

Is there a Populist Personality? Populist Attitudes as an Intervening Variable in Australian Public Opinion

Paul D. Kenny* & Boris Bizumic†

Abstract

Recent research suggests that populism can be measured as a latent psychological construct, comprising *People-centrism*, *Anti-elitism*, and *Manichean outlook*. This paper theorizes that populist attitudes should be understood and modeled as a multi-dimensional intermediary psychological construct that sits somewhere between deeper psychological predispositions and political preferences. The paper thus tests the degree to which populist attitudes are associated with underlying personality traits on the one hand, and the degrees to which both personality traits and populist attitudes combine to explain vote choice. Using data from an original nationally representative online survey of more than 2,000 Australians fielded prior to the general election in 2019, the paper demonstrates that the three sub-components of populist attitudes are distinctively associated with underlying personality traits. It also shows that personality traits affect support for populist parties both directly and indirectly through their effect on populist attitudes.

Keywords: populism; personality; public opinion; Australia; mediation analysis

*Paul D. Kenny
Department of Political and Social Change
Coral Bell School of Asia Pacific Affairs
The Australian National University
130 Garran Road
Acton, ACT 2601
Australia
+61 2 6125 8812
paul.kenny@anu.edu.au

†Boris Bizumic
Research School of Psychology
ANU College of Health & Medicine
The Australian National University
Building 39,
Acton, ACT 2601
Australia
+61 2 6125 4488
boris.bizumic@anu.edu.au

Is there a Populist Personality? Populist Attitudes as an Intervening Variable in Australian Public Opinion

Abstract

Recent research suggests that populism can be measured as a latent psychological construct, comprising *People-centrism*, *Anti-elitism*, and *Manichean outlook*. This paper theorizes that populist attitudes should be understood and modeled as a multi-dimensional intermediary psychological construct that sits somewhere between deeper psychological predispositions and political preferences. The paper thus tests the degree to which populist attitudes are associated with underlying personality traits on the one hand, and the degrees to which both personality traits and populist attitudes combine to explain vote choice. Using data from an original nationally representative online survey of more than 2,000 Australians fielded prior to the general election in 2019, the paper demonstrates that the three sub-components of populist attitudes are distinctively associated with underlying personality traits. It also shows that personality traits affect support for populist parties both directly and indirectly through their effect on populist attitudes.

Keywords: populism; personality; public opinion; Australia; mediation analysis

Introduction

Long a potent political force in Latin America and Asia (Hawkins 2010, Kenny 2017, Mizuno and Pasuk 2009, Roberts 2014), populism has in the last two decades come to exert a significant influence on political outcomes in the West, not least with respect to the most recent US presidential election (e.g., Judis 2016, Norris and Inglehart 2019). Yet in spite of the sense that populism increasingly matters, exactly how this is the case remains deeply contested. One influential body of research asserts that populism is a latent psychological disposition (Akkerman et al. 2013, Hawkins and Rovira Kaltwasser 2019). The greater degree to which individuals hold people-centric, anti-elite, and Manichean beliefs the more likely they should be to vote for populist parties and leaders when activated by political context and elite priming (Hawkins et al. 2012, Hawkins et al. 2018). Empirical research on the relationship between populist attitudes and political behavior is accumulating fast (Akkerman et al. 2013, Castanho Silva et al. 2019, Elchardus et al. 2016, Hawkins et al. 2012, Schulz et al. 2017, Spierings and Zaslove 2017, Stanley 2011, Van Hauwaert and Van Kessel 2018, Kenny and Holmes 2019, Hameleers et al. 2017, Hieda et al. 2019). However, we suggest that some caution is warranted in the use of populist attitudes as a casual variable. Our reading of the conceptual and empirical literature suggests that populist attitudes should be understood and modeled as a multi-dimensional *intermediary* psychological construct that sits somewhere between deeper psychological predispositions and political preferences. This paper investigates the degree to which populist attitudes are associated with underlying personality traits on the one hand, and the degrees to which both personality traits and populist attitudes combine to explain political preferences.

