

## MEASURING SUPPORT FOR INTERGROUP HIERARCHIES: ASSESSING THE PSYCHOMETRIC PROPRIETIES OF THE ITALIAN SOCIAL DOMINANCE ORIENTATION<sub>7</sub> SCALE

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This study presents the psychometric proprieties of the Italian version of the Social Dominance Orientation<sub>7</sub> (SDO<sub>7</sub>) Scale, originally developed by Ho et al. (2015). We recruited a convenience sample ( $N = 497$ ) to answer an online self-report questionnaire, including the SDO<sub>7</sub> Scale and other relevant convergent and divergent measures. The confirmatory factor analysis revealed that SDO<sub>7</sub> presents a satisfactory fit to the data, both as a two-correlated factor structure and as a one-dimensional measure. The two-correlated factor structure is confirmed as composed by two subdimensions as in the original version: the SDO-Dominance (SDO-D) and the SDO-Anti-Egalitarianism (SDO-E). Since the total SDO<sub>7</sub> score measures people's support for asymmetrical group relationships, the SDO-D is concerned with people's support for dominant-submissive forms of intergroup relationships whereas the SDO-E refers to the desire to support intergroup inequalities. The scale and subscales also present satisfactory indexes of reliability as well as convergent and divergent validity.

**Key words:** Confirmatory factor analysis; Group hierarchies; Inequalities; Social dominance orientation; Social dominance theory.

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Social dominance theory (SDT; Sidanius & Pratto, 1999) is a prominent theoretical framework that provides a psychological, sociopolitical explanation for the nature of intergroup hierarchies in societies. SDT is based on a wide array of empirical evidence (e.g., Lee, Pratto, & Johnson, 2011; Levin, 2004; Pratto, Sidanius, & Levin, 2006; Pratto, Stewart, & Zeineddine, 2013; Sidanius & Pratto, 1999), highlighting how group-based social hierarchies are endorsed and maintained in society (Pratto et al., 2006). In particular, SDT posits that high-status social groups hold more positive social value (e.g., material, political,

and economic resources; wealth). High-status groups are more favorable in endorsing hierarchy-enhancing legitimizing myths: ideologies, values, and beliefs to maintain their dominant hierarchical position (e.g., prejudices and stereotypes). Dominant groups show higher ingroup favoritism attitudes, which allow them to promote discriminatory policies toward subordinate groups. On the other hand, low-status groups can also reinforce the legitimacy of these hierarchy-enhancing legitimizing myths by adhering to the dominant-created agenda of norms that sustain inequalities (Sidanius & Pratto, 1999). Subordinate groups can ideologically agree on maintaining inequalities, thus manifesting favoritism toward the dominant group (vs. their own ingroup), performing own group-debilitating behaviors, and giving in to all their beliefs, attitudes, and behaviors in a way that confirms their subordinate status. This way, members of subordinate groups can sustain broadly shared ideologies (e.g., racism, sexism, and meritocracy) and stereotypes for maintaining stable asymmetrical relationships (see, Pratto et al., 2006).

SDT distinguishes three main systems that support group-based hierarchies (Lee et al., 2011; Pratto et al., 2006; Sidanius & Pratto, 1999): (i) the age system, according to which older people have a disproportionate positive social value than younger people; (ii) the gender system, according to which men monopolize more social, economic, and political power than women; (iii) the arbitrary set-systems, which refer to context-related ideologies, values, and attitudes that sustain inequalities and become salient under specific conditions or situations (e.g., nationality, ethnicity, class, clan, and religion). In particular, the arbitrary set-systems are “context-related” social distinctions that facilitate the perpetration of social inequalities and are more meaningful for certain social groups than for others.

Social dominance orientation (SDO; Pratto, Sidanius, Stallworth, & Malle, 1994) is an individual difference related to the support for hierarchy-enhancing legitimizing myths. People high in SDO also sustain social and political discriminatory attitudes and policies.

#### SOCIAL DOMINANCE ORIENTATION

Developed within SDT (Pratto & Sidanius, 1999), SDO is a construct that captures the extent of individuals’ desire for group-based dominance. The SDO measures how much people support hierarchy-enhancing legitimizing myths that produce better outcomes for dominant rather than subordinate groups — the higher the SDO, the more people desire to maintain hierarchies and inequalities. Higher-SDO people can support a series of legitimizing myths that support the notion that dominant and subordinate groups have to preserve their relative hierarchical position in society (Sidanius & Pratto, 1999).

Most commonly, SDO levels are higher for members of dominant groups than for members of subordinate groups (Lee et al., 2011; Pratto et al., 2006). However, according to SDT, members of low-status groups might also endorse SDO (e.g., Aiello, Tesi, Pratto, & Pierro, 2018; Tesi et al., 2019). High-SDO individuals in a high-status group are more likely to discriminate members of low-status groups; while members of low-status groups with high levels of SDO contribute to maintaining inequalities and expressing the manifestation of outgroup favoritism and own-group debilitating behaviors (Sidanius & Pratto, 1999).

