



A Latent Class Analytic Approach to Identifying Structures of Classist Ideology from World-View Orientations

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ABSTRACT

This study identified clusterings of individuals based on world-view orientations including epistemological style, right-wing authoritarianism, social dominance, and religious fundamentalism. The groups were compared on classist attitudes. U.S. participants (N = 272) completed a 2015 online survey. The latent class analysis's fit indices supported a three-group solution, including moderates (40%), progressives (35.8%), and traditionalists (25.2%). Assessing differences between classes, an analysis of covariance indicated that progressives had the lowest levels of classism, followed by moderates, then traditionalists, after controlling for demographics. This study illuminates worldview ideologies associated with classism and represents a step in understanding the underlying structure of classism.

KEYWORDS

classism; latent class analysis; prejudice; attitudes

As described by Collins and Yeskel (2005), *classism* is “the systematic oppression of subordinated groups (people without endowed or acquired economic power, social influence, or privilege) by the dominant groups (those who have access to control of the necessary resources by which other people make their living)” (p. 143) as well as the attitudes, policies, and practices that sustain it. As a system of oppression, classism aims to keep individuals of low socioeconomic status (SES) powerless, while the wealthy remain powerful (Aosved & Long, 2006; Lott, 2002). Classist ideology (i.e., prejudice) is one aspect of this system of oppression. Indeed, classism is a form of prejudice toward individuals in poverty and low SES (Aosved, Long, & Voller, 2009). Classism is like other forms of prejudice (e.g., racism, heterosexism), such that there is a negative attitude regarding the “other” that differs from the majority group (Aosved & Long, 2006). Researchers have noted that classism has largely been ignored by the psychological literature, at least in comparison to other forms of oppression (Carr & Sloan, 2003; Lott, 2002; Smith, 2005). A particularly large omission from the literature on classism

is research identifying the grouping of attitudes and worldview orientations that may produce or maintain classist ideologies.

Previous literature on prejudice has suggested several important underpinnings, including right-wing authoritarianism (RWA), social dominance orientation (SDO), religious fundamentalism (RF), and epistemological style (ES). *Right-wing authoritarianism* is defined by three characteristics: willingness to submit to authority, a strict adherence to societal norms, and hostility toward individuals who do not adhere to these norms (Altemeyer, 1981). *Social dominance orientation* is the degree to which individuals desire or perceive their own in-group to be superior and dominant to out-groups (Pratto, Sidanius, Stallworth, & Malle, 1994). Individuals with these views favor hierarchy-enhancing or -reinforcing policies and ideologies and seek to maintain the status quo of inequality as a means of rationalizing individual discrimination and stabilizing oppressive systems and institutions, including classism (Pratto et al., 1994; Sidanius, Pratto, van Laar, & Levin, 2004). RWA and SDO have been consistently associated with prejudice (Asbrock, Sibley, & Duckitt, 2010; Pratto, van Laar, & Levin, 2004; Pratto et al., 1994). Together RWA and SDO create a hierarchal structural and system for promoting prejudicial beliefs, including classism.

Religious fundamentalism, not religiosity, has been identified as being intimately associated with RWA and prejudice toward racial/ethnic minority groups and homosexuality (Altemeyer & Hunsberger, 1992; Johnson et al., 2011). RF asserts a “supra-human locus of moral authority, context unbound truth, and the appreciation of the sacred over the worldly components of experience” (Liht, Conway, Savage, White, & O’Neill, 2011, p. 229). Therefore, belief in religious content may not on its own instill prejudice, but rather the conviction of moral superiority over others may, which is characteristic of RF. This may be especially true if it is believed that people from low SES engaged in “immoral” activities that subsequently produced their socioeconomic position. Indeed, a review of media images of individuals of lower SES found that this group is generally portrayed as outsiders deficient in character or morality (Bullock, Wyche, & Williams, 2001) and are stereotyped as dishonest, promiscuous, criminal, alcoholic, abusive, violent, immoral, as well as are thought to be personally responsible for their economic position (Lott, 2002). It follows then that individuals high on RF may be well positioned to assert their moral high ground and prejudice over people from low SES positions via classist attitudes.

