

# Assessing the relative contribution of Moral Foundation Theory, Right-Wing Authoritarianism, and Social Dominance Orientation in the prediction of political orientation

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## ABSTRACT

Right-Wing Authoritarianism (RWA) and Social Dominance Orientation (SDO) are two constructs which have been demonstrated to explain differences in political orientation as well as opinions concerning how society should be structured. More recently, Moral Foundations Theory (MFT) has demonstrated its ability to also delineate between political and social groups. Past research, however, has presented an unclear image of how RWA, SDO, and MFT interact with their influence on political orientation. In order to provide firmer grounding, this study examined the relationship between these three constructs as well as their ability to predict political orientation and perceived threat towards immigrants in a student sample (N = 300). Large correlations were found between SDO, RWA, and MFT. A path analysis was conducted to determine the relationship between political orientation, perceived threat towards immigrants with SDO, RWA, and MFT. Basic demographics were also considered. Several models were assessed, the model containing SDO, RWA, as well as MFT best fit the data. Furthermore, MFT demonstrated significant pathways with both political orientation and perceived threat towards immigrants. Our findings suggest that MFT contributes to the explanation of political orientation beyond the variance accounted for by SDO and RWA.

## Keywords

moral foundations theory, social dominance orientation, right-wing authoritarianism, prejudice, progressivism

## RESUMEN

El autoritarismo de derechas (RWA) y la orientación social dominante (SDO) son dos constructos que han demostrado explicar las diferencias en la orientación política, así como las opiniones relativas a cómo debería estructurarse la sociedad. Más recientemente, la Teoría de los Fundamentos Morales (MFT) ha demostrado su capacidad para delimitar también entre grupos políticos y sociales. Sin embargo, las investigaciones anteriores han presentado una imagen poco clara de cómo interactúan la RWA, la SDO y la MFT con su influencia en la orientación política. Con el fin de proporcionar una base más firme, este estudio examinó la relación entre estos tres constructos, así como su capacidad para predecir la orientación política y la amenaza percibida hacia los inmigrantes en una muestra de estudiantes (N = 300). Se encontraron grandes correlaciones entre SDO, RWA y MFT. Se llevó a cabo un análisis de trayectorias para determinar la relación entre la orientación política y la amenaza percibida hacia los inmigrantes con SDO, RWA y MFT. También se tuvieron en cuenta los datos demográficos básicos. Se evaluaron varios modelos, siendo el modelo que contenía SDO, RWA y MFT el que mejor se ajustaba a los datos. Además, la MFT mostró vías significativas tanto con la orientación política como con la percepción de amenaza hacia los inmigrantes. Nuestros resultados sugieren que la MFT contribuye a la explicación de la orientación política más allá de la varianza explicada por SDO y RWA.

## Palabras Clave

teoría de los fundamentos morales, orientación de dominación social, autoritarismo de derechas, prejuicios, progresismo

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Evaluación de la contribución relativa de la Teoría del Fundamento Moral, el Autoritarismo de Derecha y la Orientación de Dominancia Social en la predicción de la orientación política

**Introduction**

Progress in moral psychology has advanced considerably over the past twenty years, and much of this progress can be attributed to the attention drawn to the field by Moral Foundations Theory (MFT). Whereas earlier theories tended to measure morality across a single spectrum dealing mainly with concerns about harm and justice (i.e., Kohlberg 1969; Gilligan, 1982), MFT presented a description of moral pluralism that also included community preserving concerns as components of morality (Graham et al., 2009). A second advancement of the theory was its incorporation of research on dual process perspectives (i.e., Kahneman, 2011). Specifically, MFT posited that our moral inclinations are intuitive and immediate reactions to our environment, and that verbal explanations are later produced to rationalize our feelings. While additional foundations have been proposed (Haidt, 2012), the original theory proposes five universal moral foundations: harm/care, fairness/cheating, ingroup/loyalty, authority/respect, and purity/sanctity. The first two (harm/care, fairness/cheating) are known as the individualizing foundations because these foundations promote the autonomy and protection of individuals. The last three (ingroup/loyalty, authority/respect, and purity/sanctity) are collectively known as the binding foundations because these foundations bind tribes, social groups, and communities together. While this theory is intended to explain moral behaviors broadly, the theory has garnered the most attention for its ability to explain differences in political affiliation. Research spanning several countries has demonstrated that regardless of nation or political party, liberals tend to endorse the individualizing foundations more than the binding foundations, whereas conservatives tend to favor all five moral foundations more equally (Graham et al., 2009; Kim et al., 2012; Koleva et al., 2012; Talhelm et al., 2015; Turner-Zwinkels et al., 2020). As current research favors the study of MFT, it has supplanted previously popular constructs designed to explain differences in political affiliation, specifically Social Dominance Orientation (SDO; Pratto et al., 1994) and Right Wing Authoritarianism (RWA; Altemeyer, 1996).