SDO is correlated with prejudice against subordinate groups, such as ethnic minorities, immigrants, the LGBT community, women, refugees, and subordinate employees (e.g., Guimond, Dambrun, Michinov, & Duarte, 2003; Ho et al., 2015; Levin, 2004; Pratto, Stallworth, Sidanius, & Siers, 1997; Sidanius, Cotteril, Sheehy-Skeffington, Kteilly, & Carvacho, 2016; Tan, Liu, Huang, Zhao, & Zheng, 2016). It was also found to be related to a set of social ideologies that correspond to viewing societies as organized

hierarchies, such as nationalism, patriotism, just-world beliefs, militarism, sexism, and meritocracy (e.g., Ho et al., 2015; Mosso, Briante, Aiello, & Russo, 2013; Pratto et al., 1994; Sidanius & Pratto, 1999). Several studies highlighted that SDO predicts support for hierarchy-enhancing myths and social policies including coercive power tactics, punitive criminal justice policies, support for war and aggression, support for torture and death penalty, and opposition to social welfare and humanitarian practices (e.g., Ho et al., 2012, 2015; Pratto & Glasford, 2008; Sidanius & Pratto, 1999; Tesi et al., 2019). The SDO was also related to the need for cognitive closure as an epistemic motivation in closing toward ambiguity and uncertainty (Ho et al., 2015; Roets & Van Hiel, 2011; Van Hiel, Pandelaere, & Duriez, 2004).

Several scholars have argued that SDO could be conceived as a stable individual difference influencing several intergroup beliefs, attitudes, and behaviors (Kteily, Ho, & Sidanius, 2012; Lee, et al., 2011; Pratto et al., 2006; Sidanius & Pratto, 1999). Kteily, Sidanius, and Levin (2011) found that SDO is a causal predictor of prejudice and discrimination against ethnic and racial outgroups.

#### REFRAMING THE NATURE OF SDO: THE SDO-DOMINANCE AND SDO-ANTI-EGALITARIANISM COMPONENTS

Previous studies had conceived SDO as a unidimensional construct (see, Pratto et al., 1994; Sidanius & Pratto, 1999; see Aiello, Chirumbolo, Leone, & Pratto, 2005 for the Italian version). However, some recent literature has shown support for a two-dimensional structure: The SDO-Dominance (SDO-D) and SDO-Anti-Egalitarianism (SDO-E; Ho et al., 2012, 2015). The SDO-D reflects personal willingness to support overt oppression and intergroup behaviors that promote group dominance. SDO-D portrays individual tendencies to support dominant-submissive forms of intergroup relations, which encourage the dominance of high-status groups against low-status groups. The SDO-E component refers to people's support for group-based inequalities. SDO-E represents the preference for the perpetration of inequalities between groups through supporting subtle hierarchy-enhancing ideologies and social policies that sustain inequality.

There is strong evidence that SDO-D and SDO-E are different facets of support for a general intergroup dominance and that these subdimensions are related to different forms of supporting asymmetrical group relationships. The SDO-D was found to be correlated with measures linked to the overt support of dominant-submissive forms of intergroup relationships (e.g., old-fashioned racism, perception of zero-sum competition, and support for aggression against subordinate groups), while SDO-E was correlated with subtle hierarchy-enhancing ideologies and beliefs (e.g., system legitimacy beliefs, political conservatism, support for unequal distribution of resources, and opposition to hierarchy-attenuating social policies; Ho et al., 2015). In several U.S. samples, Ho et al. (2015) found that the SDO-D and SDO-E subdimensions interwove satisfactorily with the previous measures of SDO also confirming the scale convergent validity.

#### MEASURING SOCIAL DOMINANCE ORIENTATION WITH THE NEW SDO<sub>7</sub> SCALE

Since the construct was proposed in the early nineties (Pratto et al., 1994), several unidimensional measures have been developed to measure SDO, even in the Italian context (Aiello et al., 2005). Originally composed of 16 items, a short 4-item version of the SDO Scale has been recently validated by Pratto, Çıdam, et al. (2013) in 20 countries.

The latest extensive version of the instrument for measuring SDO is the SDO<sub>7</sub> Scale. The SDO<sub>7</sub> Scale is composed of 16 items: eight items measure SDO-D (four items are pro-traits and four are con-traits) and eight items measure SDO-E (four items are pro-traits and four are con-traits). The computation of the scores of the two subdimensions shows a general SDO score: an overall score that can be conceived as an individual general orientation to support asymmetrical group relationships. Ho et al. (2015) have found that the SDO<sub>7</sub> Scale presents good psychometric proprieties in terms of dimensionality, validity, and reliability. It predicts intergroup attitudes and behaviors with greater precision than the previous versions of the SDO Scale.

