male related conservatism was more comprehensively admired (Jylhä, Cantal, Akrami, & Milfont, 2016).

Conformity to masculine norms and SDO predicted more sexism toward women in online video game environments (Fox & Tang, 2014). The role of social dominance orientation (SDO) as a predictor of men's reactions to romantic rejection and attitudes toward female sexuality. Two mediators explained this relationship: hostile sexism and the belief that subordinate women need to be disciplined (Kelly, Dubbs, & Barlow, 2015). The hierarchy regulating strategies are reflected in having immigrant outgroup offenders and differential judgments of national related in-group (Green, Thomsen, Sidanius, Staerkle', & Potanina, 2009).

The role of Popularity among peer groups of adolescents can be predicted by SDO (Mayeux, 2014). Men as compared to women express higher levels of SDO. In this way, SDO is considered as a variable of individual differences that reflect support for unequal, hierarchical environment among groups. The gender differences in SDO are produced by the Social dominance theory of gender and the complexity of social-contextual forces (Schmitt & Wirth, 2009).

During the process of translation, the linguistic and conceptual understanding of scale items must be maintained (Geisinger, 1994). Before that the adaptation of instrument must be valid (Fouad, 1993). Due to the growing concern of social dominance orientation in social psychology related studies, the cross-cultural validity and translation in different languages need to be established. So, the present study was dedicated to translating and adapting the social dominance scale into official language of Pakistan i.e. Urdu.

The present study was intended to establish the validity of Urdu version of SDO scale by the analysis of psychometric properties. The scale was translated for the MPhil thesis to

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highlight the role of social dominance orientation in endorsing attitude towards girl child marriages. The data was collected from Islamabad, the capital city of Pakistan. To establish the psychometric properties of translated scale was the main concern of present study. In addition to this, the contrasted group validation for SES was also explained in relation with dimensions of SDO.

The translation and adaptation of social dominance orientation scale was also necessary for cross cultural comparison of prejudice and discriminatory practices. So, the translation and cross-cultural Urdu version of present scale must be available for the researchers of Pakistan whoever may use it to address the issues of discrimination and dominance. The study followed the main objective such as:

1. To translate social dominance orientation scale in to Urdu language and establish psychometric properties in Pakistani context.
2. To identify the contrasted socio-economic status group validation of Social Dominance Orientation scale.

METHOD

The 250 educated adolescents (59 males & 191 females) under the age range of 19-35 years with ($M = 1.76$, & $SD = .42$) and studying from Undergraduate to post graduate were selected for alpha reliability of present version. The bilingual adolescents were selected having better understanding of both Urdu and English languages.

Measure

Social Dominance Orientation (SDO) Scale

The SDO scale originally developed by Pratto, Sidanius, Stallworth, and Malle (1994). The short version was developed by Ho et al. (2012) consisting 16-items measures the two dimensions of social dominance orientation i.e. Social Dominance Orientation-Dominance and Social Dominance Orientation-Egalitarianism. Participants were evaluated on their level of agreement on each item on a scale ranging from 1 (*strongly Oppose*) to 7 (*Strongly Favor*). The scale was developed as two-dimensional including eight reverse-scored items (*item nos.* 5, 6, 7, 8, 13, 14, 15, and 16). After recording these items, the average of all items was computed to create an overall SDO score for each participant. Higher scores in the first 8 items of SDO indicated the participant's greater desire that they have super-ordinate hierarchy positions compared to those who have subordinate positions; especially in hierarchy-enhancing (HE) legitimizing myths while on the other last 8 items of SDO indicated the hierarchy attenuating (HA) LMs. The alpha reliability of SDO is .95. In Norwegian study conducted by Rise, Aarø, Halkjelsvik, and Kovac (2014) with the sample of labor community on the role of responsibility judgments; who reported the alpha coefficient as .95. In the other study carried out by Kteily, Sidanius, and Levin (2011) for predicting social and political attitudes of SDO calculated the alpha coefficient of .90 from the sample of students, staff and the local community of USA.

