DEVELOPMENT AND VALIDATION OF A GROUP BASED DOMINANCE SCALE

by

TIFFANY DAVIS

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To my friends and family who have supported me.

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Abstract

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Tiffany Davis, M.S.

The University of Texas at Arlington, 2014

Supervising Professor: Shannon Scielzo

Over the past two decades, social dominance orientation (SDO) has been an instrumental component of attitude research in areas like racism and sexism. This construct was initially thought to be a single variable but has since been confirmed that it is composed of two sub-components (Jost & Thompson, 2000). The goal of this research proposal is to create and validate a scale measuring the group based dominance (GBD) component of SDO. This aspect of SDO deals with the discrimination and suppression of an outgroup and the promotion of the ingroup. Such a scale would allow researchers to more precisely measure GBD versus using the older full-length SDO scale. It is hypothesized that the GBD scale would be strongly correlated with right-wing authoritarianism, sexism, racism, competitive world view, political orientation, and the original SDO scale. I predict that higher scores on the GBD scale will be able to predict higher scores of racism and sexism above and beyond the current SDO group based dominance subscale. A small pilot study was conducted using undergraduates and a 22-item version of the proposed scale. Overall, the findings were as predicted with GBD being positively associated with RWA, sexism, racism, competitive world view, and the SDO scale. A total of 12 items were selected from the 22 to be used for the revised scale.

The main goal of the current validation study was to compare the revised scale against its older original SDO counterpart and see which of the two performed superiorly in predicting a number of different outcomes. The current validation study had a total of 220 participants recruited from a local university. The sample was ethnically diverse but predominantly female with an average age of 20 years old. Participants filled out a number of surveys online to assess them on their levels of SDO, group based dominance, right-wing authoritarianism, racism, sexism, competitive world view, and political orientation. A total of six hypotheses comparing the relationships between these attitudes and constructs to GBD were tested. Before analysis of the hypotheses began, item analyses were run again to further refine the questionnaire. This caused an additional question to be dropped leaving the total number of questions at 11. Scale reliability was very strong with Cronbach's alpha being .89. An exploratory factor analysis was also conducted to determine the number of factors present within the scale. A single factor was found that accounted for nearly half of the variance. As expected, group based dominance did positively and significantly relate to all of these factors, and the scale exhibited sufficient discriminant, convergent, and predictive validity. However when it came to outperforming the original SDO subscale, the group based dominance scale was only able to significantly predict additional variance for competitive world view.

Even though the scale did meet the requirements for proper scale development and validation, it did not perform superiorly to the older version of the social dominance orientation scale. Further refinement and analysis are needed in order to meet this goal. Despite the shortcomings of the GBD scale, it is a necessary and essential step to updating the SDO scale and keeping the measure current and contemporary with modern society.

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Chapter 1

Introduction

Social Dominance Orientation

Recent controversies such as cases like the shooting of Trayvon Martin or the heated debates over the legalization of same-sex marriage shed light on the fact that society has not progressed as far as we once thought. The disparity between different groups of a society or culture stems from many sources; from history and religious beliefs to prejudice, fear, and misunderstanding. It seems as if people can use almost any criteria to separate or differentiate themselves from others including more obvious traits like sex or race to less obvious ones like religion or sexuality. The formation of these different groups may cause people to psychologically distance themselves from those not within their group and feel closer to those their group members. Favoring members of one's own group has even been found to occur when people are told that they are randomly assigned to a group (Billig & Tajfel, 1973).

One potential explanation for this favoritism and why some people seem to endorse these "us" versus "them" views is through the construct of social dominance orientation (SDO), which is part of social dominance theory. Social dominance theory is very broad and attempts to explain why hierarchies between groups seem to form naturally in almost every society by taking a number of factors into account. Social dominance orientation was developed in the early nineties as one facet of this larger theory and is a measure of individuals' beliefs that their group should be dominant or superior to others (Sidanius, Pratto, van Laar, & Levin, 2004). Social dominance orientation is widely studied, but the scale typically used to measure the construct has not been changed or updated much over the past two decades. Evidence has also been found that SDO is not a uni-dimensional factor but rather composed of two related factors

(i.e., group based dominance and opposition to equality; Jost & Thompson, 2000). Despite this finding that a two-factor solution tends to fit the data better than a one-factor solution, many studies persist in measuring SDO as a uni-dimensional construct using the traditional summed scores of the 14-item (SDO version 5) or 16-item (SDO version 6) scale. This may partially be because of a lack of a standardized and validated scale that specifically measures either group based dominance or opposition to equality. The studies I have found that measure these two distinct constructs of SDO have either simply broken up the original SDO scale with some slight rewording (e.g., Cohrs, Moschner, Maes & Kielmann, 2005; Foels & Pappas; Ho et al., 2012; Jost & Thompson, 2000; Kugler, Cooper, & Nosek, 2010) or have created scales that were not rigorously validated (e. g., Eagly, Diekman, Johannesen-Schmidt, & Koenig, 2004; Kugler, Cooper, & Nosek, 2010).

Defining and Developing Social Dominance Orientation

Social dominance orientation is generally defined as the extent to which someone wishes his or her group to be dominant or superior to other groups. It is the individual factor within the theory that seeks to explain how hierarchies are promoted and maintained.. Social dominance theory proposes that a behavior such as discrimination is the result of group based oppression formed from an interaction of various factors like the society it takes place in, individual dispositions, and situational context. They also believe that the formation of hierarchies in society involves participation and cooperation from both the superior and the inferior group. The subordinate group must comply with the oppression to a certain extent in order for the system to remain in place and to allow society to continue to function as it does (Sidanius, Pratto, van Laar, & Levin, 2004). SDO is merely one aspect of the overarching theory that is studied.

The way SDO is viewed has changed since its inception. Originally, it was conceived of as being relatively stable and uni-dimensional, almost on the same level as a personality factor (Pratto, Sidanius, Stallworth, & Malle, 1994). Recent research has theorized that SDO is a result of how one views the world. The individual's world view forms his or her level of SDO and leads to various attitudes such as racism and sexism (Duckitt & Sibley, 2010). According to this model, social dominance orientation is a mediator attitude between one's world view and the various attitudes he or she forms towards others. Please see Figure 1-1 for a simplified version of this model representing the SDO side of the theory.

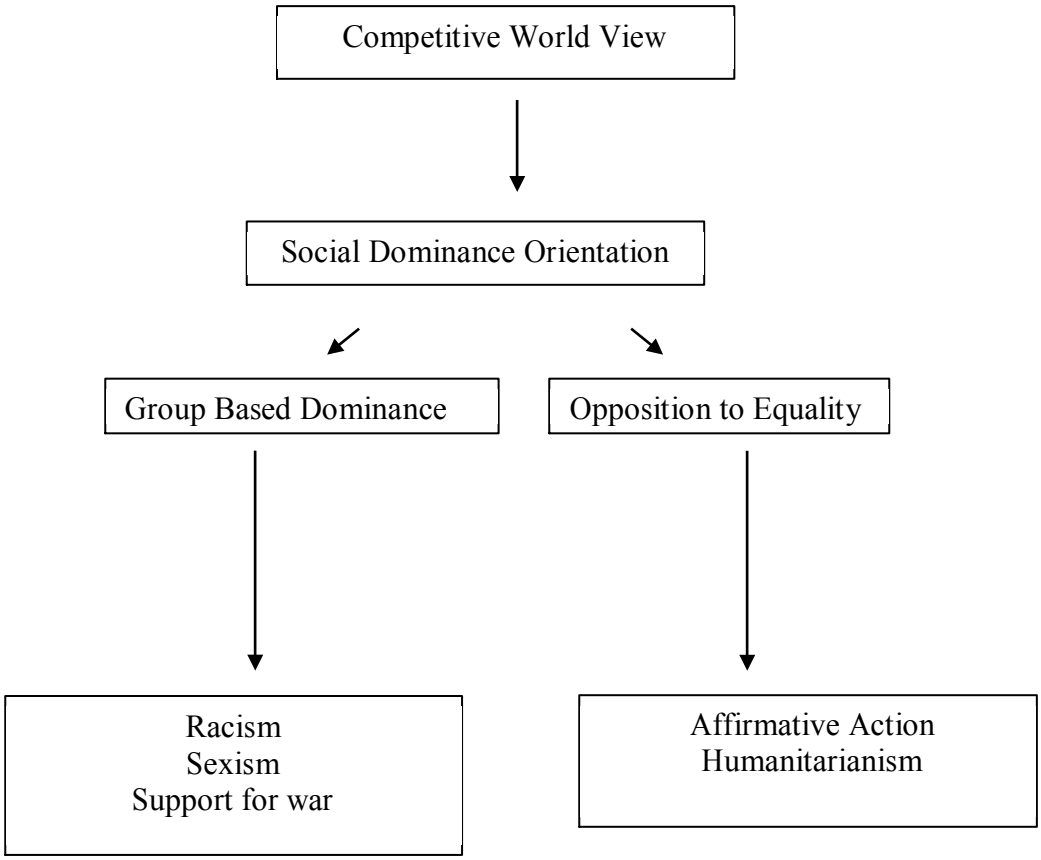

Figure 1-1 Diagram for Duckitt and Sibley's Dual Process Motivational Model

Two-factor Model

Figure 1-1 above indicates that SDO serves as a mediator between worldview attitudes and the attitudes that an individual subsequently forms towards others. However, social dominance orientation is likely best assessed by studying its specific components. Specifically, Jost and Thompson (2000) challenged the original idea that SDO was a uni-dimensional construct when they found that a two-factor solution fit the data better than the one-factor solution. They concluded that social dominance orientation was comprised of group based dominance (GBD) and opposition to equality (OEQ).

Researchers define opposition to equality as being more passive and concerned about not wanting to "rock the boat" or change the status-quo of society. Group based dominance is the more active and aggressive of the two sub-dimensions that involves a preference for the in-group and prejudice and discrimination against the out-group (Kugler, Cooper, & Nosek, 2010). Even Pratto and Sidanius, two of the original creators of the SDO scale, published an article in 2012 that confirmed that they believed SDO was made up of two sub-dimensions though they referred to them as SDO-Dominance and SDO-Egalitarianism (Ho et al., 2012). These are equivalent to group based dominance and opposition to equality.

There has been some challenge though to the idea of SDO being a two-factor construct. Xin and Chi (2010) attributed the finding of a two-factor solution to a method effect due to the con-trait wording of half of the items (e.g. It would be good if all groups could be equal). They believe that the con-trait items measure the same construct as the pro-trait items (e.g. It's OK if some groups have more of a chance in life than others), but the effect of reverse wording leads to the questions being grouped together based on

whether they are pro-trait and con-trait instead of assessing two different constructs. Ho et al. (2012) however used a scale that they created and divided it into SDO-D and SDO-E with each one having an equal balance of pro-trait and con-trait questions and endorsed the two-factor model. However, other research further supports the two factor solution.

Although the two components are strongly correlated with one another with Pearson *r* values ranging from .36 to .76, the majority of studies fall between .44 and .64 (Cohrs, Moeschner, Maes,& Kielmann, 2005 ;Ho et al., 2012; Kugler, Cooper, & Nosek, 2010). The correlation of .76 was found in one sample comprised of only white participants using a scale created specifically for that one study (Ho et al., 2012). All other samples used the traditional 16-item SDO scale (Foels & Pappas, 2004; Ho et al., 2012). Despite their strong relationship, the factors relate differently to certain outcomes and ideas. Opposition to equality has been found to be more strongly associated with identification as a Republican and rejecting such redistributive policies like Affirmative Action (Jost & Thompson, 2000; Ho et al., 2012). It has also been found to better predict attitudes towards wealth and the economy along with political orientation than GBD (Kugler, Cooper, & Nosek, 2010). On the other hand, group based dominance has been found to be more strongly correlated with right-wing authoritarianism, and significantly predicted symbolic and old-fashioned (blatant or “Jim Crow”) racism, nationalism, support for the death penalty, ethnocentrism, and immigrant prosecution (Cohrs, Moschner, Maes, & Kielmann, 2005; Ho et al., 2012; Jost & Thompson, 2000; Kugler, Cooper, & Nosek, 2010). Larsson, Bjorklund, and Backstrom (2012) found it to be significantly correlated with and predictive of endorsement of abusive actions towards prisoners.