Epistemological style, defined as an individual’s beliefs as to what constitutes knowledge and its acquisition (i.e., worldview; Wilkinson, 1989), may play a role in predicting classism. Two specific ESs defined by Wilkinson and Migotsky (1994), naïve realism, and subjective skepticism, are especially noteworthy. Individuals high on naïve realism typically do not show interest in a situation’s context or rationale of facts and prefer information to be

presented in a straightforward and simple manner (Wilkinson & Migotsky, 1994). For this reason, it is plausible that individuals high in naïve realism may be more susceptible to classist attitudes, as they may not view individuals of low SES as being oppressed by numerous systems and institutions that perpetuate their status in society. Rather, they may perpetuate a “pull yourself up by your bootstraps” attitude and absolutist thinking and therefore perceive individual hardship as a personal flaw (e.g., they are poor because they are lazy). Conversely, individuals high on subjective skepticism are more likely to be “cynical doubters,” who reject that anything can be truly known, and that there are no concrete facts (Wilkinson & Migotsky, 1994). Given the more fluid view of the world, compared to people higher in naïve realism, people high on subjective skepticism might be less susceptible to classist beliefs.

Previous studies have documented the interrelationships between RWA, SDO, and RF. SDO and RWA are consistently associated with prejudice, though they tend to make independent contributions to prejudiced attitudes (Duckitt, 2003; Pratto et al., 1994). In addition, those high in RWA have been shown to be fundamentalist, religious, consistently attend church, and allow their beliefs to influence their behaviors (Altemeyer, 2004). However, individuals high in SDO are not always from religious backgrounds, do not always attend religious services, and do not necessarily have dogmatic ideology (Altemeyer, 2004). These interconnections suggest the possibility of distinct clusterings of individuals’ classist beliefs based on patterns of right-wing authoritarian, RF, and SDO.

Work in political ideology also suggests that classist beliefs may be influenced by perceptions of the cause of poverty, and these perceptions are often associated with specific political identities and ideologies. Research examining political conservatism has identified that individuals who attribute the cause of poverty to individualistic factors (placement of responsibility for poverty on the poor themselves) as more important rather than structural explanations (placement of external economic and social factors responsible) are more likely to be a conservative rather than labor voter (Furnham, 1982), Republican rather than Democrat (Kluegel & Smith, 1986), and conservative rather than liberal (Williams, 1984). There is also a documented tendency for conservatives to attribute greater personal responsibility to welfare recipients, which is associated with less positive opinions of the welfare recipient and more disgust than liberal individuals (Williams, 1984).

Given that conservatives are more likely to align themselves with the Republican Party and liberals with the Democratic Party in the United States (Levendusky, 2009), an examination of political affiliation may be valuable. This is underscored by prior work identifying that affiliation with the Republican Party is positively associated with SDO (Pratto et al., 1994), RWA (Smith & Winter, 2002), prejudice toward gay people and women

(Bierly, 1985), with studies regularly identifying that political conservatives tend to have analogous conservative racial attitudes (Krysan, 2000). Therefore, we anticipate that those who identify with the Republican or Tea parties are more likely to endorse classism, whereas those who identify with the Democratic party to have lower levels of classism.

The current study

As described above, previous research has found that RWA, SDO, RF, and world-views have all been linked to prejudice. However, it is important to note that these traits do not exist in isolation, and it is likely that there are distinct homogeneous clusterings of these traits within the larger population. Therefore, the current study aims to identify these homogenous clusterings and their relation to classism. Based on the previous literature, we anticipate that distinct subgroup clusterings with varying levels of classism would emerge when taking into account an individual's ES, RWA, social dominance, and RF. To test this hypothesis, a latent class analysis was used, and then the various resulting groups were compared on their levels of classism. We propose to use latent class analysis, as this approach takes individuals from a heterogeneous population and classifies them into smaller, more homogeneous latent groups (Muthén & Muthén, 2000).