In this study, we presented the Italian adaptation of the SDO<sub>7</sub> Scale. In particular, we were interested in testing the factorial structure of the original SDO<sub>7</sub> Scale, hypothesizing that SDO-D and SDO-E were two-correlated subdimensions. In line with the research by Ho et al. (2015), and in order to assess the convergent and divergent validity of the scale, we hypothesized that the Italian SDO-D and SDO-E were positively correlated with the measures of the Short-SDO Scale (SSDO; see Pratto, Çidam, et al., 2013), the need for cognitive closure, symbolic racism, legitimizing myths about weaker nations, and the participants' right-wing political orientation. We also hypothesized that SDO-D and SDO-E were negatively correlated with agreeableness, openness to experience, counter dominance orientation, and sympathetic collective actions.

## METHOD

### Procedure and Participants

Participants were contacted online, using a web-based LimeSurvey questionnaire drafted in Italian. The SDO<sub>7</sub> Scale (Ho et al., 2015) was translated from English to Italian and back translated from Italian to English by two independent experts. Then, the research group and translators reviewed the results in order to achieve consensus on item phrasing. The questionnaire was publicly accessible and an invitation with the link to the questionnaire was emailed to the potential participants. Respondents were informed that their participation was voluntary and that their responses would remain anonymous and confidential; no incentives were offered. In order to check and prevent anyone from re-entering the survey site, the respondent's IP address was monitored. The data were collected in 2018.

A total of 497 Italian respondents (60% women,  $M_{age} = 35.80$ ,  $SD_{age} = 15.37$ ) filled out the questionnaire. As regards their level of education, 9.5% declared they had finished middle school, 54.5% declared they had earned a high school diploma, 34.2% had a university degree, and 1.8% had a master's or Ph.D. qualification. Jobwise, 41.5% stated they were university students, 36% were white-collar workers, 8.2% were factory workers/craftsmen, 6.3% were self-employed, 1.3% were teachers, 3.2% were unemployed, 0.8% were retired, and finally, 2.7% chose "other."

### Measures

*Social dominance orientation.* The Italian translation of the SDO<sub>7</sub> Scale (Ho et al., 2015) was used. The items numbered in Table 1 correspond to the same numbers of items in Ho et al. (2015; Appendix A). Item examples are: "Some groups of people must be kept in their place," Italian version "Certi gruppi di persone dovrebbero rimanere al proprio posto nella società" (Item 1 SDO-D); "We should not push for group equality," Italian version "Non si dovrebbe spingere per l'uguaglianza tra gruppi" (Item 9 SDO-E). As in Ho et al., (2015), the items were rated on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*).

*Subtle Prejudice Scale.* This scale was collected from a subsample of respondents ( $n = 299$ ). We used the Italian version of the Subtle Prejudice Scale (Leone, Chirumbolo, & Aiello, 2006), which measures the indirect and “socially acceptable” form of prejudice toward an outgroup. An item example is “Many other groups have come to Italy and overcome prejudice and worked their way up. Moroccans should do the same without special favors.” The scale is composed of nine items with a Likert response format ranging from 1 (*not at all*) to 6 (*completely*). Cronbach’s alpha for this study was of .72.

*Social dominance orientation–Short version.* Social dominance orientation was measured with the 4-item Short Social Dominance Orientation (SSDO) version of the SDO Scale (Pratto, Çidam, et al., 2013). The items were rated on a 7-point Likert scale (1 = *strongly disagree*, 7 = *strongly agree*). A sample item of the scale is “Some groups of people are simply inferior to other groups.” Cronbach’s alpha for this study was of .64.

*Sympathetic collective actions.* The support for sympathetic collective actions is hierarchy-attenuating legitimizing myths. The scale measures people’s desire to endorse actions finalized in reducing inequalities. The scale presents three items with a response format ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). An item example is “I would join a sympathy protest in support of uprisings by people in weaker nations.” Cronbach’s alpha for this study was of .76.

*Myths about weaker nations.* The myths about weaker nations are measured using a specific 2-item scale with a response format ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). The scale measures people’s beliefs that weaker nations need to be controlled. An item example is “Outside control over weaker nations is necessary for the world’s security.”

*Personality traits.* Participants completed the 10-item short version of the Big Five Inventory (BFI-10; Rammstedt & John, 2007; Italian version by Guido, Peluso, Capestro, & Miglietta, 2015). The BFI-10 evaluates the five personality dimensions on a 5-point scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), each with two items: openness, conscientiousness, neuroticism, extraversion, and agreeableness.