Opposition to equality and group based dominance may also differ in their malleability. Freeman, Aquino, and McFerran (2009) found that even though higher levels

of GBD were linked to lower donations to African American oriented charities, this effect could be somewhat moderated if the participants read or watched a morally uplifting story. The effect of opposition to equality on charitable donations remained steady. Thus, it may be that GBD is more easily changed or influenced than OEQ. In my opinion, the differential relations observed across studies for these two components, coupled with differences in malleability, provide substantial support that these subfactors are measuring unique sources of variation that should be independently measured.

Group Based Dominance

After reviewing the literature, group based dominance as defined for this proposal is believed to be the active subfactor of social dominance orientation that involves the suppression of subordinate outgroups in order to promote or maintain the position of the ingroup.. These groups that form the hierarchies in social dominance orientation can be anything that the individual believes to be important from race or religion to a sports team or school Within the framing of the Dual Process Motivational Model, an individual's level of group based dominance arises from his or her view of the world as a competitive and ruthless place, and in turn, leads to the formation of attitudes such as racism and sexism that help to ensure the dominance of his or her ingroups.

Nomological Network

Cronbach and Meehl (1955) state that in order for a construct to be properly validated and scientifically supported it must occur within the frame of a nomological network. They define a nomological network as a set of constructs that relate to the central idea or construct that the researcher seeks to validate. The nomological network is used by demonstrating the relationships that the central construct has with other factors and using these associations to support different types of validity (e. g., predictive validity, concurrent validity, construct validity etc.).

I have drawn on both the social dominance orientation scale and the Dual Process Motivational Model in building the nomological network and determining which constructs are important for validating the proposed scale. Based on the Dual Process Motivational Model, I included competitive world view and right-wing authoritarianism within the network (Duckitt & Sibley, 2010). Following along the lines of the creation of the social dominance orientation scale, I also added the 16-item SDO scale, a measure for racism, and a measure for sexism (Pratto, Sidanius, Stallworth, & Malle, 1994). Please see Figure 1-2 below for the diagram illustrating the nomological network.

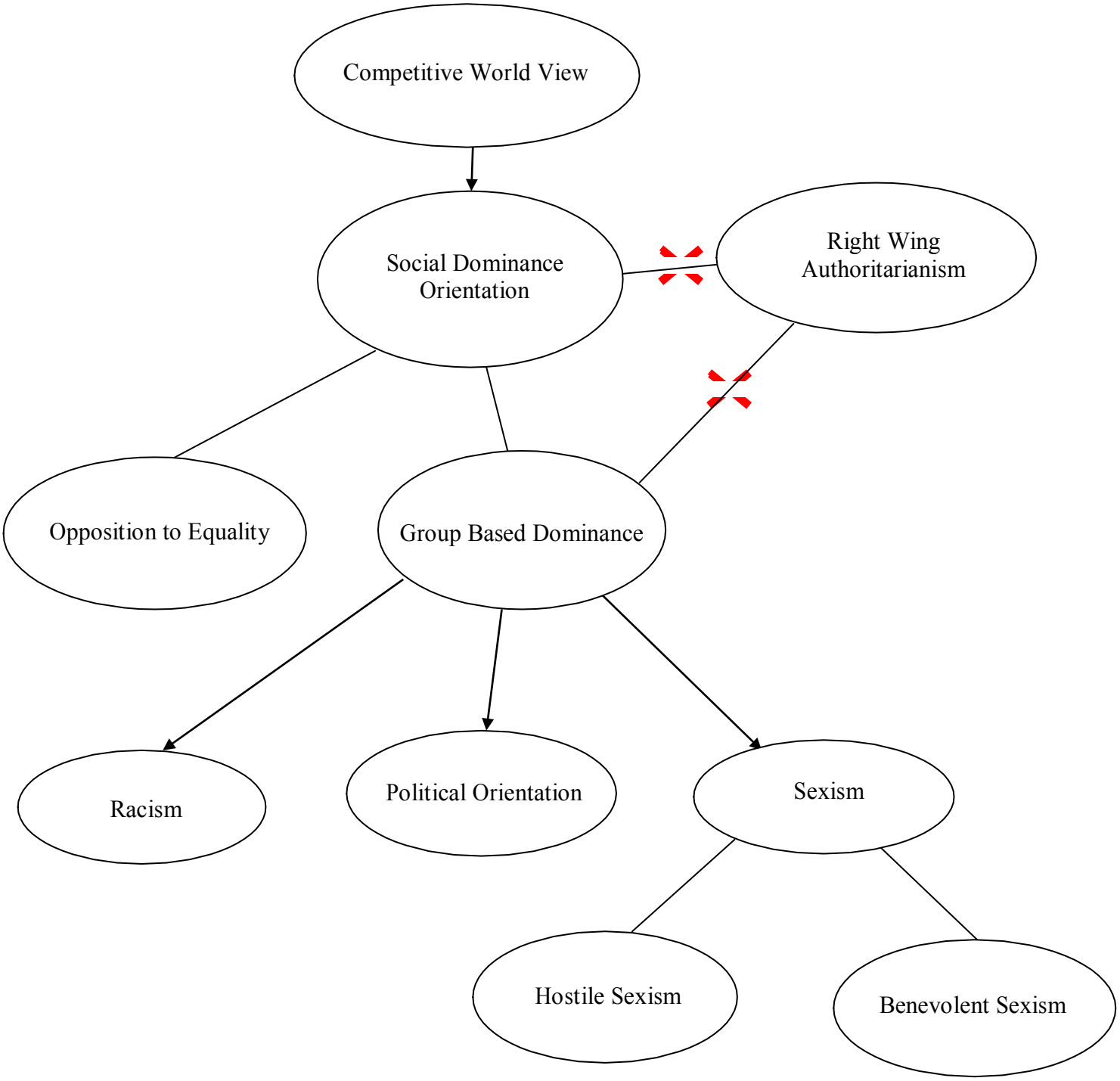

Figure 1-2 Nomological Network

Social Dominance Orientation

The SDO-6 scale has been chosen to help establish convergent validity. Convergent validity is established by administering two different measures that are expected to be related and to see if they are indeed related as predicted (Cronbach & Meehl, 1955). The SDO scale serves as a validated marker for my scale, and since GBD is a sub-dimension of SDO, it is expected that the two will be highly positively related. The SDO-6 scale is the latest version of the measurement, and one of the most widely used. It is composed of 16 items and has been shown to have high reliability (Pratto, Sidanius, Stallworth, & Malle, 1994). The social dominance orientation scale assesses both group based dominance and opposition to equality. The inclusion of the opposition to equality factor gives the SDO-6 scale a broader range of information but also may dilute its results due to the different natures of GBD and OEQ.

Hypothesis 1: For the first hypothesis, a) the whole SDO-6 scale and b) SDO-6 group based dominance subscale are both expected to have a strong positive relationship with the GBD scale.

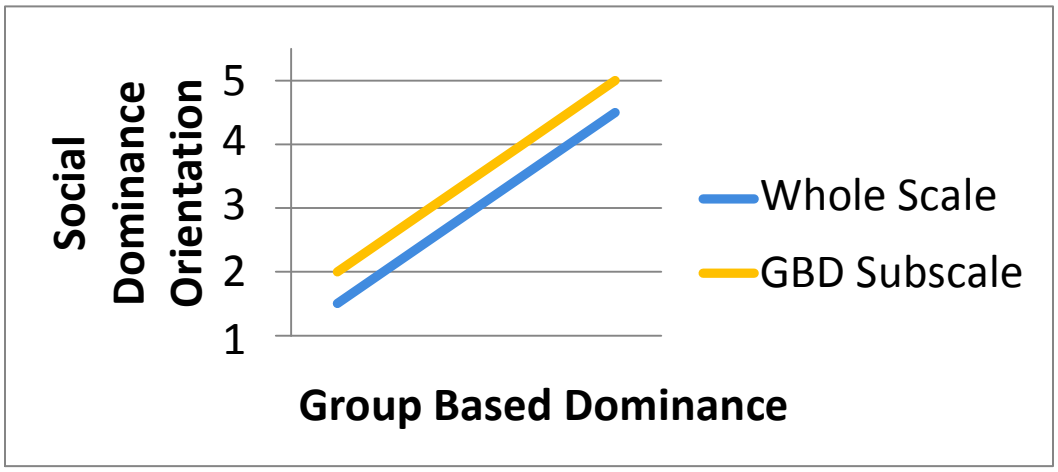

Figure 1-3 Hypothesis 1 Graph

Competitive World View

According to Duckitt's Dual-Process Motivational Model, social dominance orientation forms from the perspective that the world is a ruthless and competitive place where power and resources must be secured. Social dominance orientation has been shown to have a modest correlation with materialism of about .20 and strongly related with the pursuit of extrinsic goals that emphasize success and status, r values ranged from .37 to .52, as well as competitive world view (Duriez, 2011; Duriez, Vansteenkiste, Soenens, & De Witte, 2007; Roets, Van Hiel, & Cornelis, 2006; Sibley & Duckitt, 2009). This connection between SDO and values emphasizing worldly success and achievement could likely be the result of viewing life as a competition where winning is signified by accumulating money, prestige, and status. There have been similar findings for GBD. Group based dominance has been found to be strongly associated with competitive world beliefs in a meta-analysis and the belief in zero-sum competition between groups (Ho et al., 2012; Kugler, Cooper, & Nosek, 2010). After this literature review, I have chosen competitive world view as a way to further establish convergent validity because I believe it is the basis of the formation of group based dominance.

Hypothesis 2: For the second hypothesis a) higher scores on the competitive world view scale will be associated with higher levels of GBD. Moreover, b) the GBD scale will relate incrementally to competitive world view above and beyond the SDO-subscale.

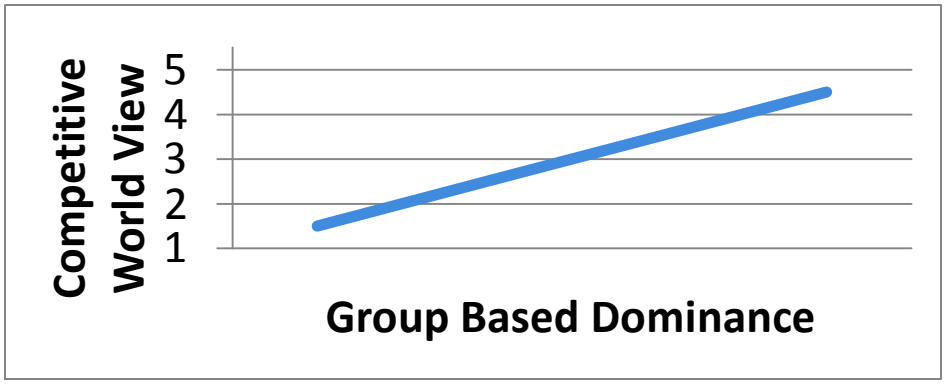

Figure 1-4 Hypothesis 2 Graph

Right-wing Authoritarianism

Right-wing authoritarianism has been found to be positively correlated with the group based dominance dimension of SDO (Cohrs, Moschner, Maes, & Kielmann, 2005; Kugler, Cooper, & Nosek, 2010). However, the two constructs are theoretically different in their definitions. Right-wing authoritarianism is grounded in adhering to group standards and conservative beliefs while SDO is much more about punishing the outgroup in order to help the ingroup maintain dominance (Jost & Sidanius, 2004, Reading 4). Also, RWA and SDO have been found to relate differently to other meaningful variables. For example, right-wing authoritarianism has been found to be more strongly related to religious beliefs and negative attitudes towards homosexuals whereas SDO was found to be more strongly predictive of racism (Sibley, Robertson, & Wilson, 2006). Due to their differences, I have chosen to use right-wing authoritarianism to demonstrate discriminant validity. Demonstrating evidence of discriminant validity requires showing that a construct does not relate or overlap with another construct with which it should not relate; thus, supporting the ideathat they are measuring two distinct factors (Nunnally & Bernstein, 1994). This in turn will provide support that my scale is assessing a unique construct, independent of RWA. Thus while GBD and RWA are expected to be positively related,

this relationship should not be so strong as to suggest that they are the same factor. To demonstrate this, I will compare the relationships of my scale with a variety of different attitudes to that of the resulting relationships between RWA and those same measures. I have chosen to exclude the political orientation questionnaire from this hypothesis due to the fact that both RWA and SDO may both intrinsically be related to conservatism but for different reasons. Specifically, I propose that the convergent relations with these scales will be higher than the proposed discriminant relations:

Hypothesis 3: For the third hypothesis, the group based dominance scale will have significantly stronger correlations with competitive world view, racism, sexism, and SDO than RWA will have with these factors to demonstrate that GBD and RWA are two distinctively different factors.