RWA and SDO are two constructs which were originally proposed to explain individual differences in prejudice. This was a popular pursuit in the social sciences after

World War II, with numerous efforts to understand “authoritarian personalities” (Adorno et al., 1950), much of the interest on the topic likely originated from efforts to explain the rise of fascism. Over the past 70 years, our understanding of authoritarianism has advanced considerably. The current depiction of the authoritarian personality represented by RWA is marked by behaviors such as submission to authority figures, ethnocentrism, low levels of openness to alternatives, and high levels of prejudice, discrimination, and tolerance of violence (Altemeyer, 2006; Benjamin, 2006; Butler, 2000; da Costa Silva et al., 2019; Mallinas et al., 2020). Individuals high in this trait tend to also exhibit high levels of aggression, especially if they believe such aggression is endorsed by authority, and generally speaking they believe behavior should be controlled through punishment (Altemeyer, 2006; Beck & Plant, 2018; Benjamin, 2006, 2016). High degrees of RWA have been linked to prejudice against homosexuals (Crawford et al., 2016; Whitley, 1999), other races (Duckitt, 1993; Duriez & Soenens, 2009), other ethnic groups (Cohrs & Asbrock, 2009; Duckitt & Sibley, 2007), and women (Christopher & Wojda, 2008). The original author of the RWA construct, Altemeyer, proposed that these high levels of prejudice can be explained by a specific set of moral convictions. Specifically, he states that outgroup discrimination is evident because authoritarians organize their world in terms of outgroup versus ingroup. In other words, authoritarians have a tribal worldview in which they view outgroup members as a threat to their way of life. A second moral conviction that leads to the observed high levels of prejudice is self-righteousness, the idea of moral superiority over others. When these two ideas operate in conjunction, an individual may be more inclined to look down on opposing social groups.

SDO is a similar but related construct. Individuals who endorse high rates of SDO tend to believe in a natural ordering of society with a strong hierarchy. The core tenant of SDO is the belief that some people and groups are inferior to others and thus deserve to be treated as such (Pratto et al., 1994). Meritocracy and Social Darwinism represent philosophies contingent on SDO. There are several core differences between RWA and SDO. RWA represents a set of moral and personality features, whereas SDO is a more unitary construct. RWA is also more concerned with ingroup preservation, whereas SDO is more focused on dominating inferior outgroups. Unsurprisingly, high degrees of SDO have also been linked to prejudice against homosexuals (Whitley, 1999), other races (Duriez & Soenens, 2009), other ethnic groups (Cohrs & Asbrock, 2009; Duckitt, & Sibley, 2007), and women (Christopher, & Wojda, 2008). These two facets of personality are often measured in tandem to predict discriminatory behavior.

Previous research has considered the association of RWA and SDO with MFT in regard to political affiliation. In a mediational analysis, Kugler et al. (2014) found that the differences in moral intuitions across liberals and conservatives were mediated by differences within RWA and SDO. Specifically, the association between conservatism and the moral foundations of ingroup/loyalty, authority/respect, and purity/sanctity was mediated by greater scores on the RWA, whereas the association between liberals and the moral foundations of harm/care and fairness/cheating was mediated by lower scores on the SDO. The authors also noted that conservatism and associated endorsement of ingroup/loyalty and authority/respect were weakly but significantly mediated by greater scores of SDO. Other research has shown similar findings. The RWA and the hierarchical dominance dimension of SDO were positively correlated with scores of the binding foundations (ingroup/loyalty, authority/respect, and purity/sanctity) and negatively correlated with scores of individualizing foundations (harm/care, fairness/cheating; Harnish et al., 2018). Further, a lack of individualizing moral foundations has been found to mediate the effect of SDO and RWA on outgroup prejudice broadly, while the presence of binding moral foundations was shown to mediate the effect of RWA on prejudice towards outgroups perceived as dangerous or dissident (Hadarics & Kende, 2017). Both of these personality constructs were also observed to be predictive of economic conservatism, while the RWA alone was predictive of both social and foreign policy conservatism. Finally, Milojev et al. (2014) formulated four unique moral signatures to identify patterns of endorsement across RWA and SDO. Of the composed signatures, “High Moralists” (high endorsement across all five moral foundations and most positively associated with political conservatism) was predicted by RWA but not SDO (“High Moralists” were negatively associated with SDO). Conversely, the signature of “Individuator” (high endorsement of just harm/care and fairness/reciprocity and emblematic of liberal moral endorsement) decreased the probability of endorsing high levels of RWA or SDO. Some research (Sinn & Hayes, 2016) suggests that MFT presents nothing over and above what is already provided by RWA and SDO. Overall, it appears that the discrepancies in associations between political affiliation and moral foundation can be partially explained by differences in RWA and SDO.