Procedure

The translation of SDO scale into Urdu was done using the criteria presented by Bristlin (1986). Before translation, the consent from original author was obtained. There are four basic requirements discussed by Lonner (1985) and Chang (2001) for equivalence of translated and adapted scale. The first functional equivalence is to show the same function of concepts for different cultures. The conceptual equivalence is to define the same meaning attached with the concept or behavior. The metric equivalence is defined as the psychometric properties or the extent of scale construct must be same across culture. Finally, the linguistic equivalence is the genuine translation obtained for language in which it is being developed. The present study was designed to obtain the final translation following these equivalence types. In case of the present translation, for example in Item 1 "Some groups of people must be kept at their place" the word "groups" has same function across two cultures. The second conceptual equivalence was ensured by checking that the concept "groups" has same meaning across both cultures. The metric equivalence was ensured by finding the psychometric properties as shown in Table 1. The correlation between sub-dimensions and full scale are shown in Table 2. The linguistic equivalence was ensured by backward, forward translation comparison and pretesting of scale.

Forward Translation

In this step, three bilinguals (native speakers of Urdu) were contacted as the quality of the test is highly dependent upon the competency of translators. It was ensured that all the translators are either MPhil or Ph.D. students. There was no time limit for the translator.

First Committee Approach

The main purpose of this step was to analyze each of the three translations for each sentence and select through mutual decision the closest and most relevant with respect to Pakistani culture. The expert panel was comprised of three MPhil students of National Institute of Psychology. Each item was separately analyzed in detail and possible translations were discussed. Out of 16 items, translations of 15 items were easily selected, because they were same in sentence structure and expression. Whereas item no. 16 shows some discrepancy in one word used in English not conveying the exact meaning in Urdu. For example, the original statement of item no. 16 was "Group equality should be our ideal," the word "ideal" was not changed into Urdu during translation. The corrected translation was obtained after the review by the author. The appropriate changes were made, and the finally obtained scale was back-translated by translators.

Back Translation

It was assured that the back translators were different from those who did forward translation for the same scale. Three back translators for each statement were attained. This time the back translators were a Ph.D. professor from Urdu University, and two MPhil students from NIP were requested. Both versions of the scale, original and translated, were then compared in second expert committee approach and all the issues regarding it were resolved afterward.

Second Committee Approach

Closest statements to original English version were retained and Urdu version of those statements was obtained. Two translations out of three were more like the original version. After this whole process, the finally obtained backward translations were sent for review to original authors. The authors of SDO Pratto, Sidanius, Stallworth, and Malle (1994) asked for amendments (in *item no.* 9, 11, and 13) to remain the same as original as they were conveying the actual meaning in English. The author was asking for the removal of the article “The” from English which was showing no effects for changing the statement in Urdu.

The finally obtained scale was used for pretesting with the sample of 250 university students between 19-35 years of age, and they were asked to discuss any cultural irrelevance or linguistic or cultural difficulty. So, the cultural relevance and similarity was confirmed for different items of the scale.

RESULTS

For the consistency check, the reliabilities, skewness, and kurtosis were calculated and reported for the scale and subscales of the SDO-7 as reported in Table 1. Correlations were found to be significant between scale and subscales of SDO-7 Urdu version as shown in Table 2

Table 1: Means, Standard Deviations, reliability, Skewness, Kurtosis, and Range of SDO-7 and Subscales of Urdu Version (N = 250)

Scale	Item s	α	M	SD	Range		Skew	Kur
					Actual	Potential		
SDO	16	.82	41.0	16.2	16-80	16-114	.39	-.97
SDO-D	8	.79	54.0	10.9	8-54	8-56	.39	-.70
SDO-E	8	.81	42.0	8.5	8-42	8-56	1.02	.23

Note: SDO = Social Dominance Orientation, SDO-D = Social Dominance Orientation-Dominance, SDO-E = Social Dominance Orientation-Egalitarianism

Means, standard deviations, and reliabilities shows the significant values for the scale and subscales of SDO-7 Urdu version. The results analyzed in the Table 1 indicate that alpha reliabilities for scale and subscales are consistent with the study sample. The skewness and kurtosis for the subscales also represent the range values according to the criteria used for the psychological testing.