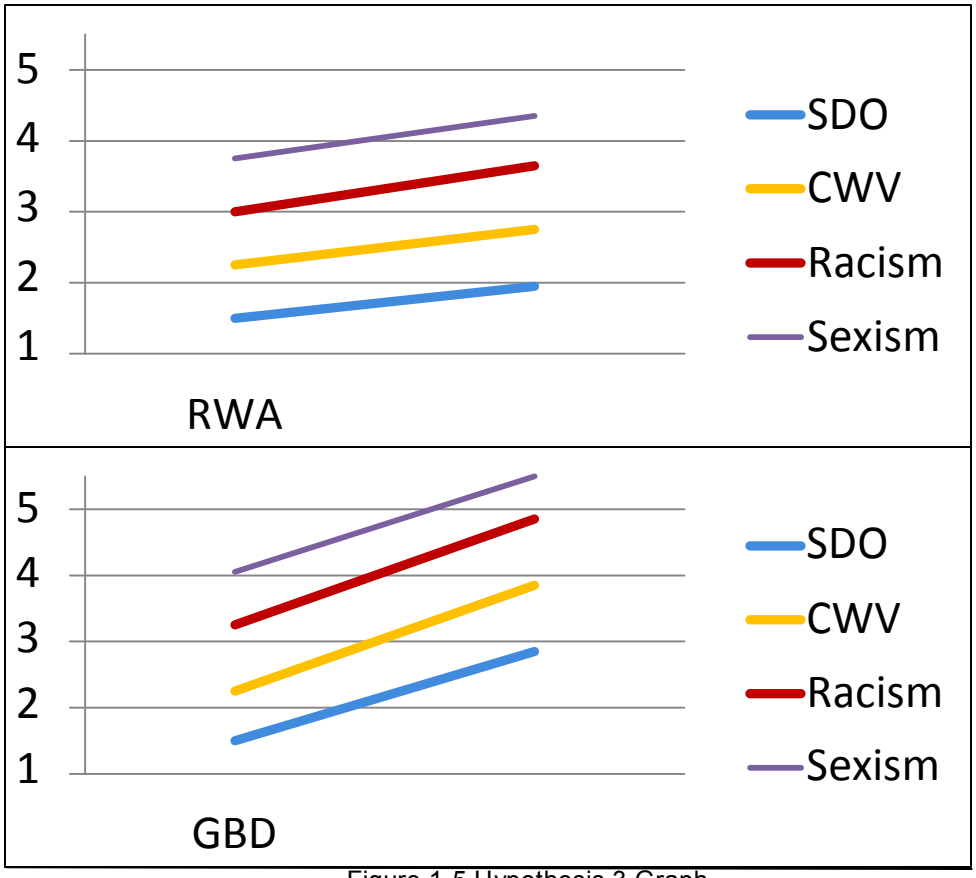

Figure 1-5 Hypothesis 3 Graph

Racism

Racism is commonly measured in conjunction with social dominance orientation and has been shown to be correlated with GBD in particular, and according to the Dual Process Motivational Model, racism is a product of having higher levels of social dominance orientation (Duckitt & Sibley, 2010; Kugler, Cooper, & Nosek, 2010). I believe that its relationship with group based dominance is similar to the one it has with social dominance orientation, and because of this, I have chosen racism as a means of establishing predictive validity. Thus, it is expected that higher scores on the group based dominance scale should lead to higher scoreson the racism measure as this would

be a way to promote one's own group and help to maintain or increase their status and position.

Hypothesis 4: For the next hypothesis, a) the racism scale will be positively related with the GBD scale. Furthermore, b) the group based dominance scale will incrementally predict racism above and beyond the SDO-GBD subscale.

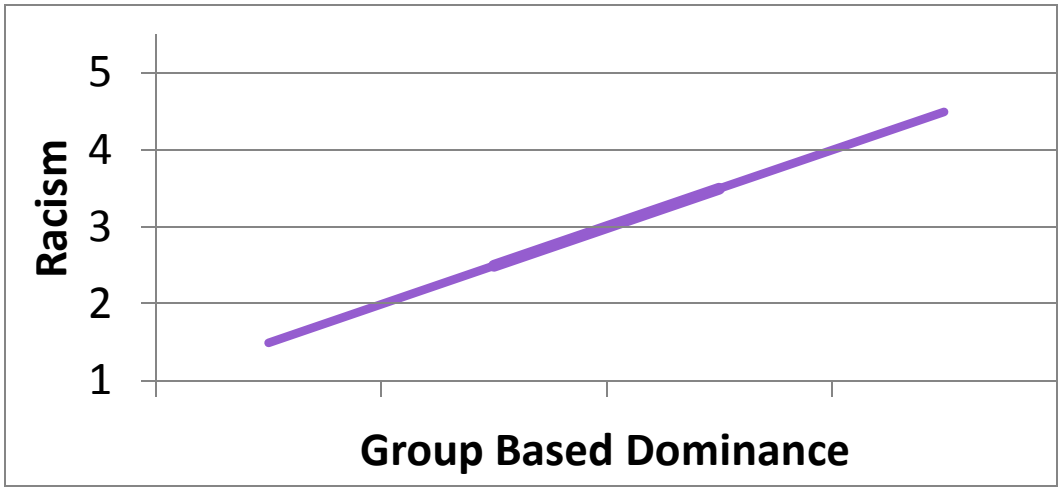

Figure 1-6 Hypothesis 4 Graph

Sexism

It is believed that higher levels of sexism will be predicted by higher levels of group based dominance but particularly, hostile sexism is expected to have a stronger relationship with GBD in comparison to benevolent sexism. Hostile sexism is a more stereotypical or blatant form of sexism where women are viewed more negatively and seen as exaggerating the effects of sexism or accused of manipulating men. Benevolent sexism is more a subtle form where women are placed on a pedestal and seen as fragile and pure. Hostile sexism has been shown to be more strongly predicted by SDO than benevolent sexism was in American, Taiwanese, and Australian samples (Feather & McKee, 2012; Lee, 2013).

Hypothesis 5: It is hypothesized that a) the entire Ambivalent Sexism Scale (including both hostile and benevolent sexism) will be positively related to the GBD scale, b) that hostile sexism will have the stronger correlation out of the two types of sexism assessed. and c) the GBD scale will predict the two types of sexism incrementally above and beyond the SDO-subscale.

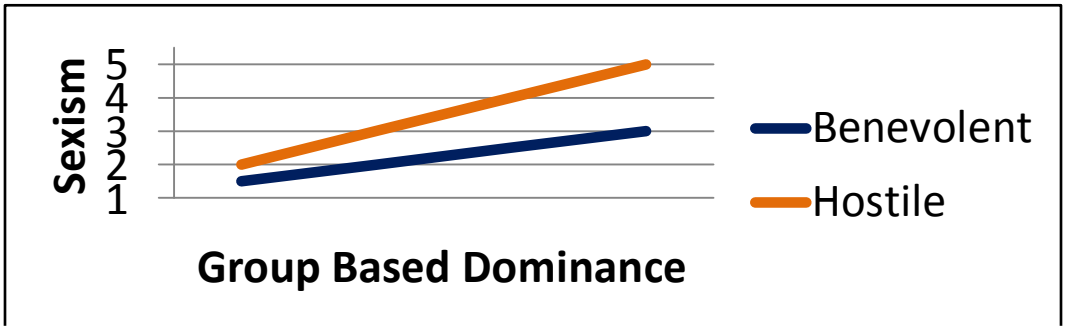

Figure 1-7 Hypothesis 5 Graph

Political Orientation

The reasoning for focusing on this particular factor stems from the fact that political orientation has been widely studied in association with SDO (e. g., Federico, Hunt, & Ergun, 2009; Jetten & Iyer, 2011; Pratto, Sidanius, Stallworth, & Malle, 1994), and the subject is particularly salient at this point in time given the recent events of the enactment of the Affordable Health Care Act and the partial government shutdown. It has been shown that those who typically consider themselves to be more conservative score higher on the SDO scale (Duriez & Van Hiel, 2002; Frederico, Hunt, & Ergun, 2009; Pratto, Sidanius, Stallworth, & Malle, 1994).

Hypothesis 6: It is expected that those who score higher on the political scale (those who rate themselves as more conservative) will also score higher on the group based dominance and SDO scale. As with the previous hypotheses, it is hypothesized that the GBD will relate to political orientation incrementally above and beyond the SDO-subscale.

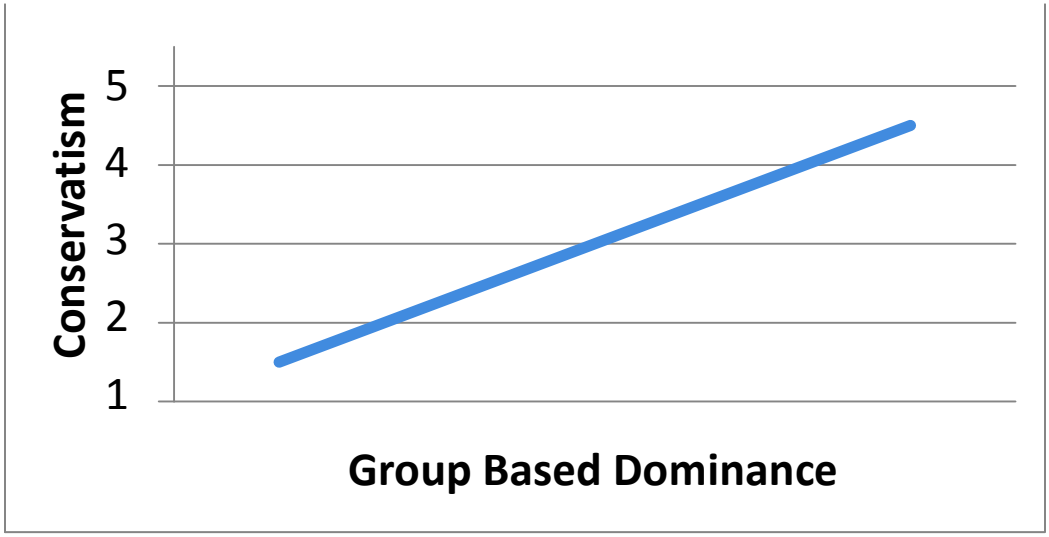

Figure 1-8 Hypothesis 6 Graph

Chapter 2

Pilot Study

The proposed scale items were created after reviewing the literature and past research and by drawing from the original 16-item social dominance orientation scale and the idea that SDO stems from a belief in a competitive world as mentioned earlier (Duckitt & Sibley, 2010).