The premise of this study is rather straightforward. MFT, RWA, and SDO have all been shown to predict self-report of political affiliation; however, the relationship between these three constructs is relatively unknown. Additionally, it’s unclear whether MFT contributes a source of unique variance in the explanation of political affiliation or

if it represents another means of measuring opinions better explained by RWA and SDO. To determine the relationship between these three constructs and political orientation, we administered a set of questionnaires to 300 undergraduate students. We administered questionnaires assessing our three constructs of interest, political orientation, and basic demographics. We also wanted to assess the relationship between these constructs and perceived threat towards immigrants. This is a timely topic, which is also correlated with political orientation and concerns the societal components of political orientation that may not be captured solely by politics but are clearly related to RWA, SDO, and MFT as well. Based on our review of the literature, we believed that MFT would represent a consistent contributor of unique variance and hypothesized that 1) MFT would uniquely contribute to the prediction of political orientation after accounting for the variance explained by relevant demographics, RWA, and SDO; 2) MFT, RWA, and SDO would all uniquely contribute to the prediction of perceived threat towards immigrants.

## **Method**

### ***Participants***

The participants in this study were undergraduate students ( $N = 300$ ) from a Midwestern university. Twenty-one participants who did not pass the validity checks of the Moral Foundations Questionnaire were not included in our analysis. The remaining sample was made up mainly of women (69.5%) in their early 20s ( $M = 21.42$ ,  $SD = 4.98$ ). The descriptive statistics of the sample can be seen in Table 1. Regarding racial demographics, the participants self-identified as White/Non-Hispanic ( $n = 180$ , 64.5%), African American/Black ( $n = 17$ , 6.1%), Hispanic/Latino ( $n = 31$ , 11.1%), Asian/Pacific Islander ( $n = 35$ , 12.5%), American Indian, Native Alaskan, Aleutian, or Eskimo ( $n = 3$ , 1.1%), Bi-racial ( $n = 11$ , 3.9%), and two (.7%) individuals elected not to indicate their ethnicity. While the study did utilize a traditionally liberal sample (college students) it also took place in a conservative state, and in terms of political orientation the sample was remarkably balanced. When responding to a seven point Likert-type scale (1-7), the sample endorsed an average level of both Social Political Orientation ( $M = 3.64$ ,  $SD = 1.59$ ) and Economic Political Orientation ( $M = 3.84$ ,  $SD = 1.48$ ). The participants were recruited through the SONA Experiment Management System, a popular online platform for managing social science research. The participants either required class credit or were compensated with extra credit for their time.

**Table 1**

*Descriptive statistics of the sample*

<b>Variables</b>	<b>Mean/N</b>	<b>SD/%</b>
Women	194	69.5
White	180	64.5
Age	21.42	4.98
Social Dominance Orientation	30.57	13.13
Rightwing Authoritarianism	70.26	32.38
Social Political Orientation	3.64	1.59
Economic Political Orientation	3.84	1.48
Progressivism	0.91	0.84
Harm	3.82	0.63
Fairness	3.65	0.62
In-group	2.85	0.75
Authority	3.02	0.76
Purity	2.61	1.01
Prejudice against Immigrants	59.23	20.45

*Note.* RWA = Right-Wing Authoritarianism; SDO = Social Dominance Orientation; Progressivism = the average of the individualizing moral foundations minus the average of the binding moral foundations.