Data and method

Procedure

Participants were recruited through Amazon's Mechanical Turk (Mturk), an online marketplace. Individuals (known as "workers") are recruited to complete human intelligence tasks (HITs), including online self-report surveys. Participants are able to choose for themselves HITs they would like to complete for compensation. When a HIT is selected, participants are prompted with a preview of the HIT as well as a set of instructions to complete it. When a participant has satisfactorily completed a HIT, the participant is compensated by the researchers (known as "requesters" on Mturk). Requesters deposit funds into an Amazon Payment account to purchase Mturk HITs. The present study compensated participants \$1 (USD) for satisfactory completion of the HIT. As Mturk does not allow the collection of identifying information (e.g., social security number, names), the study measures were completely anonymous.

Mturk is becoming more popular for Internet-based survey research (Huff & Tingley, 2015). As Mturk does not release information regarding participant demographic information, a number of studies have examined the demographics of Mturk's user base. For example, Casler, Bicket, and Hackett (2013) found that compared to participants recruited through other online samples, Mturk workers are more diverse. Further, Berinsky, Huber, and Lenz (2012)

found that Mturk workers are more representative of the U.S. population than participants in studies using convenience in-person sampling.

In addition, data obtained through Mturk has been shown to be as reliable as data collected through traditional methods (Buhrmester, Kwang, & Gosling, 2011). Previous research has demonstrated that participants perform similarly on behavioral tasks on Mturk as participants who complete the task in person (Casler, Bickel, & Hackett, 2013). Other tasks, including priming tasks and framing effects tasks are at least as reliable on Mturk as they are when completed in computer laboratories in person (Horton, Rand, & Zeckhauser, 2011).

Materials

Demographics

Participants reported their sexual orientation, age, gender, ethnicity, education level, and SES.

Epistemological Style Inventory

The Epistemological Style Inventory (ESI; Wilkinson & Migotsky, 1994) assessed individuals' epistemological orientation. The ESI has three subscales consisting of five items each: naïve realism, logical inquiry, and skeptical subjectivism. Scale anchors range from 1 (*complete disagreement*) to 5 (*complete agreement*). Although the scale's authors did not report the ESI's internal consistency, the present study utilized the naïve realism and skeptical subjectivism subscales, which demonstrated acceptable reliability in our sample ($\alpha = .73$, $\alpha = .65$, respectively). Higher scores on the subscales correspond to higher endorsement of the ES.

Social Dominance Orientation Scale

The *Social Dominance Orientation Scale* (SDOS; Pratto et al., 1994) was used to measure the extent to which individuals favor hierarchy-enhancing ideologies and policies, as well as individuals' desire for their own in-group to dominate out-groups. Scale anchors range from 1 (*strongly disagree*) to 7 (*strongly agree*). This scale has 16 items and has been demonstrated to have strong internal consistency ($\alpha = .91$; Pratto et al., 1994). Higher scores on this measure correspond to higher levels of SDO.

Short version of the Right-Wing Authoritarianism Scale

The Short Version of the Right-Wing Authoritarianism Scale (RWA; Zakrisson, 2005) is a 15-item Likert-type measure designed to assess the three main characteristics of RWA: conventionalism, authoritarian aggression, and authoritarian submission. Scale anchors range from -3 (*strongly disagree*) to $+3$ (*strongly agree*). This scale has been shown to have acceptable internal consistency ($\alpha = .72$). High scores on this measure correspond to higher levels of RWA.