Originally, 24 items were created for the scale. The 24 items were then turned over to five subject matter experts (SMEs), undergraduate research assistants who had been given information concerning the purpose of the scale and the construct it was measuring. The SMEs were asked to rate the items on how understandable they were, whether the items were considered offensive, and if they seemed to measure group based dominance. Lawshe's Content Validity Ratio was then calculated for each item by adding up the number of SMEs who endorsed the item as measuring GBD and subtracting the number of SMEs who did not and dividing the resulting sum by five. Items that were endorsed by three judges or less (CVR's of .20 or lower) were then re-examined. Any items retained had to be endorsed by the majority of the SMEs (three or more). This resulted in two items being dropped entirely and several others being reworded to make the understanding of the construct clearer. In the end, this led to the scale being cut down to 22 items from the original 24 items. Roughly half of these items are reverse scored. Please see the Appendix A for the resultant scale.

The questions are rated on a 7-point-Likert-type scale, with anchors of 1 (strongly disagree) to 7 (strongly agree). This format was chosen since it is similar to the original form used for the creation of the SDO-5 and SDO-6 scales. It is also a fairly common form in survey studies and using a scale of 1 to 7 provides more information and allows

for a greater degree of variation in answers than a simple yes or no or true/false answer system. Also, I want to be able to compare the results of the GBD scale with the whole SDO-6 scale as well as the items that seem to specifically measure group based dominance and see if there are significant differences between the two scales and various attitudes. A higher score on the test indicates a greater level of group based dominance. All con-trait items were reverse scored so that a “7” on that item would actually be considered a “1” in the scoring. A participant’s test score was then calculated by averaging the score for all items in order to help control for random missing data. Questions were then looked at individually to check for missing data and determine whether it was random or not. Items were carefully reviewed to make sure that the data were likely missing at random – i.e., it was not likely that participants were purposefully skipping a particular item.

Once all of the items were reviewed and dropped or reworded as needed according to the SMEs, a 22-item scale was composed of the remaining questions in order to administer to a group of undergraduate participants at a local university for an exploratory pilot study. The purpose of this pilot study was to gather data in order to conduct item and factor analyses to further refine the scale for a final version that could be administered for validation

Methods

Participants

Participants were recruited from a local urban university located in the Southern United States. The participants took all surveys online using the survey function available via Google Documents and were given course credit via the Psychology Department’s experiment pool in exchange for participating. The study was approved by the university’s Internal Review Board and was posted on Sona for students to see and sign up for the

allotted time slots. There were a total of 222 participants with over half of them being female (63%). Racially the participants were very diverse with about 28% identifying themselves as white, 28% as Hispanic, 17% as black, 14% as Asian, and 10% as biracial. The remaining percentage consisted of five participants who answered “other” and one who preferred not to answer.

Measures

I collected several different measures in addition to my GBD scale in order to examine the efficacy of my scale. Specifically, I asked participants for basic demographic information, administered the SDO-6 scale, a version of the right-wing authoritarianism scale, a questionnaire assessing competitive worldview, scales looking at racism and sexism, and a measure looking at social desirability. Each scale is discussed in greater detail below.

Demographics

Participants were first asked for their age, gender, and ethnicity.

Group Based Dominance Scale

The Group Based Dominance Scale originally developed for this study was administered first with a total of 22 questions that were measured using a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). The following scales were included in order to help establish the scale’s validity. All questionnaires were answered using the same Likert-type scale as the GBD scale unless otherwise stated.

Social Dominance Orientation

The 16-item version of the SDO scale was administered. This is the sixth version of the scale and has been shown to have a high reliability and be highly correlated with the 14-item version of the scale (SDO-5) (Pratto, Sidanius, Stallworth, & Malle, 1994). It is composed of eight pro-trait items and eight con-trait items.

Competitive World View

To assess competitive world view, I selected a shortened version of Duckitt's Competitive World View Scale. The shortened version consists of six items from the original 20-item scale and was found to be highly correlated with the original full-length version. The questionnaire assesses how the participant views the world through the lens of competition using items like "winning is the not the first thing; it's the only thing" (Sibley & Duckitt, 2009).

Right-wing Authoritarianism

An 18-item version of Altemeyer's Right-wing Authoritarianism Scale was administered. This questionnaire was adapted from a 22-item version. Several questions were deleted because it was believed that they overlapped too much with homophobia and sexism (Altemeyer, 2006).

Racism

Racism was assessed using McConahay's Modern Racism Scale for predictive validity (McConahay, 1986). The questions were slightly reworded replacing any reference to one particular race with the word "races" due to the diversity of the sample. The MRS has been found to be highly reliable (Poteat & Spanierman, 2010; Pratto, Sidanius, Stallworth, & Malle, 1994).

Sexism

The 22-item Ambivalent Sexism Inventory (Glick & Fiske, 2001) was administered to measure sexism. This particular scale was chosen because it measures both hostile sexism and benevolent sexism.

Social Desirability

Given the fact that some of this material may be considered taboo in modern society, a measure of social desirability was needed in order to help ensure that participants were not purposefully answering questions in order to please the researchers or in a way they thought was socially acceptable. The Marlowe-Crowne Social Desirability Scale was employed for this purpose (Crowne & Marlowe, 1960). It consisted of 33 items and participants were told to select either true or false.

Results

Preliminary Data Analyses

Several items had to be reverse scored for five of the questionnaires: the Group Based Dominance Scale, the RWA scale, the SDO-6 scale, Duckitt's competition scale, and the Marlowe-Crowne Social Desirability Scale. This has been done, and these reversed scores have been used in the computation of the average scores. All analyses have been performed using SPSS

The frequencies for each question on the GBD scale created for this study have been examined, and the percentage of missing values for each question does not meet or exceed 5%. Thus in accordance with Tabachnick and Fidell's (2007) suggestion, it is assumed that the data are missing at random. The frequencies for the other questionnaires were also examined and none of those had missing value percentages meeting or exceeding 5%. However, three participants' data were dropped completely. These three volunteers skipped the majority of the questions. An additional participant was dropped due to him/her skipping more than 10% of the questions on the GBD scale. Several other participants were missing data as well, but this appeared to be at random.

The rest of the missing data points were left alone since they were interpreted as being due to human error.

Cronbach's alpha was calculated for the 22 items used in the GBD scale. The alpha was found to be fairly high at roughly .89, which is similar to what is found for the SDO scale. However, given that there are 22 items, and alpha coefficients are expected to be higher with a larger numbers of items, this number is not particularly meaningful. Thus, I also examined the inter-item relations.

The bivariate correlations between all items have been calculated and examined. Neither redundancy nor multicollinearity appeared to be a problem because the largest correlation between the questions is .58. Most correlations are .40 or lower, suggesting that each item is measuring and contributing unique information. The lowest correlation was less than .02.

The corrected item-total correlations have been analyzed for use as a discrimination index. The lowest item correlation is .21, and the highest is .68. Nunnally and Bernstein (1994) offer .3 as a minimum value for item-total correlation when choosing to keep an item. The individual item means and standard deviations have been examined as well, and a one-sample Kolmogrov-Smirnov (KS) test to see if the items have deviated away from a normal distribution. All of the items appear to violate the assumption of normality according to the one-sample KS test. However, these results should be interpreted cautiously as the test is overly sensitive when larger sample sizes are involved (Field, 2009). Also, these results were expected to a certain extent given the sample that was used. It may be that students from such a diverse university are less likely to harbor these sorts of views in comparison to other populations. Please see Table 2.1 for individual items' means, standard deviations, and Kolmogrov-Smirnov test scores. Given the sensitive nature of the KS test, I decided to look at the individual items' levels

of skewness and kurtosis as well to corroborate the results of the KS test. All but three of the items exhibited significant levels of skewness according to the z-score table. The significance level was determined by dividing the skew scores by the standard error and comparing it against the z-score table. Any results over 2 were considered to be significant. The majority of items were positively skewed though one was significantly negatively skewed. A square-root transformation was performed to try and normalize the data. This did reduce the level of skewness, but it increased the level of kurtosis for many of the items with an original skewness score over 1. The same pattern was found when the data were submitted to a logarithmic transformation. Due to this finding and for the sake of simplicity when interpreting the data, I decided to continue to use the raw data rather than the transformed versions.

Table 2-1 Item Means and Standard Deviations

	M	*SD*	One-Sample KS	*p*
Item 1*	1.85	1.36	5.49	< .001
Item 2	3.04	1.92	2.95	<.001
Item 3	2.28	1.48	3.86	<.001
Item 4	2.71	1.88	3.64	<.001
Item 5	1.95	1.44	4.81	<.001
Item 6*	3.87	1.99	2.12	<.001
Item 7	4.24	1.86	2.65	<.001
Item 8	2.23	1.54	3.94	<.001
Item 9	3.03	1.67	2.70	<.001
Item 10*	2.80	1.79	2.96	<.001
Item 11	2.38	1.54	3.56	<.001
Item 12*	2.71	1.82	3.28	<.001
Item 13	2.71	1.69	3.10	<.001
Item 14	2.05	1.49	4.74	<.001
Item 15	4.43	1.78	2.27	<.001
Item 16*	1.65	1.11	5.72	<.001
Item 17*	2.40	1.24	2.63	<.001

Table 2-1 *Continued*

Item 18*	3.04	1.82	2.69	<.001
Item 19	3.82	1.80	2.13	<.001
Item 20	4.10	1.93	2.16	<.001
Item 21*	2.79	1.74	2.98	<.001
Item 22*	2.20	1.44	3.58	<.001
Note: * Indicates item is reverse scored.				

Bivariate correlations have been run between all of the scales excluding the Social Desirability Scale since it is not measured on an interval scale. After the correlations were calculated, a correction for attenuation was then applied to partial out the effects of random error and obtain a better understanding of the 'true' relationships between variables as if they were perfectly measured. The average scores including reverse scored items have been used to calculate the correlations, see Tables 2.2 and 2.3 for all of the r values for group based dominance and right-wing authoritarianism. In lieu, summed scores as is customarily done with social dominance scales, I elected to use the participant's average score. It is inappropriate in my opinion to use a sum score when participants are not forced to answer all of the questions. Thus, if a participant accidentally skipped over a question or chose not to answer it his or her score will not be accidentally minimized. The observed summed scores will still be used for the Social Desirability Scale though corrected values may be utilized as well to see how they compare to the raw scores. The Group Based Dominance Scale has been found to be significantly correlated with all of the other measurements with the corrected *r* values ranging from .11, $p < .01$ for the benevolent sexism subscale scale to .86, $p < .001$ for the group based dominance subscale of the SDO-6 scale. As predicted, all correlations are

positive. It was also found that the correlation between hostile sexism and GBD was greater than the relationship found between group based dominance and benevolent sexism (r = .66, p < .001; r = .11, p =.14, respectively).

Table 2-2 Group Based Dominance Corrected Correlations

Factor	*r*	*p*	*n*
Right-wing Authoritarianism	0.26	< .01	219
Sexism	0.26	< .01	219
Hostile Sexism	0.66	< .001	213
Benevolent Sexism	0.11	< .15	210
Modern Racism	0.51	< .001	219
Social Dominance Orientation	0.59	< .001	219
SDO-Group Based Dominance subscale	0.86	<.001	215
Competitiveness	0.49	< .001	219

Table 2-3 Right-wing Authoritarianism Corrected Correlations

Factor	*R*	*p*	*n*
Group Based Dominance	0.26	< .01	219
Sexism	0.53	< .001	219
Hostile Sexism	0.16	< .05	213
Benevolent Sexism	0.56	< .001	210
Modern Racism	0.43	< .001	219
Social Dominance Orientation	0.23	< .001	219
SDO-Group Based Dominance subscale	0.39	<.01	215
Competitiveness	-0.03	< .85	219

Correlations were also run between the various questionnaires and the RWA scale in order to compare the results to those found for the group based dominance scale. Several differences were found as expected. The RWA scale did have a positive but much lower relationship with the SDO scale than the group based dominance scale did (r = .23, p < .001 vs. r = .59, p < .001). It also had a much a lower correlation with the hostile sexism subscale of the Ambivalent Sexism Scale (r = .16, p < .05) in comparison to the GBD scale (r = .66, p < .001). The largest difference though was on the competitive world view measure which right-wing authoritarianism had a non-significant but slightly negative relationship with *(*r = -.03, p > .05) and the group based dominance scale had a highly positive relationship with (r = .49, p < .001). These relationships seem to indicate that while RWA and GBD do share some common ground, they are clearly two distinct

constructs as predicted by the proposed nomological network and help to establish the discriminant validity of the group based dominance scale. Please see Table 2.2 for all *r* values relating to RWA.