***Procedure***

After signing up for an appointment via the SONA Experiment Management System, participants reported to the laboratory room where the study took place. Participants were then administered the following paper and pencil questionnaires: a demographics form (made by the authors), the Moral Foundations Questionnaire, the Social Dominance Orientation Scale, the Right-Wing Authoritarianism Questionnaire, the Perceived Threat Towards Immigrants Scale, the Ten-Item Personality Inventory, and the Short Dark Triad. The data from the Ten-Item Personality Inventory and the Short Dark Triad will not be reported in the current manuscript because they do not relate to

our hypotheses concerning the relationship between political orientation, Moral Foundations, Social Dominance Orientation, and Right-Wing Authoritarianism. These questionnaires were administered by an undergraduate level research assistant. Participants were run individually. Upon completing the questionnaires, the research assistant asked the participants if they had any questions and proceeded to answer any questions. The study took approximately 60 minutes to complete and was approved by the presiding institutional review board.

### **Measures**

The Moral Foundations Questionnaire (MFQ) is a 32-item measure of moral beliefs utilizing the five moral foundations of MFT (Graham et al., 2011). The MFQ contains two parts, each consisting of sixteen questions. In each set, three questions are presented for each of the moral foundations, with one question used to account for an acquiescence bias. The first set of questions asks participants to rate the moral relevance of various contextual information, such as “Whether or not someone suffered emotionally” and “Whether or not someone did something disgusting.” Questions are rated on a 6-point Likert scale from 0 (not at all relevant) to 5 (extremely relevant). The second set of questions asks participants to determine their agreement with moral statements, such as “Respect for authority is something all children need to learn” and “It can never be right to kill a human being.” Questions are rated on a 6-point Likert scale from 0 (strongly disagree) to 5 (strongly agree). While the MFQ has been shown to have a Western bias (Iurino & Saucier, 2020), it has strong psychometric properties in both reliability and validity (Graham et al., 2011). Each foundation has been found to be internally consistent,  $\alpha = .69$  for Harm,  $\alpha = .65$  for Fairness,  $\alpha = .71$  for Ingroup Loyalty,  $\alpha = .74$  for Authority, and  $\alpha = .84$  for Purity. Test-retest coefficients for each foundation,  $r = .71$  for Harm,  $r = .68$  for Fairness,  $r = .69$  for Ingroup Loyalty,  $r = .71$  for Authority, and  $r = .82$  for Purity, indicate stability over time. Further, each foundation mapped on to thematically related external scales, supporting its discriminant and convergent validity. For the current study we assessed the impact of moral foundations on political orientation by condensing the five foundations into a single variable known as “Progressivism.”

Progressivism is calculated by subtracting the average level of endorsement for the binding foundations (ingroup/loyalty, authority/respect, and purity/sanctity) from the average level of endorsement for the individualizing foundations (harm/care, fairness/cheating; Van Leeuwen & Park, 2009).

The Social Dominance Orientation Scale (SDO; Pratto et al., 1994) is a 16-item scale measuring attitudes regarding social group inequality. Participants indicate their feelings toward statements, such as “some groups of people are simply inferior to other groups,” from 1 (very negative) to 7 (very positive). Higher scores indicate a greater preference for intergroup inequalities. The original 14-item scale demonstrated good internal reliability across several samples ( $\alpha = .83$ ), as well as test-retest reliability ranging from  $r = .81$  to  $r = .84$  after three months. The modified 16-item version of this scale also demonstrated good internal reliability ( $\alpha = .91$ ) and is highly correlated with the original 14-item scale ( $r = .75$ ). Pratto and colleagues (1994) established that SDO is independent of common conceptions of interpersonal dominance, such as those measured by the dominance scales of the California Personality Inventory (CPI; Gough, 1987) and the Jackson Personality Research Form (JPRF; Jackson, 1965). This construct was found to be negatively correlated with Concern for Others (Multidimensional Empathy Scale; Davis, 1983), Communalism (Personal Attribute Questionnaire; Spence et al., 1974), Tolerance (Jackson Personality Inventory; Jackson, 1976), and the Katz and Hass' (1988) Humanitarian-Egalitarian Scale. Pratto and colleagues (1994) established that SDO is also negatively correlated with policy attitudes supporting issues such as social programs, racial policy, women's rights, and gay and lesbian rights. SDO is positively correlated with beliefs aligned with ideologies such as anti-Black racism, nationalism, sexism, cultural elitism, equal opportunities, and Just World.