Multi-Dimensional Fundamentalism Inventory

RF was assessed using the Multi-Dimensional Fundamentalism Inventory (MDFI; Liht et al., 2011). The MDFI consists of 15 items across three subscales that have demonstrated acceptable internal consistency: external versus internal authority ($\alpha = .77$), fixed versus malleable religion ($\alpha = .68$), and worldly rejection versus worldly affirmation ($\alpha = .66$; Liht et al., 2011). Scale anchors range from 1 (*totally agree*) to 4 (*totally disagree*). Higher scores on the external versus internal authority correspond to higher levels of external authority. Higher scores on the fixed versus malleable religion subscale correspond to higher levels of fixed religion. Finally, higher scores on the worldly rejection versus worldly affirmation correspond to higher levels of worldly rejection.

Intolerant Schema Measure

The classism subscale of the Intolerant Schema Measure (Aosved et al., 2009) was used to assess classist ideology. The classism subscale scale consists of nine items, which participants respond to on a Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*). The classism subscale has high internal consistency ($\alpha = .80$; Aosved et al., 2009). Higher scores on this measure correspond to higher levels of classism.

Participants

Participants ($N = 278$) consisted of individuals recruited from Amazon's Mturk (www.mturk.com). Geographic location was limited to individuals whom reside in the United States. As Mturk records participant identification numbers, the researchers found two individuals had taken the study measures twice. Therefore, their second set of data was removed. Further, one participant responded incorrectly to more than one of the seven attention check questions randomly inserted into the study measures, and this participant's data were consequently removed. Two participants scored greater than three Standard Deviations above the mean on SDO yet were retained based on recommendations by Cohen et al. (2003) to retain outliers if they make up less than 2% of the total sample. Three participants were removed due to being multivariate outliers as calculated by Mahalanobis distance. There were no missing data in the current study. The final sample size of the study was 272 participants. Participant demographics can be found in Table 1.

Data analyses

Latent Gold 5.1 was used to classify participants based on the five worldview characteristics described above without covariates (Vermunt & Magidson, 2016). A successive-group model-building approach was conducted in which the number of groups increased until an adequate model fit was achieved.

Table 1. Participant Demographics.

Characteristic	%
Age	37.1 <i>M</i> (13.17 <i>SD</i>)
Gender	
Men	37.50
Women	60.70
Trans/nonbinary	1.80
Race/ethnicity	
White/European (non-Latino/Hispanic)	75.30
Asian/Asian American/Pacific Islander	8.70
Black/African-American (non-Latino/Hispanic)	6.50
Latino/Hispanic	5.10
Multiracial/multiethnic	3.60
American-Indian/Native-American	.70
Education	
4-year college	44.40
Some college	18.50
Master's degree	15.30
2-year technical degree	9.80
High school/General Education Development	8.70
Doctorate	2.50
Grade school	.70
Sexual orientation	
Heterosexual	88.70
Bisexual	5.50
Gay or lesbian	4.00
Queer	1.80
Socioeconomic status	
Upper middle class	40.10
Lower middle class	34.20
Working class	17.30
Lower class	6.60
Upper class	1.80

The Bayesian Information Criterion (BIC) and the Akaike Information Criterion (AIC) were used to assess model fit to determine a suitable number of latent groups. Parsimony and interpretability were also guiding principles in model selection.

Following estimation of the final model, a series of bivariate and multivariate analyses were conducted to determine correlates of group membership. IBM SPSS 23 was used to examine group differences based on demographic characteristics, political affiliation, and levels of classism. Three ANOVAs were run with group membership as the independent variable and age, social class, and education as the dependent variables. A series of chi-squared tests were conducted to determine if the proportion of categorical demographics was based on group membership. And an analysis of covariance (ANCOVA) was run to test the mean difference in classism by group membership, after controlling for sexual orientation and education.

Results

Latent class analysis

A series of latent class models were estimated to identify underlying latent worldview ideology groups within the sample of 272 adults. In the latent class analyses of the five indices of worldview ideology, a three-group model was the best fitting model. The BIC and overall fit of the model improved from 255 the one-group model to the three-group solution, but fit reduced substantially when estimating successive models. Similarly, the AIC improved from the one-group solution to the six-group model (Table 2). Thus, models with three to six groups were examined for observation classification errors, as well as parsimony and interpretability. The three-group model demonstrated robust evidence for the best-fitting model based on the aforementioned criteria. Further support for the three-group solution resulted from the small group proportions in the fourth, fifth, and sixth groups. Classification error for the three-group model also was lower than those with greater groups (7.7%) and the entropy R^2 was .82.