*Need for cognitive closure (NFCC).* NFCC was assessed with the Italian version of the revised Need for Closure Scale (Rev NFCS; Pierro & Kruglanski, 2005), which consists of 16 items to which responses are given using a 6-point Likert scale (1 = *strongly disagree*, 6 = *strongly agree*). An item example is “Any solution to a problem is better than remaining in a state of uncertainty”. Cronbach’s alpha for this study was of .77.

*Political orientation.* Participants indicated their ideological political affiliation from 1 (*extreme left*) to 10 (*extreme right*).

## Data Analysis

First, in order to verify the factorial structure of the SDO<sub>7</sub> Scale, we performed a confirmatory factor analysis (CFA) both for a one-dimensional and a two-dimensional solution. Data were analyzed with Mplus 8 (Muthen & Muthen, 2012) using maximum likelihood estimation. Consistent with the recommendation of Hu and Bentler (1999), goodness-of-fit criteria were used in order to quantify the acceptable fit — comparative fit index (CFI) > .90; standardized root mean square residual (SRMR) < .08; root mean square error approximation (RMSEA) < .06. Second, the internal reliability of the SDO<sub>7</sub> was examined both with alpha and omega coefficients. In particular, internal reliability > .70 (Cronbach & Meehl, 1955; McDonald, 1999) was considered acceptable. Finally, in order to examine the association of the SDO<sub>7</sub> and the discriminant association of the two dimensions of SDO<sub>7</sub> with the other variables, both bivariate and partial correlations were computed. As suggested by Hittner, May, and Silver (2003), we used the  $z$  procedure to compare the magnitude of the partial correlations.

RESULTS

CFA was used to verify the fit of both the one-factor and two-factor solutions. In the one-factor solution, modification indexes suggested correlating four error terms. As some scholars have pointed out (see Gerbing & Anderson, 1984), the inclusion of correlated error terms in the CFA models do not undermine the factorial validity, where they are theoretically plausible. In the current model, these correlations were all theoretically plausible given the very similar meaning and formulation of the associated items. Specifically, the correlations allowed were as follows (see Table 1): Item 2 with Item 3, Item 6 with Item 8, Item 9 with Item 12, and Item 13 with Item 15. The final one-dimensional model fit the data in an acceptable way:  $\chi^2(99) = 347.75, p < .001$ ; CFI = .90; RMSEA = .07; SRMR = .06. The factor loadings are shown in Table 1.

TABLE 1  
 Means, standard deviations, alphas, CFA on the SDO<sub>7</sub> Scale

	<i>M</i>	<i>SD</i>	CFA loadings	
			One	Two
Pro-trait dominance				
Item no. 1	2.72	1.81	.44	.45
Item no. 2	3.13	1.90	.56	.58
Item no. 3	2.95	1.86	.51	.52
Item no. 4	2.04	1.67	.51	.53
Con-trait dominance				
Item no. 5	2.11	1.57	-.60	-.61
Item no. 6	2.73	1.89	-.39	-.41
Item no. 7	3.05	1.85	-.35	-.36
Item no. 8	3.44	1.89	-.26	-.26
Pro-trait anti-egalitarianism				
Item no. 9	2.12	1.61	.68	.69
Item no. 10	1.85	1.52	.51	.51
Item no. 11	2.66	1.99	.43	.43
Item no. 12	2.48	1.74	.69	.69
Con-trait anti-egalitarianism				
Item no. 13	1.56	1.04	-.47	-.47
Item no. 14	1.85	1.27	-.65	-.65
Item no. 15	1.59	1.05	-.53	-.53
Item no. 16	2.23	1.62	-.77	-.77

*Note.* One = one-factor solution; Two = two-factors solution.  
 The item number in table referred to the Italian version scale and correspond to the item number of the original Ho et al. (2015; Appendix A) scale.  
 The full Italian version is available upon request from authors.

For the two-dimensional model, the same four correlations between error terms of the one-dimensional model were computed. The final two-dimensional model fit the data in an acceptable way (see Figure 1):  $\chi^2(54) = 344.33, p < 0.001$ ; CFI = .90; RMSEA = .07; SRMR = .05. The Chi-square difference



test indicated that the one-factor and two-factor models were nonstatistically different:  $\Delta\chi^2(45) = 3.42, p = ns$ . Further, we used the sample-size adjusted Bayesian information criteria (saBIC; Sclove, 1987) to compare the two solutions. The lowest value of saBIC indicates the best fitting model (with a  $\Delta$  of at least 2 points, see Fabozzi, Focardi, Rachev, & Arshanapalli, 2014). The saBIC difference between the one- and two-factor models was negligible: 27,551.58 and 27,551.97, respectively.