Exploratory Factor Analyses

A principal components analysis (PCA) with a varimax rotation was performed on the full 22-item version of the scale. This factor analytic extraction technique was chosen because I am in the beginning stages of research and random error variation likely plays a role. Moreover, I expected that there would be a general underlying factor accounting for most of the variation. Assuming that multiple components might be present, varimax rotation was chosen due to the ease of interpretation, coupled with my intended application of the scale. Oblique rotation is used when the factors are assumed to be highly correlated with each other, and thus, can lead to the data being difficult to interpret (Field, 2009; Tabachinick & Fidell, 2007).

The results of the Kaiser-Meyer-Olkin test performed found that the sample size was large enough to conduct a principal components analysis on, KMO = .88. Initially using the full sample of items, four components with eigenvalues over 1 were extracted. According to Kaiser's criterion, a component need only have an eigenvalue over 1 in order to qualify as a factor. Field (2009) however does not recommend this method unless the average value of all variable communalities is .70 or above. Unfortunately, this was not the case. None of the variable communalities reached .70. Instead, the scree plot was examined in conjunction with the component matrix. A two-factor solution seemed to best fit the data after taking the slope of the scree plot into consideration and the loadings on the component matrix. The two rejected factors accounted for less variance then the first two (both under 10% before rotation) and what variables loaded on them highly (above .40) loaded highly on the other two factors as well.

Given the concerns previously discussed with the data, in the next step, I then examined the results using a refined set of items. Thus, the process was repeated using a 12-item version of the scale. The items were selected according to the values of their item-total correlation values (values greater than .50 were chosen to maximize retaining the essence of the overarching construct) as well as having a variety of means to attempt to compensate as much as possible for the underlying problems with skew in addition to being able to represent all levels of the underlying construct. The majority of the questions had means of about 2.4, but there were several with means between 3 and 4 as well. Once again, the sample size was adequate for the analysis according to the KMO measure, KMO = .90. Cronbach's alpha was also sufficiently high, $\alpha = .88$. Using the same methods as the full scale (scree plot and component matrix), it seems that one factor best fits the data. The second component accounts for considerably less variance before rotation than the first (8.4% for the second component versus 44.9% for the first) and has an eigenvalue only minimally above 1. Also when looking at the component matrix, it only has three items loading on it at .40 or higher, and all three of these items load higher on the first factor than on the second factor. It is likely that the second factor is a byproduct of the high levels of skew of the items.

A one-way ANOVA was conducted on the averaged scores of the group based dominance scale to see if there were any significant differences in means among the different ethnic groups. Past studies have found that white Americans tend to have higher levels of SDO than black Americans (Sidanius, Levin, Liu, & Pratto, 2000). Although not part of the main hypotheses, I chose to run this analysis because the data present a unique opportunity to look at multiple ethnicities represented roughly equally thanks to the diversity of the campus that I sampled from. Many studies looking at SDO focus either solely on Caucasians or have a very small percentage of minorities that do

not make comparing means feasible. Surprisingly, there were no significant differences found between any combination of the different races, F(5, 212) = 1.02, p = .41. Despite this lack of significant findings, African American participants did have the lowest average score (M = 2.65) followed by Hispanic participants (M = 2.74).

Gender is also thought to play a role in SDO scores with men usually scoring higher than women (Levin, 2004). A one-way ANOVA was run to see if males would score significantly higher than females on the group based dominance scale. The analysis was significant, $F(1, 217) = 14.76$, $p < .001$, with men having higher scores than women (men's $M = 3.13$, $SD = 1.00$, $N = 79$; women's $M = 2.65$, $SD = 0.79$, $N = 140$). Thus, the scale appears to be performing as expected in that regard.

Chapter 3

Cross-validation Study

Methods

The following study was done in order to cross-validate the revised form of the group base dominance scale. In addition, it also included two questions concerning political orientation of the participants along with citizenship status. Political orientation was included to further help establish the predictive validity of the measure. A questionnaire measuring anti-fat attitudes and another measuring materialism were given. These were administered for exploratory analyses and do not directly relate to the goal or content of my thesis.

Participants

A total of 231 participants enrolled in the study. The participants were students from a local university located in the Southwestern United States and signed up using the school's online sign up website. The majority of participants were female (71%), and the sample was ethnically diverse (white 40%, black 16%, Asian 18%, Hispanic 21%, < 1% Native American). The majority of participants were under the age of 25 with the average age being roughly twenty years old.

Materials

The majority of the scales administered in this cross-validation study were from the previous pilot study with the exception of the addition of two questions assessing participants' political leanings, and citizenship status. The order of the scales was randomized except for the GBD scale, which remained at the beginning and the demographics, which were given at the end. All questions within the questionnaires were randomized as well. This was done in order to minimize any order effects that might have influenced the results.

Group Based Dominance Scale

Participants took the revised Group Based Dominance Scale through an online survey website. The scale was rated from 1 (strongly disagree) to 7 (strongly agree). All scales were measured using this range unless stated otherwise.

Right-wing Authoritarianism

The same 18-item version of Altemeyer's (2006) RWA scale from the pilot study was administered once again.

Sexism

The Ambivalent Sexism Scale (Glick & Fiske, 2001) was taken by participants in order to measure hostile and benevolent sexism.

Racism

The slightly modified 6-item MRS scale was given using the word "races" in place of any specific ethnic group.

Social Desirability

A 13-item version of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) was given as a means of controlling for participants purposefully answering questions in such a way as to make themselves look better. It was measured using a true/false answer scheme.

Social Dominance Orientation

Like in the pilot study, the 16-item SDO-6 scale was administered to participants.

Competitive World View

A shortened version of the Competitive World View questionnaire was once again administered (Sibley & Duckitt, 2009).

Political Orientation

Political orientation was analyzed using two items. The first question asked the participants to select one of seven options concerning their political attitudes sorted along a spectrum (extremely conservative, moderately conservative, slightly conservative, neither liberal nor conservative, slightly liberal, moderately liberal, extremely liberal). The second then asked them to rate on a 7-point scale how important their political orientation was to their personal identity.

Demographics

Sex, age, and ethnicity were collected, but this time they were asked at the end of the study in order to avoid potentially biasing the participant into thinking about any one particular group to which he or she may belong.

Citizenship

Participants were asked whether they were a citizen of the United States or not. This was done in order to potentially control for citizenship status since political orientation could have impacted the results of non-U.S. citizens differently than U.S. citizens. Please see Appendix A for the final version of the GBD scale and Appendix B for all others.

Results

Data Screening

Before beginning hypothesis testing the results were examined for missing data. A total of 11 participants' data were dropped who did not answer a substantial amount of the questions. Unfortunately, they could not be compared to participants whose data was retained as they did not provide enough information. The total number of participants whose data were analyzed was 220.

Each question on the revised Group Based Dominance Scale was also examined to make sure that no more than 5% of participants failed to answer that particular question. If more than 5% of the participants did not answer a particular question, this may indicate that participants refused to answer it for some reason rather than accidentally skipping it. It was found that no questions had more than 5% of the total responses missing after those eleven participants' data were removed.

Once again, each question on the group based dominance scale was checked for normality using skewness and kurtosis scores. It was indeed found that 10 of the questions violated the assumption of normality. All but two were positively and significantly skewed. This however was not unexpected given the nature of the questionnaire and the results of the pilot study. Like in the pilot study, I chose not to transform the data but instead decided to keep the raw scores for the sake of simplicity and ease when interpreting the data. One outlier was found by looking at the standardized z-scores on all of the averaged scores and determining that the participant had a z-score above 3.29 on one or more of the scales. It was decided though that the participant's data would be retained since there is no evidence that the data was incorrectly entered or incorrect in any other way

Item Analyses

Cronbach's Alpha was calculated for the refined scale as a whole and was found to be .89. This was the same as the Cronbach's Alpha that was calculated for the 22-item version of the scale administered in the pilot study. The correlations amongst all of the questions were checked for multicollinearity. The items' correlations showed that this was not a problem. Most of the inter-item correlations were between .40 and .50 with the lowest being .17 and the highest .57.

Next, I chose to analyze the individual items to reassess the structure of the scale with the new sample. The means and standard deviations were examined for all items. The means ranged from 1.96 to 4.06. Please see Table 3.1 for a complete list of all questions' means and standard deviations. The item-total correlations were also looked at again to make sure they met the requirement of a score .5 or higher likein the pilot study. This caused one question to be dropped from the refined questionnaire. The Cronbach's Alpha remained .89.

Table 3-1 Item Means, Standard Deviations, and Skewness

	M	*SD*	Skewness
Q1	2.56	1.69	0.80
Q2	2.21	1.53	1.15
Q3	2.90	1.79	0.44
Q4	1.94	1.48	1.80
Q5	3.83	1.74	-0.21
Q6	2.26	1.52	1.22
Q7	2.22	1.34	1.04
Q8	2.80	1.79	0.68
Q9	1.98	1.37	1.37
Q10	4.06	1.88	-0.26
Q11	2.43	1.63	0.95

Hypothesis 1

Given that the group based dominance scale was influenced by the SDO scale, the first hypothesis predicted that the group based dominance scale would be positively related to the original SDO scale and its subscale. This was tested by running a bivariate correlation. The hypothesis was supported for the whole SDO scale, $r = .74$, $p < .01$, and the subscale, $r = .78$, $p < .01$.

Hypothesis 2

Similar to the first hypothesis, it was stated in the second hypothesis that the GBD scale would be positively related to the competitive world view questionnaire. In addition to this, it was believed that the GBD scale would be able to predict competitive world view above and beyond what the original SDO-subscale could. The first half of this hypothesis was tested using a bivariate correlation, and the results did support the prediction, $r = .55$, $p < .01$. Hypothesis 2 b proposed that the group based dominance scale would be able to superiorly predict competitive world view in comparison to the older SDO-subscale, and it was assessed using a hierarchical regression with SDO being entered as the first variable. Overall, the model with both the SDO-subscale and the group based dominance scale was found to be significant and met the assumption of homoscedasticity, $F(2,215) = 60.50.$, $p < .05$. The SDO-subscale was entered into the analysis first and was found to account for 33% of the variance in the scores on the Competitive World View Scale, $F(1,216) = 108.67$, $p < .05$. The group based dominance scale was then entered into the model at the second step and accounted for an additional 2.8% of the variance above and beyond what the first scale accounted for, $F(2,215) = 8.97$, $p < .05$. The results did support the second hypothesis that the group based

dominance scale would be able to predict competitive world view scores above and beyond the original SDO-subscale.

Hypothesis 3

The purpose of the hypothesis 3 was to establish discriminant validity. Thus, it was expected that the relationships between the group based dominance scale and the competitive world view scale, the racism measure, the Ambivalent Sexism Scale, and the Social Dominance Orientation Scale would be stronger than the relationships these scales have with the Right Wing Authoritarianism scale. First, all necessary bivariate correlations were calculated (please see Table 3.2 for all correlations). These correlations were then converted into z-scores using Fisher's *r*-to-*z* transformation formula so that they could be objectively and compared to see if they significantly differed.