Figure 1 presents the estimated probability for worldview ideology indicators. Table 3 displays the group labels, loadings for all model indicators (i.e., standardized linear effects of latent variables on indicators), estimated means for each class for all indicators, and overall sample means and standard deviations for all indicators. The first latent group (“moderates,” 40.0%) was characterized by moderate scores on rationalism, constructivism, SDO, RWA, and RF. The second latent group (“progressives,” 35.8%) was characterized by low relativism, moderately high constructivism, and very low SDO, RWA, and RF. Finally, the third latent group (“traditionalists,” 25.2%) was characterized by moderately high relativism, moderately low constructivism, moderate SDO, high RWA, and high RF.

Socio-demographic characteristics of the groups

Table 4 displays the results comparing the sociodemographics differences of the three groups. Three ANOVAs were run with the group membership as the

Table 2. Model Fit Information for Latent Class Analyses with One to Six Latent Groups.

Groups	Parameters	AIC	BIC	CAIC	Entropy R^2	Classification errors
1	10	9810.9	9846.9	9856.9	1.00	0.00
2	21	9361.2	9436.9	9457.9	0.89	0.03
3	32	9273.5	9388.9	9420.9	0.82	0.08
4	43	9241.2	9396.3	9439.3	0.83	0.09
5	54	9202.4	9397.1	9451.1	0.83	0.11
6	65	9168.1	9402.5	9467.5	0.84	0.10

Notes. AIC = Akaike information criterion; BIC = Bayesian information criterion; CAIC = Consistent AIC. Bold font indicates selected model.

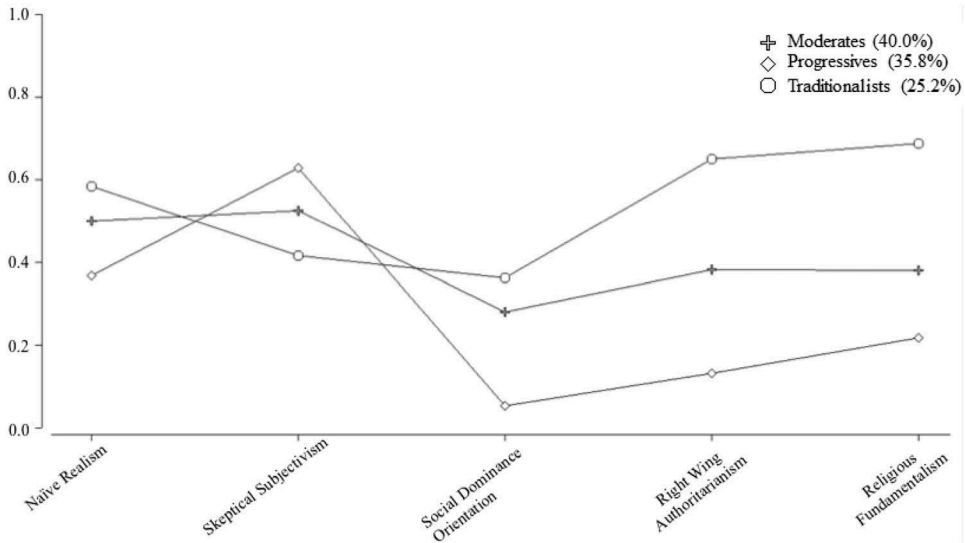


Figure 1. Estimated Means for Worldview Orientation.

Table 3. Parameter estimates for model of three worldview ideology latent groups.