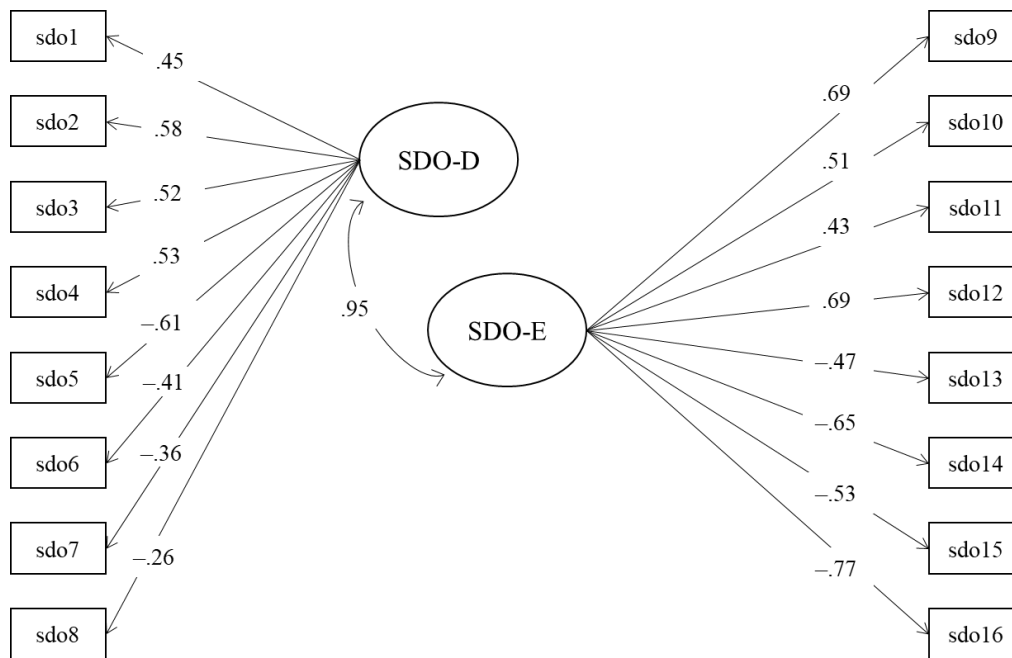


FIGURE 1  
 Graphical representation of CFA.  
 SDO-D = SDO-Dominance; SDO-E = SDO-Anti-Egalitarianism.

After recoding the reversed items, the internal reliability was computed. Cronbach’s alpha was .86 for the total SDO<sub>7</sub>, .72 for SDO-D, and .82 for SDO-E. The alpha did not increase with the elimination of any item. McDonald’s (1999) omega total coefficient was .87 for the total SDO<sub>7</sub>, .73 for SDO-D, and .83 for SDO-E.

Bivariate correlations (see Table 2) showed that the SDO<sub>7</sub> was positively correlated with subtle prejudice, SSDO, myths about weaker nations, need for cognitive closure, and right-wing political orientation, while negatively correlated with sympathetic collective action. Replicating Ho et al. (2015) partial correlations showed that when statistically controlled for SDO-E, SDO-D was positively related to subtle prejudice, SSDO, myths about weaker nations, the need for cognitive closure, and right-wing political orientation, and negatively to sympathetic collective actions (see Table 2). When statistically corrected for SDO-D, SDO-E was positively related to subtle prejudice and SSDO, and negatively to sympathetic collective actions and extraversion. The *z*-test showed that SDO-D was statistically more related to myths about weaker nations as compared to SDO-E; SDO-E was statistically more related to subtle prejudice, SSDO, and extraversion as compared to SDO-D.

TABLE 2  
 Means, standard deviations, zero-order correlations of the SDO<sub>7</sub>  
 and partial correlations of the two dimensions of SDO<sub>7</sub> with the other variables

Variable	<i>M</i>	<i>SD</i>	<i>r</i> SDO <sub>7</sub>	Partial correlations		
				SDO-D cor. SDO-E	SDO-E cor. SDO-D	<i>z</i>
Subtle prejudice	2.70	0.76	.46***	.14**	.25***	-3.03**
SSDO	2.04	1.03	.79***	.30***	.60***	-9.37***
<i>Myths</i>						
Sympathetic collective actions	4.00	1.27	-.42***	-.17***	-.19***	0.55
Myths about weaker nations	3.14	1.20	.29***	.22***	.03	5.17***
<i>Individual differences</i>						
Extraversion	3.28	0.84	-.05	.08	-.12**	5.40***
Agreeableness	3.78	0.70	-.03	.05	-.08	
Conscientiousness	3.66	0.76	.02	.07	-.07	
Neuroticism	2.94	0.78	.03	-.02	.05	
Openness	3.42	0.83	-.06	-.03	-.04	
Need for cognitive closure	3.14	0.70	.20***	.09*	.07	0.54
Right-wing political orientation	3.89	1.53	.32***	.17***	.13**	1.09

Note. SSDO = Short Social Dominance Orientation; SDO-E = SDO-Anti-Egalitarianism; SDO-D = SDO-Dominance; Cor. = corrected for.  
 \**p* < .05. \*\**p* < .01. \*\*\**p* < .001.