Table 3-2 Raw and Corrected Correlations

Factor	GBD	RWA	SX	HS	BS	MR	SDO	CP
Group Based Dominance (GBD)	1	.42	.50	.51	.36	.75	.81	.73
Right-wing Authoritarianism (RWA)	.38	1	.51	.46	.44	.60	.45	.36
Sexism (SX)	.45	.46	1	.98	.97	.63	.40	.35
Hostile Sexism (HS)	.45	.41	.88	1	.57	.70	.49	.34
Benevolent Sexism (BS)	.32	.39	.86	.5	1	.40	.21	.28
Modern Racism (MR)	.58	.46	.51	.56	.32	1	.79	.75
Social Dominance Orientation (SDO)	.73	.40	.37	.45	.19	.64	1	.76
Competitiveness (CP)	.55	.28	.27	.26	.21	.51	.59	1

Values below diagonal are raw correlations. Values above diagonal are corrected for attenuation.

For the competitive world view scale, the group based dominance scale had a significantly stronger positive correlation with the questionnaire (z =.61) then the RWA scale did, (z =.28), z = 3.46, p < .01 . A similar result was found for the Modern Racism Scale with the GBD scale having a greater correlation with it (z =.66) than RWA had, (z =.49), z = 1.84 p = .06, though it was only marginally significant.

The Ambivalent Sexism was examined both as a whole and then broken up into its hostile and benevolent subscales. The entire sexism was found to have a roughly equal relationship with the GBD and RWA scales, (RWA z = .50, GBD z =.48) z = -0.13, p > .05. However, this finding is slightly misleading as the subscales had somewhat different results. The benevolent sexism scale had a weaker relationship with group based dominance than with right-wing authoritarianism, GBD z =.33, RWA z =.41, z = -0.83 p > .05. Surprisingly, the hostile subscale, which deals with the more overt form of sexism, was found to only have a slightly larger correlation with GBD than RWA (GBD z = .48,RWA z =.43), z = 0.51, p > .05.

Finally, the SDO scale was examined to see whether it was more highly related to the GBD scale of the right wing authoritarianism scale. As predicted, it was much more strongly related to the group based dominance than RWA (RWA z = .40, GBD z =.94),z = 5.46, p < .01

Overall, hypothesis three was partially supported by the findings of the various scales and their relations with the group based dominance scale and the right wing authoritarianism scale. They did significantly differ when it came to relating to the original SDO scale and the competitive world view scale and marginally on the racism measure, but the differences between RWA and GBD on the sexism measures were weak. Thus, most of the findings were as predicted, and the discriminant validity was at least partially established.

Hypothesis 4

Hypothesis 4 dealt with the relationships between the group based dominance scale, the social dominance orientation scale, and racism. For part a, a bivariate correlation was run for racism and the GBD scale. As expected, the Modern Racism scale was highly correlated with the GBD scale, $r = .59$, $p < .01$. Part b of the hypothesis stated that the group based dominance scale would be better able to predict racism versus the social dominance orientation-subscale. Like in the second hypothesis, a hierarchical regression was done to test this prediction with the SDO-subscale being entered first followed by GBD. The SDO-subscale alone was found to significantly predict the levels of racism that participants reported, $F(1,215) = 185.64$, $p < .05$, and accounted for 46.3% of the variance. Afterwards, the group based dominance scale was entered and the ΔR^2 was found to be .009, $F(2,214) = 3.18$, $p = .08$. The overall model was found to be significant, $R = .69$, $F(2,214) = 95.35$, $p < .05$, and meet the assumption of homoscedasticity. The hypothesis was partially supported as the GBD scale did account for some additional variance though this was found to be a relatively small amount and did not meet the criteria for statistical significance .

Hypothesis 5

For the first part of the next hypothesis, a bivariate correlation was run to look at the relationship between group based dominance and sexism. A positive relationship was expected for the scale overall, but it was thought that the relationship would be particularly strong for the hostile subscale. The correlation for the entire scale was .45. Then the correlations for the two subscales were calculated and transformed into the z scores using Fisher's r-to-z transformation formula to compare the correlations for the hostile subscale and benevolent subscale (Hostile z = .48, Benevolent z =.34). Even though the hostile subscale did have a stronger relationship with GBD than the

benevolent subscale, it was not significant, $z = 1.59$, $p = .06$.. Unfortunately, part b of the hypothesis was not supported.

Part c of the hypothesis, addressed the incremental validity of the group based dominance scale over the social dominance orientation-subscale. Once again, a hierarchical regression was run with variables being entered in the same order as in hypothesis 4. The SDO-subscale significantly predicted the scores on the entire Ambivalent sexism scale, $R^2 = .26$,$F(1, 216) = 74.39$, $p < .05$.Even though the GBD scale did account for some additional variance, it was a fairly small amount and was not statistically significant, $\Delta R^2 = .008$, $F(2, 215) = 2.32$, $p > .05$.

In addition to the main analyses run for the hypothesis, women and men were also examined separately due to the nature of the construct. It was thought that gender could potentially play a role in how group based dominance relates to the different kinds of sexism assessed by the scale. First the men's scores were examined ($N = 61$), and a significant positive correlation was found between group based dominance and the ambivalent sexism scale as a whole, $r = .41$, $p < .01$. The correlation between group based dominance and hostile sexism was not significantly stronger ($r = .42$, $p < .001$, $z = 0.45$) than the correlation with benevolent sexism ($r = .29$, $p = .03$, $z = 0.28$), $z = 0.80$, $p = .42$. In the hierarchical regression, the SDO-subscale did significantly predict the ambivalent sexism scores, $R^2 = .16$,$F(1, 59) = 11.07$, $p > .01$, but the contribution made by the addition of group based dominance into the model remained nonsignificant, $\Delta R^2 = .02$, $F(1, 58) = 1.48$, $p = .23$.

Next, the women's scores were examined ($N = 156$), and a strong positive correlation was found between group based dominance and the sexism scale, $r = .46$, $p < .001$. There was no significant difference between the correlations for hostile sexism ($r = .45$, $p < .001$, $z = 0.48$) and benevolent sexism ($r = .35$, $p < .001$, $z = .34$), $z = 1.04$, $p =$

.15. For the hierarchical regression, the SDO-subscale was found to account for a significant amount of variance on the scores for the sexism measure, R^2 = .30 ,F(1, 154) = 65.55, p < .001. Although, the group based dominance scale did account for some unique variance after the SDO-subscale was entered into the model, it was not enough to be significant, ΔR^2 = .005, F(1, 153) = 1.20, p = .27.

Hypothesis 6

The last hypothesis stated that a) political conservatism would be highly and positively related to participants' levels of group based dominance, and b) that the GBD scale would be able to predict political conservatism above and beyond the original SDO-subscale. For part 1, a bivariate correlation was run as in the previous hypotheses and GBD was found to be positively and significantly correlated with higher levels of political conservatism, r = .16, p < .05 (M = 3.72, SD = 1.33, Skewness = .07). Part b consisted of running another hierarchical regression by entering the group based dominance scale into the second step so that the participants' scores on the social dominance orientation scale could be controlled for. Firstly, SDO did significantly predict conservatism, R^2 = .18, F(1, 215) = 7.11, p < .05, with participants who were higher in SDO being more conservative. Next, group based dominance did not account for a statistically significant amount of variance after taking the SDO scale into account, ΔR^2 = .03, F(2, 214) = .40, p > .05 Therefore, the results failed to support the second half of the fifth hypothesis.

I decided to rerun the analyses concerning the participants' political orientation and take into consideration their citizenship status. It is possible that students who are not U.S. citizens may not feel strongly enough about politics one way or another for it to be significantly impacted by their levels of social dominance orientation. I removed participants' data who said they were not U.S. citizens. The resulting bivariate correlation was .14, p = 06. Social dominance orientation remained a significant predictor, R^2= .02

,F (1,191) = 3.81, $p < .05$, and group based dominance did not significantly increase the amount of variance accounted for, $\Delta R^2 = .002$, F(2,190) = .44, $p > .05$. I also went on to rerun the analyses using only the non-U.S. citizen participants ($N = 22$) as well to see their status impacted the results. The bivariate correlation between conservatism and GBD for this second group was .49. The hierarchical regression revealed that social dominance orientation was a significant predictor of conservatism among non-U.S. citizen participants, $R^2 = .36$, F(1,20) = 11.04, $p < .05$, and that the amount of variance accounted for did not significantly increase after group based dominance was entered into the model, $\Delta R^2 = .001$, F(2,19) =.02, $p > .05$. Overall, it seems that the influence of group based dominance on political conservatism was similar for U.S. citizens and non-U.S. citizens.

Factor Analysis

Another exploratory factor analysis (principal components analysis) with a varimax rotation was run to see how many factors were present in this revised version of the group based dominance scale. The scree plot and eigenvalues were examined to see how many factors seemed to be present in the scale. There were two components with eigen values over 1, but the second eigenvalue accounted for much less variance in comparison to the first eigen value (48% vs. 10%). In addition to this, visual examination of the screeplot shows a steep drop off after the first factor, and many of the items that make up the second component load heavily on the first as well. After taking these things into consideration, it was determined that there was only one that accounted for 48% of the variance.

Additional Analyses

To see if perhaps participants' desire to answer in a socially acceptable manner could influence the results, the regression analyses for hypothesis 2 b, hypothesis 4 b,

hypothesis 5 c, and hypothesis 6 b were rerun while controlling for the total scores on the social desirability scale. For hypothesis 2 b regarding competitive world view, social desirability did not significantly predict the scores, R^2 = .01, F(1, 216) = 2.18, p = .14, and did not drastically alter the results of the analysis. The social dominance orientation subscale and the GBD scale still accounted for roughly the same amount of variance as in the first analysis, ΔR^2 = .33, F(1,215) = 104.71, p < .001, and ΔR^2 = .03, F(1,214) = 10.86, p = .004, respectively. The overall model with all three variables was significant, R^2 = .36, F(3, 214) = 40.15, p < .001.

Next for hypothesis 4 b concerning the prediction of modern racism scores, the results showed that social desirability accounted for a significant but small amount of variance when controlled for, R^2 = .03, F(1,215) = 5.82, p = .02. The rest of the findings for hypothesis 4 b were very similar to those of the original analysis (SDO-subscale, ΔR^2 = .44, F(1,214) = 174.32, p < .001, GBD, ΔR^2 = .008, F(1,213) = 3.33, p = .07). Again, the entire model did significantly predict the scores on the racism scale, R^2 = .47, F(3, 213) = 63.69, p < .001.

The scores on the Ambivalent Sexism Scale for hypothesis 5 c did not appear to be significantly impacted by participants' levels of social desirability, R^2 = .002, F(1,216) = .47, p = .49. The social dominance orientation-subscale continued to be a significant predictor, ΔR^2 = .26, F(1,215) = 75.14, p < .001, and the amount of variance that GBD accounted for did not change substantially, ΔR^2 = .006, F(1,214) = 1.79, p = 18. The entire model accounted for 26% of the variance, F(3, 214) = 25.94, p < .001.

Lastly, social desirability did not alter the findings of hypothesis 6 c (political orientation/ level of conservativism), R^2 = .002, F(1,215) = 0.34, p = .56. Once again, the social dominance orientation sub-scale played a significant role in predicting participants' political orientation, ΔR^2 = .03, F(1,214) = 6.72, p =.01. The group based dominance

scale did not account for a significant amount of variance after adding the other two scales into the model, ΔR^2 = .002, $F(1,213) = 0.40$, p = .53. The model as a whole accounted for about 3% of the variance, $F(3, 213) = 2.48$, p = .06. Thus overall, it seems that social desirability was not a major influence on the way participants chose to answer the questions and did not greatly affect the results.