Latent Class Size	Loading	Moderates	Progressives	Traditionalists	Overall Sample <i>M (SD)</i>
		.39	.36	.25	
Naïve realism	.40	15.00	12.35	16.66	14.47 (4.31)
Skeptical subjectivism	.41	16.42	18.30	14.46	16.60 (3.63)
Social dominance orientation	.60	42.85	21.07	50.64	37.01 (20.53)
Right wing authoritarianism	.86	47.06	26.08	69.57	45.22 (19.53)
Religious fundamentalism	.81	29.79	23.43	41.78	30.53 (8.74)

independent variable and age, social class, and education as the dependent variables. Neither age, $F(2, 269) = 1.78, p = .171$, nor social class, $F(2, 269) = 0.14, p = .869$, was significantly different based on group membership. Education was significantly different, such that the progressive group had significantly more education compared to the traditionalist group, $F(2, 269) = 3.98, p = .020$.

A series of chi-squared tests were conducted to determine if the proportion of categorical demographics was based on group membership. Race/ethnicity, relationship status, gender, and environment categories were not different based on group membership (all $ps > .158$). Sexual orientation was significantly different based on groups, such that individuals who identified as heterosexual were approximately equally distributed across the groups, the majority of bisexual and gay/lesbian individuals were in the progressive group, followed by the moderates, with the lowest proportions in the traditionalist group, and queer-identified individuals all belonging to the progressives group, $\chi^2(6) = 15.09, p = .020$. Political affiliation was also significantly different, $\chi^2(10) = 59.42, p < .001$. The majority of Democrats were in the

TABLE 4. Groups Membership by Sociodemographics (percentages and mean distributions).

Characteristic	<i>n</i>	%	Moderates	Progressives	Traditionalists	<i>p</i>
Overall <i>n</i>	272	100	104	98	70	
Gender						.345
Man	102	37.5	42.2	31.4	26.5	
Woman	165	60.7	37.0	38.2	24.8	
Trans/nonbinary	5	1.8	0.0	60.0	40.0	
Race						.158
White, non-Latino	204	75.0	75	80	49	
Racial/ethnic minority	68	25.0	29	18	70	
Sexual orientation						.020 ^a
Heterosexual	241	88.6	39.4	32.8	27.8	
Bisexual	15	5.5	40.0	53.3	6.7	
Gay/lesbian	11	4.0	27.3	54.5	18.2	
Queer	5	1.8	0.0	100.0	0.0	
Relationship status						.234
Partnered	177	65.1	37.9	33.3	28.8	
Not partnered	95	34.9	38.9	41.1	20.0	
Political party affiliation						< .001 ^a
Democrat	122	44.9	35.2	50.0	14.8	
Republican	39	14.3	35.9	0.0	64.1	
Libertarian	12	4.4	75.0	16.7	8.3	
Tea Party	3	1.1	33.3	0.0	66.7	
Green Party	6	2.2	50.0	33.3	16.7	
Independent	90	33.1	37.8	36.7	25.6	
Environment						.598
Urban	72	26.5	31.9	43.1	25	
Suburban	147	54.0	40.1	34.7	25.2	
Rural	53	19.5	41.5	30.2	28.3	
Age, <i>M</i>	272	100	37.24	35.29	39.14	.171
Social Class, <i>M</i>	272	100	2.84	2.87	2.91	.869
Education, <i>M</i>	272	100	4.39	4.72	4.17	.020 ^a

Note. a. Statistically significant ($p < .05$) difference by group membership.

progressive group, followed by the moderate group, then the traditionalist group. The majority of Republicans and Tea Party affiliates were in the traditionalist group, and the remaining were in the moderate group, with none of this group belonging to the progressive group. Independents were approximately evenly distributed across all groups, whereas Libertarians were mostly in the moderate group, followed by the progressive, and the traditionalist group. Finally, those who identified with the Green Party were mostly in the moderate group, then the progressive group, and finally the traditionalist group.