## DISCUSSION

The present study was aimed at assessing the psychometric proprieties of the Italian version of the SDO<sub>7</sub> Scale (Ho et al., 2015). Results of the CFA (Figure 1) confirmed the original factorial structure of the scale (Ho et al., 2015). In particular, the analysis showed that the two-correlated factor solution presented a satisfactory fit to the data. Following the original conceptualization (Ho et al., 2015), the first dimension, called SDO-D, measures people's support for the dominant-submissive form of intergroup relationships. The second dimension, called SDO-E, measures people's preference for the perpetration of intergroup inequalities.

Note, though, that the two factors were very highly correlated, and the analysis also showed that the one-factor model fit the data as well as the two-factor solution. Indeed, no statistical difference was found when comparing the two-correlated factors and the one-factor models. Despite SDO-D and SDO-E, in line with Ho et al. (2015) showed a distinctive predictive validity in relation to different intergroup *outcomes*, the positive correlation between the SDO-D and SDO-E factors could be explained considering that people high in SDO-D likely endorse beliefs concerning how dominance should be manifested (e.g., support for group inequalities). We also foresee that people high in the anti-egalitarian dimension (SDO-E) would agree with the beliefs that some groups, higher in hierarchies, manifest the forms of social dominance toward the groups perceived as at the bottom of the hierarchies.

Cronbach's alpha and the omega total coefficient confirmed that both the one-factor solution (SDO<sub>7</sub> total score) and the two-factor solutions (the SDO-D and SDO-E) presented good internal reliability. For these reasons we argue that, depending on the research questions, the Italian version of SDO<sub>7</sub> can thus be used for measuring both the facets of SDO (SDO-D and SDO-E), and it is a single score that captures the individual desire to maintain asymmetrical intergroup relationships.



In terms of the convergent and divergent validity, in line with Ho et al. (2015), bivariate correlations confirmed that the total score of SDO<sub>7</sub> was positively related to the different individual orientations, thus legitimizing myths and personality characteristics (see Table 2) that contribute to enhancing asymmetrical group relations, and it was negatively related to the measure of support toward the struggle of the oppressed people (sympathetic collective actions). Our results are also in line with other studies that suggest SDO to be conceived as an individual orientation (Kteily et al., 2012) related to other inter-individual differences (e.g., NFCC and subtle prejudice; Ho et al., 2012, 2015; Lee et al., 2011; Passini & Morselli, 2016; Roets & Van Hiel, 2011; Van Hiel, Pandelaere, & Duriez, 2004) as well as to hierarchy-enhancing legitimizing myths (Pratto et al., 1994; Pratto & Glasford, 2008; Sidanius & Pratto, 1999).

Partial correlations also revealed that both SDO-D and SDO-E were positively correlated with endorsing prejudice and myths that sustain the asymmetrical relationships, while negatively correlated with support for sympathetic collective actions against the oppressed groups. But the two dimensions did distinguish between different types of prejudice; the *z*-test showed that SDO-E was more strongly correlated with subtle prejudice than was SDO-D. This is in line with the idea that SDO-E is the subdimension more closed to subtle ideologies that sustain inequalities. Indeed, subtle prejudice refers to a more covert form of prejudice (Meertens & Pettigrew, 1997). Our analysis also shows that the SDO-E (vs. SDO-D) had a strong positive correlation with the SDO measure. This result demonstrates that the SDO scale may measure the more subtle desire to support the intergroup inequalities than the more overt desire to support intergroup dominance (Pratto, Çidam, et al., 2013). Moreover, SDO-E had a strong negative correlation with extraversion, whereas SDO-D was not significantly correlated with any personality dimension. This result may be explained considering that extraversion is a personality facet related to an energetic approach to maintain positive relations with others (John, Naumann, & Soto, 2018). Highly extraverted people could try to maintain such positive relations by endorsing attitudes and behaviors that sustain equality instead of inequalities. Finally, we found that SDO-D (vs. SDO-E) was strongly correlated to myths about weaker nations. Indeed, myths about weaker nations measure people's beliefs about the notion that such nations need to be dominated and controlled by others.

The present study presents some limitations. The cross-sectional nature of the study and the use of only self-report instruments did not allow conclusions to be drawn about the causal relationships and temporal stability among the measures. Longitudinal studies would address this limitation. Moreover, we used a varied convenience sample in which university students and women were slightly over-represented. For this reason, the results of the present study should not be considered as a representation of the entire Italian population. Furthermore, future research could assess if the SDO<sub>7</sub> Scale is invariant across gender and age. Indeed, in accordance with Sidanius and Pratto (1999), women and younger people are less inclined to support intergroup asymmetrical relationships. Moreover, our future studies foresee also the application of the item response theory (IRT) in order to show the discriminative power of each item and to propose, similarly to Ho et al. (2015) the short version of the Italian SDO<sub>7</sub> Scale.