As in the pilot study, I once again compared the average scores on the revised group based dominance scale by race and gender using an ANOVA to compare the means. Significant differences were not found among the different ethnicities (White *N* = 81, *M*= 2.66, *SD* = 1.00; Black *N* =31, *M*=2.68, SD = 1.32; Hispanic *N* = 49, *M*= 2.41, SD = 1.00; Asian *N* = 41, *M*= 2.81, *SD* = 1.20; Native American *N* = 6, *M* = 3.09, SD = 1.06; Other *N* = 5, *M* = 3.35, *SD* = 1.35). Surprisingly, men were not found to score significantly higher than women overall unlike in the pilot study (Men *N* = 61, *M*= 2.80, *SD* = 1.25; Women *N* = 156, *M*=2.60, *SD* = 1.05).

In order to see if the pilot study sample and the cross validation sample differed in any other ways, the means of the participants' scores on the group based dominance scale, the social dominance orientation scale, and the social dominance orientation subscale were compared using paired samples t-tests in SPSS. No significant differences were found between the different measures, all p's > .10 in the cross-validation study. Surprisingly, the results in the pilot study were quite different. All means in the paired samples t-tests between the three scales were significant, all ps < .01.

Discussion

The goal of this project was to develop and validate a new scale to more accurately measure a subfactor of SDO known as group based dominance. The original social dominance orientation scale has been widely used with a number of different variables to help further understand the complex relationships of prejudice and

discrimination. However, the scale had not truly been updated since the early 90s, nearly twenty years ago. American society and culture since then have undergone significant changes politically and socially. Additionally, it has been found since the scale's creation that a two factor solution is more appropriate than the original one factor solution proposed (Jost & Thompson, 2000; Ho et al, 2012) and because of these reasons I felt it was necessary to make an attempt to restructure and improve the scale.

The group based dominance scale was initially developed with 24-items, which were then sent to five subject matter experts who reviewed each question individually. This resulted in two items being dropped and several others being reworded. A pilot study was then conducted to further refine the scale and determine the number of factors present. After an exploratory factor analysis and item analyses were conducted, it was decided that 12 of the original items would be retained and that these composed one single factor known as group based dominance orientation.

After the pilot study, a final study was run to validate the group based dominance scale where another question was dropped leaving the total at eleven. A total of six hypotheses were proposed that sought to establish convergent validity, discriminant validity, and predictive validity by examining the relationships of the group based dominance scale to measures of various attitudes. Moreover, I wanted to demonstrate the superiority of my scale relative to the older SDO-subscale of group based dominance in predicting several key attitudes like sexism and racism.

In order to demonstrate that my scale is measuring the same underlying construct as an already validated, accepted tool, I proposed for the first hypothesis that the group based dominance scale and the original social dominance orientation were positively related. This hypothesis was supported when it was found that the group based dominance scale was highly related to both the whole SDO scale and the SDO group

based dominance subscale. Thus, this provides support that my scale is providing similar inferences as the already validated SDO scale – and in turn likely assessing the same underlying construct.

The second hypothesis set out to confirm the belief that the GBD scale would be positively related to the Competitive World View Scale, and this relationship would be stronger than the one between CWV and the social dominance orientation subscale. The goal of this hypothesis was to help establish convergent validity by incorporating Duckitt and Sibley's Dual Process Motivational Model (Sibley & Duckitt, 2009), but also to prove the superiority of my scale in comparison to the older SDO subscale. Both parts of the hypothesis were supported as GBD related positively to competitive world view and accounted for a small but significant amount of variance above and beyond what the SDO subscale accounted for. Therefore, it appears that convergent validity is reasonably well-established for the scale.

Convergent validity is only one step in properly validating a scale. It must also be shown that the proposed scale does not have considerable overlap with a construct that it should not, a concept known as discriminant validity. For this purpose, right-wing authoritarianism (RWA) was chosen. Right-wing authoritarianism has long been studied in conjunction with SDO, but the two constructs are ideologically quite distinct and relate to various prejudicial attitudes in different ways (Sibley, Robertson, & Wilson, 2006). Discriminant validity was tested by directly comparing the correlations of the GBD scale and the various attitude scales to those between the right wing authoritarianism scale and the same scales. This hypothesis was mostly supported, but some of the findings took unexpected turns. The group based dominance scale was more highly related to the social dominance orientation scale, the competitive world view scale, and the racism scale than RWA, but there was little to no difference in their relationships regarding the

measure of sexism assessed. This may have been due to the higher percentage of female participants in the validation study in comparison to the pilot study (63% pilot study vs. 71% validation study). It may be that women do not differentiate the two forms of sexism as much as men do, and this skewed the results. Indeed, it has been found that women tend to score lower on sexism overall than men, and their scores tend to be more highly correlated (Zakrisson, Anderzen, Lenell, & Sandelin, 2012). Even within the cross validation sample, the women's correlations were closer together (.35 and .45) than the men's (.29 and .42).The higher percentage of women within the sample may have diluted and weakened the results. Despite the fact that the sexism scores did not reach significance, they were in the direction predicted, and the rest of the results established the discriminant validity of the scale.

The last three hypotheses set out to establish predictive validity as well as demonstrate the superiority of the performance of the GBD scale over its SDO counterpart. The constructs were chosen due to the fact that they are often studied in conjunction with the original SDO scale and were used to validate the scale during its development (Pratto, Sidanius, Stallworth, & Malle, 1994). These topics may be particularly pertinent during the twenty-first century because of the election of the first African American president and the strong possibility of the first female president in the near future.

The fourth hypothesis dealt with racism, specifically modern racism. This form is thought to be more subtle and socially acceptable than its old-fashioned counterpart (McConahay, 1986), and thus, this form of racism can still be prevalent even within modern society. It was found that the group based dominance scale was strongly related to the measure, but it was able to only marginally significantly predict racism after taking

the SDO scale into account. Hypothesis 4 did help to establish predictive validity, but unfortunately, it did not firmly prove the superiority of the GBD scale.

Sexism was the focus of the next step in establishing predictive validity and examining the performance of the scale in comparison to its older counterpart. This factor in particular was of interest due to the culture that the sample was drawn from in the Southern United States because of the stereotype of "Southern Gentlemen", a role where men embrace the ideals and values that typify benevolent sexism. The Ambivalent sexism scale was examined both as a whole and by its subcomponents (benevolent and hostile sexism). The hypothesis was partially supported in that GBD was positively correlated with the overall questionnaire, and but there was not a large enough difference between the correlations of the two types of sexism to be significant though it was in the predicted direction. Unfortunately though, when the SDO subscale was entered into the incremental analysis GBD did not significantly predict sexism above and beyond what the SDO subscale did. This was still found even when women and men were analyzed separately. Overall, this hypothesis lent further support to proving the predictive validity of the scale, but there was no strong evidence that the GBD scale outperformed the original SDO-subscale on this measure of sexism. As pointed out earlier, the results on the Ambivalent Sexism Scale in the cross-validation study may have differed from those for the pilot study because the higher percentage of women in this sample.

The last hypothesis looked at the connection between participants' levels of political conservatism and group based dominance as a final means for establishing predictive and incremental validity. Social dominance orientation has been found to be strongly linked with conservatism and was even found to mediate the relationship between racism and conservatism (Sidanius, Pratto, & Bobo, 1996).. It was expected that political conservatism would coincide with higher levels of GBD, and that GBD would

predict conservatism above and beyond what the SDO-subscale predicted. This hypothesis was only partially supported. As expected, it was found that group based dominance was positively and significantly related to political conservatism, but group based dominance failed to significantly predict conservatism after scores on the social dominance orientation subscale were taken into account. Further analysis proved that this finding did not change when U.S. citizens and non-U.S. citizens were separated and examined. As a result of these findings, the last hypothesis certainly helped to build on the predictive validity of the GBD scale established by the previous hypotheses but not upon the incremental validity of the scale.

The findings and support for the six hypotheses were mixed. Although several were fully supported, others were only partially so. The relationships between the GBD scale and the other measures were in the expected directions, and thus the goal of establishing convergent, discriminant, and predictive validity was accomplished. On the other hand, the group based dominance scale did not outperform the older social dominance orientation scale in all of the areas that it was predicted to. There was also the issue concerning the discrepancy of some of the findings in the pilot study sample versus the cross-validation sample, particularly in regards to the Ambivalent Sexism Scale. Comparing the group based dominance scale means to the social dominance orientation scale and SDO-subscale means produced significant differences in the pilot study sample but not in the cross-validation sample. This and the facts that the percentage of women was higher and the percentage of minorities lower in the cross-validation sample may indicate the two samples differed in a substantial way that was not assessed in the study. The findings for the pilot study and the cross validation study may have also differed because of order effects. The order of the questionnaires and the

items within the questionnaires were randomized in the cross-validation study, and thus eliminated any impact order effects may have had on the results.

Despite the fact that the group based dominance scale did not perform superiorly against the SDO-subscale on all of the measures, overall it appears to be a useful measure that may hold promise for a better understanding GBD. It may be that the scale can offer some new information on a different subject area than of those examined within the limited scope of this project or perhaps this version of the scale is simply a good starting point for a more thorough analysis. Even though it appears that the group based dominance scale did not quite pan out as planned, I believe that it was a necessary step in the right direction. No matter how good a scale may be at the time of its creation, there will come a point in time where it will need to be reassessed and updated. To the extent of the author's knowledge, there had been no rigorous efforts to bring the SDO scale up to date and model it after the two-factor solution that has been endorsed by some of its creators. Therefore, regardless of the outcome of the group based dominance scale, it represents a unique and essential step in the continuing process of improvement for the construct of social dominance orientation.

Theoretical Implications

Though not all of the results were as expected, the group based dominance scale does serve to further improve and update the social dominance orientation scale. As stated earlier, the SDO scale has remained virtually untouched since the early nineties, nearly two decades ago. Its accuracy and precision have been taken for granted, and any new findings concerning SDO's factor structure since its development have largely been ignored. The group based dominance scale not only offers up an updated view of the world through the lens of the twenty-first century, but takes into

account new findings and theories such as Jost and Thompson's (2000) two-factor model and Sibley and Duckitt's Dual Process Motivational Model (2009).

The value of these points and their incorporation into the theory of SDO should not be taken too lightly. Several of the original creators themselves have backed the idea of social dominance orientation having two subfactors (Ho et al., 2012), but as of right now, have done little with the concept. The very idea that SDO is composed of more than one factor warrants careful consideration and opens the door to various questions about the definition of social dominance orientation, the larger theory of social dominance, and how it all relates to the issues of prejudice and oppression. The group based dominance scale was as far as the author's knowledge goes the first concrete step towards addressing these issues. It was the first rigorous attempt to create an individual scale for one of the subfactors to try and tease out the differences between group based dominance and SDO as a whole.

The group based dominance scale also incorporates a slightly different perspective concerning the origins of group based dominance and social dominance orientation by utilizing the Dual Process Motivational Model. This allows group based dominance to fit into a larger and more comprehensive framework than what was originally proposed. It takes into account factors not considered before with the original scale like level of competitiveness and how one sees the world. These in turn add a new level of depth and understanding to how group based dominance and social dominance orientation are formed and how they fit in with other attitudes.

Practical Implications

The group based dominance scale may also have some advantages regarding its psychometric properties over the older SDO scale. The scale did account for slight increases in variance on the predictive measures and had well established convergent

and discriminant validity. There is also the fact that the group based dominance scale is more specific as far what it seeks to measure. The SDO-subscale is part of the larger SDO scale, which was meant to measure a broader construct than group based dominance, and because of this, the group based dominance scale is most likely a better a tool for measuring this specific subfactor. The goal of any scale or measure should be to try and capture the construct it is assessing as accurately as possible in order to get the best results. Thus, it stands to reason that because the group based dominance scale was specifically developed with this construct in mind, it should be favored over the older SDO-subscale when looking at GBD. Continuing to use the older SDO-subscale to look at questions that are directly related to GBD may lead to less accurate and reliable results. The group based dominance scale may be better suited than the SDO-subscale when researchers have more particular and precise research questions in mind regarding some factors.