The Right-Wing Authoritarianism Questionnaire (RWA; Altemeyer, 1996) is a 22-item scale measuring one's degree of submission to established societal authority, level of aggression in support of authority, and level of conventionalism. Participants indicate how much they agree with statements, such as “Women should have to promise to obey their husbands when they get married,” from -4 (very strongly disagree) to +4 (very strongly agree), with 0 (neutral) as the midpoint. Higher scores indicate a greater



willingness to submit to and support conventional forms of authority. The RWA scale has demonstrated strong internal consistency with Cronbach's Alpha coefficients ranging from .90 to .95 (Altemeyer, 2006; Harnish et al., 2018), as well as good test-retest reliability ( $r = .85$  after 28 weeks; Altemeyer, 1988). Studies have shown this construct to negatively correlate with the Openness to Experience facet of the Five Factor Model of personality (Akrami & Ekehammar, 2006; Cramer et al., 2013), as well as attitudes supporting the feminist identity and the importance of political issues involving women (Duncan et al., 1997). RWA has been shown to positively relate to ideals of traditional gender-role acceptance (Duncan et al., 1997), religious fundamentalism and orthodoxy (Mavor et al., 2011), racial prejudice (Mavor et al., 2011), anti-gay prejudice (Cramer et al., 2013; Mavor et al., 2011), and general prejudice towards minorities (Bilewicz et al., 2017; Mavor et al., 2011).

Perceived Threat towards Immigrants Scale (PTIS) is a 15-item scale of attitudes toward immigrants. The scale was created by combining and adapting the realistic threats and symbolic threats measures, as detailed in Stephan et al. (1999a). Realistic threats are concerns regarding the overall existence of a group, such as threats to a group's political, economic, physical, or material welfare (e.g., "Immigrants get more from this country than they contribute"). Symbolic threats involve concerns regarding the worldview of a group, such as divergent morals, beliefs, attitudes, and standards (e.g., "Immigrants are undermining American culture"). Both constructs have been reported as predictors of prejudicial attitudes (Schweitzer et al., 2005; Stephan et al., 1999b). Items are rated on a 10-point Likert scale from 1 (strongly disagree) to 10 (strongly agree), with greater scores indicating higher levels of prejudice.

To assess political orientation on social and economic issues, participants completed questions on the demographic questionnaire. Relevant questions included "How would you describe your political outlook with regard to social issues?" and "How would you describe your political outlook with regard to economic issues?" Both questions were rated on a 7-point Likert scale from "Very Liberal" to "Very Conservative."

### *Procedure*

The period of information collection was between 1st September and 31st October 2018. The students filled out the sociodemographic information and completed the Family APGAR and the WHO-5-WBI. The research team explained the study's objectives to the educational institutions' authorities, distributed and compiled the signed informed consent to the parents or legal representatives and the students' assent.

### *Analyses*

Descriptive statistics and correlation were run for all of the variables of interest. Hypothesis 1) that MFT would uniquely contribute to the prediction of social political orientation after accounting for the variance explained by relevant demographics, RWA, and SDO as well as hypothesis 2) that MFT, RWA, and SDO would all uniquely contribute to the prediction of perceived threat towards immigrants were both tested in set of path analyses which assessed the relationship between political orientation and perceived threat towards immigrants with MFT, RWA, and SDO; while also assessing the influence of sex, race, and age.

## **Results**

The correlations between self-report of political orientation (both social and economic), Right-Wing Authoritarianism, Social Dominance Orientation, Progressivism, as well as the individual moral foundations can be seen in Table 2. The correlation between social and economic political orientation was very high ( $r = .82$ ), which was expected and fits with previous research. All correlations involving social and economic political orientation were significant and in the expected direction. Specifically, more conservative views were positively correlated with Right-Wing Authoritarianism, Social Dominance Orientation, Ingroup Loyalty, Authority, and Purity, while being negatively correlated with Harm, Fairness, and Progressivism. The correlations between the predictor variables tended to be stronger with social political orientation as opposed to

economic political orientation, with the exception of Harm and Fairness, where there was not much difference.