Despite these limitations, the present study represents a first attempt to validate the SDO<sub>7</sub> Scale in the Italian context. Our results show that the Italian SDO<sub>7</sub> presents satisfactory psychometric proprieties and thus could be used in a wide range of SDT related research.

#### REFERENCES

- Aiello, A., Chirumbolo, A., Leone, L., & Pratto, F. (2005). Uno studio di adattamento e validazione della Scala di Orientamento alla Dominanza Sociale [A study for an Italian adaptation and validation of the Social Dominance Orientation Scale]. *Rassegna di Psicologia*, 22, 65-75. doi:10.7379/72099

- Aiello, A., Tesi, A., Pratto, F., & Pierro, A. (2018). Social dominance and interpersonal power: Asymmetrical relationships within hierarchy-enhancing and hierarchy-attenuating work environments. *Journal of Applied Social Psychology, 48*, 35-45.  
doi:10.1111/jasp.12488
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin, 52*, 281-302.  
doi:10.1037/h0040957
- Fabozzi, F. J., Focardi, S. M., Rachev, S. T., & Arshanapalli, B. G. (2014). Appendix E: Model selection criterion: AIC and BIC. In F. J. Fabozzi, S. M. Focardi, S. T. Rachev, & B. G. Arshanapalli (Eds.), *The basics of financial econometrics: Tools, concepts, and asset management applications* (pp. 399-403). Hoboken, NJ: Wiley.
- Gerbing, D. W., & Anderson, J. C. (1984). On the meaning of within-factor correlated measurement errors. *Journal of Consumer Research, 11*, 572-580.  
doi:10.1086/208993
- Guido, G., Peluso, A. M., Capestro, M., & Miglietta, M. (2015). An Italian version of the 10-item Big Five Inventory: An application to hedonic and utilitarian shopping values. *Personality and Individual Differences, 76*, 135-140.  
doi:10.1016/j.paid.2014.11.053
- Guimond, S., Dambrun, M., Michinov, N., & Duarte, S. (2003). Does social dominance generate prejudice? Integrating individual and contextual determinants of intergroup cognitions. *Journal of Personality and Social Psychology, 84*, 697-721.  
doi:10.1037/0022-3514.84.4.697
- Hittner, J. B., May, K., & Silver, N. C. (2003). A Monte Carlo evaluation of tests for comparing dependent correlations. *The Journal of General Psychology, 130*(2), 149-168.
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., Stewart, A. L. (2015). The nature of social dominance orientation: Theorizing and measuring preferences for intergroup inequality using the new SDO7 scale. *Journal of Personality and Social Psychology, 109*, 1003-1028. doi:10.1037/pspi0000033
- Ho, A. K., Sidanius, J., Pratto, F., Levin, S., Thomsen, L., Kteily, N., & Sheehy-Skeffington, J. (2012). Social dominance orientation: Revisiting the structure and function of a variable predicting social and political attitudes. *Personality and Social Psychology Bulletin, 38*, 583-606.  
doi:10.1177/0146167211432765
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*, 1-55.  
doi:10.1080/10705519909540118
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big-Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114-158). New York, NY: Guilford Press.
- Kteily, N., Ho, A. K., & Sidanius, J. (2012). Hierarchy in the mind: The predictive power of social dominance orientation across social contexts and domains. *Journal of Experimental Social Psychology, 48*, 543-549.  
doi:10.1016/j.jesp.2011.11.007
- Kteily, N. S., Sidanius, J., & Levin, S. (2011). Social dominance orientation: Cause or 'mere effect'? Evidence for SDO as a causal predictor of prejudice and discrimination against ethnic and racial outgroups. *Journal of Experimental Social Psychology, 47*, 208-214.  
doi:10.1016/j.jesp.2010.09.009
- Lee, I. C., Pratto, F., & Johnson, B. T. (2011). Intergroup consensus/disagreement in support of group-based hierarchy: An examination of socio-structural and psycho-cultural factors. *Psychological Bulletin, 137*(6), 1029-1064.  
doi:10.1037/a0025410
- Leone, L., Chirumbolo, A., & Aiello, A. (2006). Pregiudizio sottile e pregiudizio manifesto: alcuni rilievi critici sullo strumento di Pettigrew e Meertens (1995) [Subtle and overt prejudice: some observations on the Pettigrew and Meertens (1995) tool]. *Giornale Italiano di Psicologia, 33*(1), 175-198.
- Levin, S. (2004). Perceived group status differences and the effects of gender, ethnicity, and religion on social dominance orientation. *Political Psychology, 25*(1), 31-48.
- Lord, F. M. (1952). *A theory of test scores* (Psychometric Monograph No. 7). Iowa City, IA: Psychometric Society, 35.
- McDonald, R. P. (1999). *Test theory: A unified treatment*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Meertens, R. W., & Pettigrew, T. F. (1997). Is subtle prejudice really prejudice? *Public Opinion Quarterly, 61*(1), 54-71.
- Mosso, C., Briante, G., Aiello, A., & Russo, S. (2013). The role of legitimizing ideologies as predictors of ambivalent sexism in young people: Evidence from Italy and the USA. *Social Justice Research, 26*, 1-17.  
doi:10.1007/s11211-012-0172-9