Group membership and classism

An ANCOVA was run to test the mean difference in classism by group membership, after controlling for sexual orientation (0 = heterosexual vs. 1 = sexual minority) and education. Political affiliation was not included as there are seven categories and no clear or parsimonious way to dichotomize this variable. There was a significant omnibus effect for group, $F(2, 267) = 74.81, p < .001, \eta^2 = .36$.

However, the effects for sexual orientation and education were not significant, $F(1, 267) = .002, p = .881$; $F(1, 267) = 1.99, p = .160$. Post-hoc multiple comparison tests using a Bonferroni correction for family-wise error indicated that all comparisons were significantly different from each other, such that the progressive group had the lowest mean of classism ($M = 15.48, SD = 15.48$), followed by the moderate group ($M = 23.55, SD = 6.66$), then the traditionalist group ($M = 27.66, SD = 7.15$).

Discussion

In the current study, a latent class analysis was used to identify homogenous latent groups on measures of ES (naïve realism and skeptical subjectivism), SDO, RWA, and RF in relation to classism among 272 adults residing in the United States. Fit indices supported a three-group solution, including latent groups consisting of moderates, progressives, and traditionalists. The moderate latent group contained 40% of participants and was characterized by moderate scores on naïve realism, skeptical subjectivism, SDO, RWA, and RF. The progressive latent group contained 35.8% of participants and was characterized by low naïve realism, moderately high skeptical subjectivism, and very low SDO, RWA, and RF. The traditionalist latent group consisted of 25.2% of participants and was characterized by moderately high naïve realism, moderately low skeptical subjectivism, moderate SDO, high RWA, and high RF.

Epistemological style

Although no previous studies have examined ES as a predictor of prejudice, this study suggests that assessing this construct may be important for future research examining classism. The means of naïve realism were the highest in the traditionalist and moderate groups, whereas the means of skeptical subjectivism was the highest for the progressive group, suggesting that traditionalists and moderates have the most “world as black-and-white” views, whereas progressives have more “world as grey” views (Figure 1). Constructs similar to skeptical subjectivism, such as relativism (the ability to analyze situations from different viewpoints), have been found to be negatively associated with RWA (McHoskey, 1996). Indeed, previous studies have also characterized individuals high in RWA as unimaginative and close minded (Billings, Guastello, & Rieki, 1993), which are in line with the results of the current study.

Social dominance orientation and RWA

As shown in Figure 1, traditionalists had the highest mean scores on SDO and RWA, followed by moderates, with progressives having the lowest mean on these two constructs. Given previous research on SDO and RWA, it is

perhaps understandable that traditionalists had higher scores on classism in the current study. These constructs have been consistently associated with various types of prejudice (Asbrock et al., 2010; Pratto, van Laar, & Levin, 2004; Pratto et al., 1994), and individuals high in SDO and RWA have been found to be the most prejudiced individuals in society (Altemeyer, 2004).

Despite sharing similarities, SDO and RWA make independent contributions to prejudice. Individuals high in SDO have a desire to dominate over groups they consider “below” them, whereas individuals high in RWA submit to authorities they deem legitimate (Altemeyer, 2004). These differences may be particularly important when considering classism, as previously research has shown that SDO, but not RWA, predicted prejudice against those seen as socially subordinate (e.g., unemployment beneficiaries; Duckitt, 2006).

Interestingly, the traditionalist group had higher scores on RWA than SDO. As noted by Sibley, Robertson, and Wilson (2006), research suggests that SDO better predicts certain forms of prejudice (e.g., racism, hostile sexism), but RWA better predicts others (e.g., heterosexism, benevolent sexism). This can be explained by the underlying ideologies of these two constructs: in RWA, ideologies are associated with in-group threat and adherence to social conformity, and in SDO, the ideologies are associated with competition and a need for superiority (Sibley et al., 2006). The results of the current study may suggest that classism clashes more so with RWA ideology, though future studies should be conducted to further examine this potential association.