**Table 2**

*Fit Statistics for Path Analysis*

<b>Model</b>	<b>X<sup>2</sup></b>	<b>df</b>	<b>RMSEA</b>	<b>AIC</b>	<b>TLI</b>	<b>CFI</b>
1	3.26	1	0.09	109.26	.86	.99
2	4.48	1	0.11	90.48	.80	.99
3	4.62	1	0.11	90.62	.75	.99
4	5.14	1	0.12	73.14	.72	.99

*Note.* RMSEA stands for Root Mean Square Error of Approximation, AIC stands for Akaike's information criterion. TLI stands for Tucker-Lewis Index, and CFI stands for Comparative Fit Index.

A path model of the relationship between Individualizing Foundations, Binding Foundations, Right-Wing Authoritarianism (RWA), Social Dominance Orientation (SDO), political orientation, perceived threat towards immigrants (PTI), and demographic questions including age, sex, and race was analyzed using AMOS. The following fit indices were examined to determine model adequacy: X<sup>2</sup>/df ratio (Bryant & Yarnold, 1995), Root Mean Square Error of Approximation (RMSEA; Steiger, 1990), Tucker-Lewis Index (TLI; Tucker & Lewis, 1973), and the Comparative Fit Index (CFI; Bentler, 1990). Small values (<.06) are preferred for the RMSEA index, and high values closer to 1.0 indicate better fit for the CFI and TLI (>.90). The AIC was also evaluated and is interpreted by comparing to other models using the same dataset, with lower numbers indicating better fit.

Four models were examined. In the first model, all factors were included. In the second model, Individualizing Foundations was removed. In the third model, Binding Foundations was removed. Finally, in the fourth model both Individualizing and Binding Foundations were removed. The first model with all factors included had the best fit statistics for chi-square, RMSR, TLI and CFI. The AIC was not the lowest value; however, based on other fit indices, this was still considered the best model. Table 1 illustrates these values.

**Table 3**

*Predictive Paths*

<b>Path</b>			<b><math>\beta</math></b>	<b>SE</b>	<b>p</b>
Political Orientation	<---	Individualizing	-.128	0.135	.015
Political Orientation	<---	Binding	.116	0.125	.061
Political Orientation	<---	RWA	.499	0.003	>.001
Political Orientation	<---	SDO	.133	0.006	.011
PTI	<---	Individualizing	-.139	1.933	.010
PTI	<---	Binding	.222	1.797	>.001
PTI	<---	RWA	.265	0.042	>.001
PTI	<---	SDO	.311	0.083	>.001
PTI	<---	Race	.129	1.938	.004
Political Orientation	<---	Race	.138	0.135	.002
Political Orientation	<---	Sex	.079	0.139	.072
PTI	<---	Sex	.062	2.004	.168
PTI	<---	Age	.007	0.177	.866
Political Orientation	<---	Age	-.074	0.012	.081

*Note.* PTI stands for perceived threat towards immigrants.

Results from the path analysis for the first model are illustrated in Tables 2 and 3. For the predictive paths, all paths were significant, with the exception of the paths between Binding Foundations to political orientation, between sex to political orientation and to perceived threat towards immigrants, and between age to political orientation and to perceived threat towards immigrants. Paths between Individualizing Foundations to both political orientation and perceived threat towards immigrants indicated a negative relationship, where all other significant relationships were positive. For the correlational paths, all paths not including demographic information were significant, with paths between Individualizing Foundations and both Right-Wing Authoritarianism and Social Dominance Orientation indicating negative relationships and all others being positive relationships. Nearly all paths that included demographic information were non-significant, with the exception of the paths between sex and both Individualizing Foundations (positive) and Social Dominance Orientation (negative), and the path between race and Individualizing Foundations (negative).

**Table 4**

*Correlational Paths*

	<b>Path</b>	<b><math>\beta</math></b>	<b>SE</b>	<b>p</b>
Binding	<--> Individualizing	.162	.025	.008
Binding	<--> RWA	.663	1.666	>.001
RWA	<--> SDO	.484	28.274	>.001
Individualizing	<--> RWA	-.199	1.129	.001
Individualizing	<--> SDO	-.412	.489	>.001
Binding	<--> SDO	.272	.588	>.001
Individualizing	<--> Sex	.248	.016	>.001
Binding	<--> Sex	.079	.020	.189
RWA	<--> Sex	-.001	.889	.988
SDO	<--> Sex	-.204	.371	>.001
Race	<--> Sex	.018	.013	.770
Individualizing	<--> Race	-.285	.017	>.001
Binding	<--> Race	-.110	.021	.069
RWA	<--> Race	.015	.926	.800
SDO	<--> Race	.079	.379	.188
Sex	<--> Age	-.046	.138	.440
Individualizing	<--> Age	.049	.172	.419
Binding	<--> Age	.047	.216	.431
RWA	<--> Age	-.008	9.664	.890
SDO	<--> Age	.050	3.954	.406
Race	<--> Age	.042	.144	.480