- Muthen, L. K., & Muthen, B. (2012). *Mplus: Statistical analysis with latent variables*. Los Angeles, CA: Muthén & Muthén.
- Passini, S., & Morselli, D. (2016). Blatant domination and subtle exclusion: The mediation of moral inclusion on the relationship between social dominance orientation and prejudice. *Personality and Individual Differences, 89*, 182-186.  
doi:10.1016/j.paid.2015.10.022
- Pierro, A., & Kruglanski, A. W. (2005). *Revised Need for Cognitive Closure Scale*. Unpublished manuscript. "La Sapienza" University of Roma.
- Pratto, F., Çidam, A., Stewart, A. L., Zeineddine, F. B., Aranda, M., Aiello, A., . . . Henkel, K. E. (2013). Social dominance in context and in individuals: Contextual moderation of robust effects of social dominance orientation in 15 languages and 20 countries. *Social Psychological and Personality Science, 4*, 587-599.  
doi:10.1177/1948550612473663
- Pratto, F., & Glasford, D. E. (2008). Ethnocentrism and the value of a human life. *Journal of Personality and Social Psychology, 95*, 1411-1428.  
doi:10.1037/a0012636
- Pratto, F., Sidanius, J., & Levin, S. (2006). Social dominance theory and the dynamics of intergroup relations: Taking stock and looking forward. *European Review of Social Psychology, 17*, 271-320.  
doi:10.1080/10463280601055772
- Pratto F., Sidanius J., Stallworth L. M., & Malle, B. F. (1994). Social Dominance Orientation: A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology, 67*, 741-763. doi: 10.1037/0022-3514.67.4.741
- Pratto, F., Stallworth, L. M., Sidanius, J., & Siers, B. (1997). The gender gap in occupational role attainment: A social dominance approach. *Journal of Personality and Social Psychology, 72*, 37-53.  
doi:10.1037/0022-3514.72.1.37
- Pratto, F., Stewart, A. L., & Zeineddine, F. B. (2013). When inequality fails: Power, group dominance, and societal change. *Journal of Social and Political Psychology, 1*, 132-160.  
doi:10.5964/jspp.v1i1.97
- Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality, 41*(1), 203-212.
- Roets, A., & Van Hiel, A. (2011). Allport's prejudiced personality today: Need for closure as the motivated cognitive basis of prejudice. *Current Directions in Psychological Science, 20*, 349-354.  
doi:10.1177/0963721411424894
- Sclove, S. L. (1987). Application of model-selection criteria to some problems in multivariate analysis. *Psychometrika, 52*(3), 333-343.
- Sidanius, J., & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge, UK: Cambridge University Press.
- Sidanius, J., Cotterill, S., Sheehy-Skeffington, J., Kteily, N. S., & Carvacho, H. (2016). Social Dominance Theory: Explorations in the psychology of oppression. In Sibley, C. G. & Barlow, F. K. (Eds.), *The Cambridge Handbook of the Psychology of Prejudice*. Cambridge, UK: Cambridge University Press.
- Tan, X., Liu, L., Huang, Z., Zhao, X., & Zheng, W. (2016). The dampening effect of social dominance orientation on awareness of corruption: Moral outrage as a mediator. *Social Indicators Research, 125*, 89-102.  
doi:10.1007/s11205-014-0838-9
- Tesi, A., Aiello, A., Morselli, D., Giannetti, E., Pierro, A., & Pratto, F. (2019). Which people are willing to maintain their subordinated position? Social dominance orientation as antecedent to compliance to harsh power tactics in a higher education setting. *Personality and Individual Differences*. Advance online publication.  
doi:10.1016/j.paid.2019.04.045
- Van Hiel, A., Pandelaere, M., & Duriez, B. (2004). The impact of need for closure on conservative beliefs and racism: Differential mediation by authoritarian submission and authoritarian dominance. *Personality and Social Psychology Bulletin, 30*, 824-837.  
doi:10.1177/014616720426433