Table 2: Correlations between Scores of Urdu version for Total Score and for all Subscale Scores of the SDO-7 (N = 250)

Variable	r
Social Dominance Orientation	.87**
Social Dominance Orientation-Dominance	-.78**
Social Dominance Orientation-Egalitarianism	-.38*

Note. * $p < 0.05$, ** $p < 0.01$

Table 2 demonstrates the values calculated for Pearson correlation (r) between the scale and subscales of the SDO-7 Urdu version. The values for coefficient of correlation indicate that the subscales have positive and negative correlation for the study sample and represent the operational definition of the constructs of scales and subscales.

Confirmatory Factor Analysis for Subscales of Social Dominance Orientation Scale (SDO)

The subscales of Social Dominance Orientation Namely Social Dominance Orientation-Dominance (SDO-D) and

Social Dominance Orientation-Egalitarianism (SDO-E) were taken to measure dominance and egalitarianism among university students. In the current study, it is assumed that they play a mediating role between modern sexism and attitude toward girl child marriages. The scales were translated and adapted to measure the dominance and egalitarian orientation toward girl child marriages. Factor structures of SDO have never been studied or reported before in Pakistani culture. So, the CFA on the following scales was done to test their unidimensionality and to check their construct validity with respect to the changes made.

Table 3: Confirmatory Factor Analysis for Subscales of Social Dominance Orientation Scale (N =250)

Model	$\chi^2(df)$	NFI	IFI	TLI	CFI	RMSEA	$\Delta\chi^2(\Delta df)$
Model 1	230.99(103)	.79	.87	.85	.87	.07	
Model 2	165.57(100)	.85	.94	.92	.93	.05	65.42(3)

Note. NFI = Normed Fit Index, IFI = Increment Fit Index, TLI = Tucker Lewis Index, CFI = Comparative Fit Index, RMSEA = Root Mean Square Error of Approximation. Model 1 = Default Model, Model 2 = Model 1 after adding covariance

Table 3 depicts fit statistics for SDO subscale (16 items). Model fit in student’s sample was achieved by after adding the covariance between e2 <-> e3, e3 <-> e14, e7 <-> e8, and e10 <-> e11 as all these items were about dominance and egalitarian orientation toward gender groups. After adding this covariance, a good model fit for student’s sample was achieved as $\chi^2(100) = 165.57, p < .05, NFI = .85, IFI = .94, TFI = .92$, and $CFI = .93$, whereas value of $RMSEA = .05$. The result can be more elaborated through diagram (Figure 1).

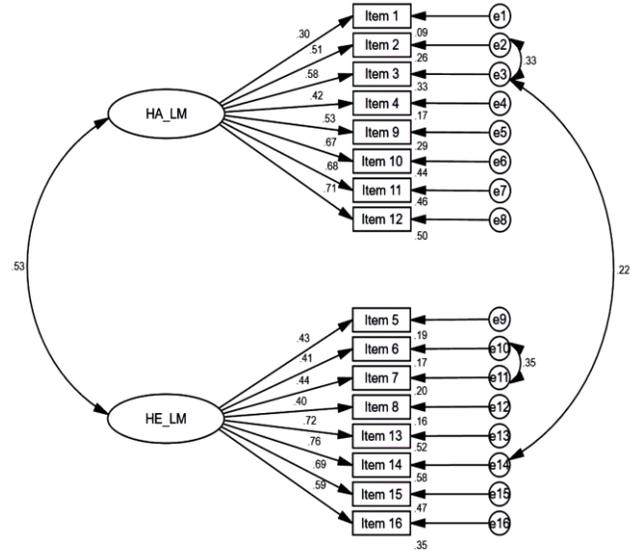


Figure 1: Confirmatory Factor Analysis for Subscales of Social Dominance Orientation Scale

The Figure 1 shows the CFA of subscales of social dominance orientation scale. The final model was achieved after required modifications shown with covariates. The standardized estimates are shown between arrows for items from unobserved variables.

Contrasted group validation of socio-economic status for SDO scale

The contrasted group validation for SES was calculated for dimensions of social dominance orientation scale was

performed on same sample. The results were calculated using ANOVA for different categories of SES observed in student sample.