Limitations and Future Research

As with any study, there were limitations and things that could be improved upon in the future. When dealing with survey data in particular, it is be possible that participants may not respond in the most honest manner and that makes it difficult to assess how accurately the construct is being measured. This problem was somewhat alleviated by the fact that the surveys were conducted online and no identifying data were collected from participants. Knowing that there is no one watching them and cannot trace the responses back to individuals may encourage the participants to answer more truthfully than they would otherwise. An additional step that I took was to administer a version of the Social Desirability Scale that assesses how much a participant may be susceptible to feeling pressured to present his/herself in a more socially acceptable light. This did not appear to be a significant problem though as the results did not change

substantially when the regressions were rerun while controlling for social desirability. Surveys also may not be the most accurate way of assessing a construct as the data can be subjective with no observed behaviors to back them up. It is possible that the group based dominance scale would have outperformed the SDO-subscale if more concrete predictive methods were used.

Monomethod bias may also have been a problem given that all of the measures were self-report. The idea of monomethod bias is that results or correlations may be inflated due to the fact that the constructs are being measured in the same or similar manner so that even two unrelated things may seem connected. Doty and Glick (1998) performed a large scale meta-analysis and estimated that on average there is a 26% bias due to monomethod bias. They do conclude though that while this is problematic it does not render the results of monomethod studies invalid.Thus even though monomethod bias could have been a problematic issue with the study, it does not invalidate the findings and contributions made by it.

The other largest problem would be the sample that was used. All participants were students from an urban college and were relatively young. This may somewhat limit the generalizability of the findings to the rest of the population and could also be responsible for why the responses were so skewed. I do not however necessarily consider the demographics of the sample to be as problematic as others might. Rather than being representative of the current U.S. population, this sample may reflect attitudes that will be held by a large portion of American citizens in the future. The rate of college enrollment has been climbing dramatically since 2000 especially among minority students (National Center for Education Statistics). It is also expected that by the year 2050 minorities will make up more than 50% of the U.S. population (Broughton, 2008). So it may be that as time progresses and the population of America grows more diverse and

educated, the views possessed by the sample in this study will be representative of the American majority.

Although two studies were conducted to develop and validate the group based dominance scale, there is still plenty of room for further experimentation and research. The scale needs to be further refined and analyzed in differing populations such as older adults and different geographical locations both within the United States and internationally. It would be interesting to see if the results would be similar for northern states given that they tend to have more liberal attitudes towards a variety of social topics.

Another area that could be expanded upon would the method of testing for attitudes concerning different groups. For the group based dominance scale, only questionnaires were used to assess racism, sexism, and political association. It is possible that how these factors are assessed could impact the nature of their relationships with GBD. The Implicit Association Test is one example of a different testing method that could be used to measure participants' attitudes concerning those of different races or genders. Another might involve an experimental manipulation where participants would be asked to choose between several different individuals. Experimental manipulations could also be used in determining how malleable group based dominance is under various circumstances. Overall, there are still many questions that remain unanswered concerning group based dominance and social dominance orientation in general and plenty of room for exploring and studying these topics.

Appendix A

Group Based Dominance Scale

Group Based Dominance Scale Original Version.

Please choose the answer that best fits 1 (strongly disagree) to 7 (strongly agree)

1. No group should suppress another. (reverse scored)
2. Sometimes it is necessary for one group to use force against another.
3. The best things should go to the superior group.
4. Some groups are just better than others.
5. It is alright for one group to use aggression against another to get what it wants.
6. It is wrong that some groups are more powerful than others. (reverse scored)
7. It is the natural that some groups dominate others.
8. Inferior groups should learn to accept their place in society.
9. A group should do what is best for its own interests even if it is at the cost of other groups.
10. Groups should coexist without one group being dominant to another. (reverse scored)
11. Peace among groups can only be achieved by one being superior to another.
12. One group is not better than another. (reverse scored)
13. Superior groups are entitled to more than inferior groups.
14. Some groups deserve to be oppressed.
15. It is natural that groups should compete for things like power and money.
16. A group should be kind to others groups and treat them with respect. (reverse scored)
17. Oppressed groups should stand up for themselves and fight for a better position in society. (reverse scored)
18. One group should never use force against another. (reverse scored)
19. In this world, it is every group for itself.
20. Some groups just know how to run things better than other groups.
21. There are enough resources in this world for different groups to live equally. (reverse scored)
22. It is not right for one group to control or manipulate another. (reverse scored)

Revised Group Based Dominance Scale

Please choose the answer that best fits 1 (strongly disagree) to 7 (strongly agree)

1. Sometimes it necessary for one group to use force against another.
2. The best things should go to the superior group.
3. Some groups are just better than others.
4. It is alright for one group to use aggression against another to get what it wants.
5. It is natural that some groups dominate others.
6. Inferior groups should learn to accept their place in society.
7. Peace among groups can only be achieved by one group being superior to another.
8. One group is not better than another. (reverse scored).
9. Superior groups are entitled to more than inferior groups.
10. Some groups deserve to be oppressed.
11. Some groups just know how to run things better than other groups.

Appendix B

Other Scales

Social Dominance Orientation.

Please choose the answer that best fits 1 (strongly disagree) to 7 (strongly agree)

1. Some groups of people are simply inferior to other groups.
2. In getting what you want, it is sometimes necessary to use force against other groups.
3. It's OK if some groups have more of a chance in life than others.
4. To get ahead in life, it is sometimes necessary to step on other groups.
5. If certain groups stayed in their place, we would have fewer problems.
6. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
7. Inferior groups should stay in their place.
8. Sometimes other groups must be kept in their place.
9. It would be good if groups could be equal. (reverse scored)
10. Group equality should be our ideal. (reverse scored)
11. All groups should be given an equal chance in life. (reverse scored)
12. We should do what we can to equalize conditions for different groups.(reverse scored)
13. Increased social equality is beneficial to society. (reverse scored)
14. We would have fewer problems if we treated people more equally. (reverse scored)
15. We should strive to make incomes as equal as possible. (reverse scored)
16. No one group should dominate in society. (reverse scored)

Competitive World View Scale.

Please choose the answer that best fits 1 (strongly disagree) to 7 (strongly agree)

1. Winning is not the first thing; it's the only thing.
2. Life is not governed by "survival of the fittest". We should let compassion and moral laws be our guide. (reverse scored)
3. It is much more important in life to have integrity in your dealings with others than to have money and power. (reverse scored)
4. It's a dog-eat-dog world where you have to be ruthless at times.
5. Charity (i.e. giving somebody something for nothing) is admirable not stupid. (reverse scored)
6. You know that most people are out to "screw" you, so you have to get them first when you get the chance.

Right-wing Authoritarianism Scale.

Please choose the answer that best fits 1 (strongly disagree) to 7 (strongly agree)

1. The established authorities generally turn out to be right about things, while the radicals and protestors are usually just “loud mouths” showing off their ignorance.
2. Our country desperately needs a mighty leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.
3. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people’s minds.
4. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly.(reverse scored)
5. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.
6. There is absolutely nothing wrong with nudist camps. (reverse scored)
7. Our country needs free thinkers who have the courage to defy traditional ways, even if this upsets many people. (reverse scored)
8. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.
9. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else. (reverse scored)
10. The “old-fashioned ways” and the “old-fashioned values” still show the best way to live.
11. You have to admire those who challenged the law and the majority’s view by protesting for women’s abortion rights, for animal rights, or to abolish school prayer. (reverse scored)
12. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.

13. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way things are supposed to be done.” (reverse scored)
14. God’s laws about abortion, pornography and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.
15. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.
16. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the “rotten apples” who are ruining everything.
17. There is no “ONE right way” to live life; everybody has to create their own way. (reverse scored)
18. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group’s traditional place in society.

Modern Racism Scale.

Please choose the answer that best fits 1 (strongly disagree) to 7 (strongly agree)

1. Over the past few years, the government and news media have shown more respect to some races than they deserve.
2. It is easy to understand the anger of some races in America. (reverse scored)
3. Racial discrimination is no longer a problem in the United States.
4. Over the past few years, some races have gotten more economically than they deserve.
5. Some races are getting too demanding in their push for equal rights.
6. Other races should not push themselves where they are not wanted.

Ambivalent Sexism Scale.

1. No matter how accomplished he is, a man is not truly complete as a person unless he has the love of a woman. (benevolent sexism)
2. Many women are actually seeking special favors, such as hiring policies that favor them over men, under the guise of asking for "equality." (hostile sexism)
3. In a disaster, women ought to be rescued before men. (benevolent sexism)
4. Most women interpret innocent remarks or acts as being sexist. (hostile sexism)
5. Women are too easily offended. (hostile sexism)
6. People are not truly happy in life without being romantically involved with a member of the other sex. (benevolent sexism)
7. Feminists are seeking for women to have more power than men. (hostile sexism)
8. Many women have a quality of purity that few men possess. (benevolent sexism)
9. Women should be cherished and protected by men. (benevolent sexism)
10. Most women fail to appreciate fully all that men do for them. (hostile sexism)
11. Women seek to gain power by getting control over men. (hostile sexism)
12. Every man ought to have a woman whom he adores. (benevolent sexism)
13. Men are incomplete without women. (benevolent sexism)
14. Women exaggerate problems they have at work. (hostile sexism)
15. Once a woman gets a man to commit to her, she usually tries to put him on a tight leash. (hostile sexism)
16. When women lose to men in a fair competition, they typically complain about being discriminated against. (hostile sexism)
17. A good woman should be set on a pedestal by her man. (benevolent sexism)
18. Many women get a kick out of teasing men by seeming sexually available and then refusing male advances. (hostile sexism)
19. Women, compared to men, tend to have a superior moral sensibility. (benevolent sexism)

20. Men should be willing to sacrifice their own well-being in order to provide financially for the women in their lives. (benevolent sexism)

21. Feminists are making unreasonable demands of men. (hostile sexism)

22. Women, as compared to men, tend to have a more refined sense of culture and good taste. (benevolent sexism)

Political Questionnaire.

1. Please select which of the following choices best reflects your political orientation: 1) extremely liberal 2) moderately liberal 3) slightly liberal 4) neither liberal nor conservative 5) slightly conservative 6) moderately conservative 7) extremely conservative.
2. My political orientation is an important part of who I am. 1) strongly disagree to 7) strongly agree

Shortened Marlowe-Crowne Social Desirability Scale.

1. It is sometimes hard for me to go on with my work if I am not encouraged. (T) (F) (reverse scored)
2. I sometimes feel resentful when I don't get my way. (T) (F) (reverse scored)
3. On a few occasions, I have given up doing something because I thought too little of my ability. (T) (F) (reverse scored)
4. There have been times when I felt like rebelling against people in authority even though I knew they were right. (T) (F) (reverse scored)
5. No matter who I'm talking to, I'm always a good listener. (T) (F)
6. There have been occasions when I took advantage of someone. (T) (F) (reverse scored)
7. I'm always willing to admit it when I make a mistake (T) (F)
8. I sometimes try to get even rather than forgive and forget. (T) (F) (reverse scored)
9. I am always courteous, even to people who are disagreeable. (T) (F)
10. I have never been irked when people expressed ideas very different from my own. (T) (F)
11. There have been times when I was quite jealous of the good fortune of others. (T) (F) (reverse scored)
12. I am sometimes irritated by people who ask favors of me. (T) (F) (reverse scored)
13. I have never deliberately said something that hurt someone's feelings. (T) (F)

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Biographical Information

Tiffany Davis is originally from Birmingham, Al where she graduated from the University of Alabama at Birmingham with a Bachelor's of Science in Psychology. She is currently attending the University of Texas at Arlington pursuing a career in psychological research.