**Discussion**

This manuscript presented an investigation into the relationship between three constructs which have largely dominated the landscape of research on political affiliation, Right-Wing Authoritarianism (RWA), Social Dominance Orientation (SDO), and Moral Foundations Theory (MFT). MFT has been shown to successfully categorize liberals and conservatives (Graham et al., 2009), and the relationship between MFT and both RWA and SDO has been investigated (Harnish et al., 2018; Kugler et al., 2014; Milojev et al.,

2014); however, it is still not clear if MFT's place in political research represents an alternative means to assess aspects of personality also measured by RWA and SDO or if it is assessing a unique source of variance. We believed that MFT would contribute to explaining variance beyond that which is explained by RWA and SDO. Our first hypothesis, that MFT would explain unique variance in political orientation, was supported by the data.

Our second hypothesis was that all three constructs of interest (i.e., RWA, SDO, and MFT) would contribute to a model predicting perceived threat towards immigrants. This hypothesis was also supported by the data. Our path analysis indicated that, RWA, SDO, and MFT all produced significant pathways. Previous research has linked higher levels of both RWA (Bilewicz et al., 2017; Cramer et al., 2013; Duncan et al., 1997; Mavor et al., 2011) and SDO (Christopher & Wojda, 2008; Cohrs & Asbrock, 2009; Duckitt & Sibley, 2007; Duriez & Soenens, 2009; Whitley, 1999) to prejudice against marginalized groups. To our knowledge, MFT has not been directly linked to prejudice against marginalized groups, but a potential association makes intuitive sense. For instance, individuals scoring high in ingroup/loyalty, one of the moral foundations, would likely present hostility to an outgroup such as immigrants.

A notable strength of this study is the consistency of findings. All predicted relationships were observed in the predicted direction. RWA was the strongest predictor of both social and economic political orientation based on effect size. This fits with the literature surrounding the RWA. RWA has consistently been identified as the best predictor of political orientation for over half a century; however, SDO and MFT were unique contributions of variance. This fact is especially salient for future predictions of political orientation concerning MFT. Our work suggests that it is indeed an important component as well as a unique source of variance outside of RWA and SDO.

On the other hand, the weaknesses of our study are the same as any study conducted with a student population. Our sample falls victim to every critique of WEIRD studies (Henrich et al., 2010). The sample was young, primarily female, likely intelligent, wealthy enough to pursue a college education, and likely fits the mold of typical WEIRD samples. Nevertheless, based on the consistency of our results and their fit with the larger literature, we fully anticipate these findings would generalize to a more representative sample. For some populations, such as Latin American or Hispanic groups, these findings may provide some insight to the processes that contribute to changes in the political

changes of their countries. Overall, the implications of these results create additional understanding in the construction of political ideology and intergroup interactions.

In summary, this study has shown that RWA, SDO, and MFT were all unique contributors to explaining social political orientation, economic political orientation, and perceived threat towards immigrants. While a brief overview of the literature would suggest this to be the case, the unique contribution of MFT in light of RWA and SDO is novel and has yet to be empirically shown prior to this study. Future work should incorporate related constructs linked to political orientation, such as disgust sensitivity (Brenner & Inbar, 2015; Inbar et al., 2012), tolerance of ambiguity (Jessani & Harris, 2018), and others.

The harm inflicted on society by poverty, crime, and mental illness is a constant focus of social discourse. Less attention has been paid to politics stress inflicted by political divide, even though the American Psychological Association's Stress in America reports have consistently found politics to be a leading stressor in recent years for the vast majority of Americans (APA, 2017, 2018, 2019, 2020). We live in a politically divisive world, and one of the lessons the past year should have taught us is that tribalistic political dedication can take precedence over both self-care and self-interest. The harmful effects of political tribalism are widely apparent if not scientifically documented. Social scientists need to delve deeper to better understand the destructive aspects of politics. The real-world ramifications are clear and understanding the foundations of misattributed bias and hatred of outgroups is the best way to deconstruct these malicious intentions.

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