Table 4: Mean Differences on SES for Social Dominance Orientation scale (N = 250)

Variable	Upper (n=95)		Middle (n=24)		Lower (n=31)		F	P	Groups	MD	95% CI		η^2
	M	SD	M	SD	M	SD					U	L	
SDO	38	16	42	16	46	14	3.3	.04*	Lower > Upper	8.09	.16	.00	0.0
	.2	.1	.0	.4	.2	.0					.09	.09	0.0

Note. ** $p < 0.05$, SDO = Social Dominance Orientation, MD = Mean Difference

The results in Table 4 shows that groups representing socioeconomic status differ significantly ($p < .05$) on social dominance orientation. It shows that dominance based on SES can be predicted by SDO scale. Students from lower socioeconomic status tend to show more SDO than those of upper SES. This finding suggest that students of lower socioeconomic status oppose group-based hierarchy more than students of higher socio-economic status did (Lee, Pratto, & Johnson, 2011). It shows that in Pakistan group-based hierarchies are affecting the member of lower socio-economic status. The lower socio-economic class suffer more from hierarchy maintenance in Pakistan.

DISCUSSION

The growing number of researchers in the field of social psychology especially the dominance, discrimination, and prejudice related studies have made great impact in organizational and social environment. The studies based on prejudice and dominance in Pakistan pursue the local population to find the answer for their research questions. Therefore, the psychometrically tested Urdu versions in Pakistan are necessary for better understanding of social issues. Thus, the present study was focused on making the necessary arrangements for the availability of Urdu version of social dominance orientation scale.

The assessment of each citizen or individual separately is very important for every culture because it defines the population. In this way, the findings obtained from a sample can be correctly generalized to the population. The necessity of individual level testing has recently taken much importance in Pakistan. Therefore, psychologists have taken the stance of individual testing in each field of psychology. But it requires the locally developed, translated, and validated tests to avoid the cultural irrelevance of the internationally developed scales. The important advantage of translation the scale is the fairness of testing and allowing the individual to get assessed in one's own native language (Hambleton & Kanjee, 1995). Therefore, the present study utilized the translation and adaptation of the SDO-7 scale into Urdu, the native language of Pakistan. The scale for translation was obtained from America, so the concepts were found like the modern culture of Pakistan. The English version of the scale was giving different meaning of

some words according to Pakistani culture due to the language difference. The purpose of translating the English version was to develop the conceptual equivalence and to remove difficulties of reading proficiency, idiomatic expression, and to maintain the comprehension of reading the scale items.

The guidelines of Bristlin (1986) were used to translate the social dominance orientation (SDO-7) scale in the present study. The translations were obtained from one or more translators having the good language skills for both languages to avoid the element of subjectivity. The quality of instrument depends upon the quality of measurement (Fouad, 1993) used in the research which can be maintained through construct and content validity (Kozma, Stone, Stones, Hannah, & McNeil, 1990). Although the validity established through English versions of the instruments makes its applicability in other cultures and languages makes it inappropriate. The need to translate that instrument arise from the applicability in other languages. The present study translated the instrument for establishing the psychometric properties of this new version according to the culture and native language of Pakistan.

Validity of the instrument used in research first requires the reliability. According to the suggestions of Nunnally (1978), the minimum criteria for Cronbach's coefficient alpha is .70 for basic research measures. This criterion was utilized in the present study, the alpha coefficient was found according to the guidelines. The same instructions go for instrument based on internal consistency. The recommended minimum sample range for the confirmatory factor analysis is 200 (Hoelter, 1983). The present study utilized the sample of 250 for confirmatory factor analysis. The overall purpose of confirmatory factor analysis is to ensure the stability of the factor structure (Hinkin, 1995). In the present study, the confirmatory factor analysis was done to check the stability of factor structure according to Pakistani culture.

The contrasted group validation for SDO scale based on SES of study sample i.e., university students was analyzed using ANOVA (Table 4). It has shown that lower SES group tends to show more SDO as compared to Higher SES. It depicts that the SDO scale has the tendency to measure the group-based dominance in socio demographic variables. This Urdu version of this scale from present study can be used to examine the social dominance among social group hierarchies. It is a contribution in the field of social psychology to help researchers for examining the class differences among SES groups.

Limitations and Implications

The present study utilized the Social dominance orientation being a self-reported measure have some inherent disadvantages like difficulty in the generalizability of student sample. The sample for the present study was small due to time constraints other studies might use this translated version for more contrasted results. For more diversified results this scale can be used for other organizational and educational sample. The present study has great importance in the field of social psychology to help social psychologists to examine the group differences based on social class.

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