In a similar vein, individuals high in SDO may not see equality among social groups to be a goal worth striving for (Altemeyer, 2004), which may generalize to economic equality among social groups. Further, Sidanius, Levin, Liu, and Pratto (2000) found individuals high in SDO tend to belong to higher-status groups (e.g., men, Whites). This is consistent with other studies that suggest individuals high in SDO prefer unfair and unjust systems that benefit them (Altemeyer, 2004), suggesting that individuals high in SDO may also have an ingrained classist way of seeing the world. Therefore, the finding that traditionalists, the group with the highest SDO scores, were also the highest on classism, is to be expected.

Religious fundamentalism

As most religions teach loving other human beings unconditionally as well as tolerance (Coward, 1986), it was initially shocking when researchers found an association between religiosity and prejudice (Hunsberger & Jackson, 2005). However, over the past 60 years, these findings have largely been corroborated, particularly with RF. Indeed, RF has been associated with various types of prejudice, including antigay and lesbian prejudice (Laythe, Finkel, Bringle, & Kirkpatrick, 2002), as well as ethnic and racial prejudice (Hall, Matz, & Wood, 2014). As various types of prejudice are related, it is plausible that an association

between RF and classism exists. However, to the knowledge of the authors, this is the first study to identify associations between classism and RF, particularly a grouping of individuals high in RF and classism (traditionalists), and a grouping of individuals low in each of these constructs (progressives).

These defining characteristics of the latent groups in the present study also corroborate previous studies finding positive associations between RF, RWA, and prejudice. As noted by Altemeyer (2004), individuals high in RWA tend to be fundamentalist, have religious backgrounds, consistently attend church, and their beliefs influence their behaviors. Further, Johnson et al. (2011) found that RWA and RF fully mediated the relationship between religiosity and prejudice (e.g., attitudes toward gay men and lesbians, racism), though RF was a stronger predictor. Future studies should examine the unique effects of both RWA and RF on classism to determine if similar relationships exist.

Limitations and future directions

Overall, this study supports the notion that constructs previously associated with prejudice, including worldview orientation, RWA, SDO, and RF are also associated with classism. Future research examining other forms of prejudice (e.g., sexism, racism, heterosexism, etc.) should be conducted to examine whether the three latent groups identified in the present study may have differing levels of those forms of prejudice as well. For example, it would be important to determine whether the worldview patterns across the different groups similarly predict a wide array of prejudices, or just classism specifically.

Compared to studies on other forms of prejudice (e.g., racial prejudice), fewer studies have examined the effects of classism on well-being. Fuller-Rowell, Evans, and Ong (2012) found that perceived SES-based discrimination influences the relationship between poverty and individuals' allostatic load. Perceived discrimination has also been found to be a mediator in the relationship between poverty and mental health in adults (Kessler, Mickelson, & Williams, 1999). In a Dutch sample, Simons, Koster, Groffen, and Bosma (2016) found perceptions of classism to be related to poor physical and mental health, as well as perceptions of inferiority.

Generalizability of the sample is a limitation of the present study. The sample was primarily middle class, White, and was generally well educated. It is possible that individuals across other socioeconomic gradients, levels of education, and racial/ethnic groups may have varying levels of classism. Future studies should attempt to recruit more diverse samples of participants.

Despite limitations of the current study, this latent class analysis approach may serve as an important first step in identifying personality characteristics and worldview orientations associated with classism, including ES, SDO, RWA, and RF. These groupings were shown to robustly predict levels of classism, such that participants with the highest levels of classism were those in the group with

moderately high naïve realism, moderately low skeptical subjectivism, moderate SDO, high RWA, and high RF. The current study adds to the literature by illuminating particular worldview ideologies that are associated with classism and perhaps represents a step in the direction of understanding the basic underlying structure of classist ideologies. Future classism-reduction intervention research may attempt to incorporate the ways people view the construction of knowledge, religious beliefs, and other worldview ideologies and how this gets applied to beliefs about individuals in poverty and lower SES.

Disclosure statement

No potential conflict of interest was reported by the authors.

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