We test these claims against data from an original nationally representative online survey of more than 2,000 Australians fielded prior to the general election in 2019. We deployed a

recently developed nine-item, three-component populist attitudes scale (Castanho Silva et al. 2019) along with the Ten Item Personality Inventory (TIPI) measure of the Big Five personality traits (Gosling et al. 2003). First, we find that the three components of populism in this scale, *People-centrism*, *Anti-elitism*, and *Manichean outlook* are only loosely related to one another. Second, we find that the Big Five personality traits differentially impact the three dimensions of populist attitudes. Third, utilizing a structural equation model, in which each of the five personality latent variables was modeled to predict each of the dimensions of populism and in which the five personality and three populism latent variables were modeled to predict voting intention for One Nation, a populist Australian political party, we find evidence of both direct and indirect effects of personality on populist party support.

The contribution of this paper is two-fold. First, it demonstrates that latent populist attitudes, in particular when disambiguated into their component dimensions, have a basis in personality. Thus, although populist attitudes may be partially affected by political choice (i.e., an individuals' support for a politician who employs anti-elite rhetoric may *cause* her to adopt anti-elite attitudes) (Zaller 1992), people appear to be more or less predisposed towards holding these attitudes. Second, this paper shows that populist attitudes may partially mediate the relationship between personality traits and vote choice (Fatke 2019, Schimpf and Schoen 2017). Although some personality traits are directly associated with support for populist parties, others instead operate through their effect on populist attitudes. Populist attitudes are, at least to a degree, an intervening variable.

The Ideational Approach to Populism

It is by now well-known that there is persistent disagreement over the meaning of populism. It has been variously understood as a form of political mobilization or organization

(Kenny 2019, Weyland 2001), a style of politics (Moffitt 2016, Ostiguy 2009), a set of fiscal policies (Acemoglu, Egorov et al. 2013, Dornbusch and Edwards 1991), and as a set of political ideas or ideology (Hawkins and Rovira Kaltwasser 2019, Mudde 2004, Mudde and Rovira Kaltwasser 2017, Rooduijn 2014). While not dismissing the validity of other approaches, which have been shown to have some explanatory value on the supply side (Kenny 2017), given recent efforts to ground the demand for populism in individual psychology, this paper focuses on the ideational approach.

The ideational conceptualization of populism in its current form largely derives from the analytical work of Cas Mudde (2004). Mudde (2004: 543) defines populism as “an ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, ‘the pure people’ versus ‘the corrupt elite’, and which argues that politics should be an expression of the *volonté générale* (general will) of the people” and that populism expresses a “Manichean worldview.” Hawkins and Rovira Kaltwasser (2019: 3) propose a more parsimonious conceptualization but the key elements remain the same, with populism defined as an understanding of “politics as a Manichean struggle between a reified will of the people and a conspiring elite.” Populism, like liberalism or conservatism, can in this sense be understood as a political disposition at the individual level.

Populism in the attitudinal sense is a latent psychological variable. It is not directly measurable but reflects a deeply held set of attitudes that is distinct from its two inverse poles, elitism and pluralism (Hawkins and Rovira Kaltwasser 2019: 4). According to this approach, people with populist attitudes should be simultaneously more people-centric, anti-elite, and Manichean in their outlook (Hawkins and Rovira Kaltwasser 2019: 3). Attempts to measure populist sentiments or attitudes in this precise sense at the mass level go back to

2012 (Akkerman et al. 2013, Castanho Silva et al. 2019, Elchardus et al. 2016, Hawkins et al. 2012, Schulz et al. 2017, Stanley 2011, Van Hauwaert and Van Kessel 2018, Mohrenberg et al. 2019), but the approach has a longer lineage (Farrell and Laughlin 1976). Issues with the reliability of some of these early scales have been discussed at length by others (Van Hauwaert et al. 2019). In this paper, we therefore utilize a recently devised multi-factor populist attitudes scale that tends to perform better than previous scales, providing a wider range of information and greater cross-country reliability (Castanho Silva et al., 2018).

Populist attitudes, as commonly understood in the literature, comprise three dimensions: *People-centrism*, *Anti-elitism*, and *Manichean outlook* (Hawkins and Rovira Kaltwasser 2019). *People centrism* refers to the view that “the people” are the repository of positive values in society. Although not explicitly classist or nativist in orientation, it reflects a belief in folk values rather than in learned expertise, and so often correlates with economically left wing or ethno-chauvanist attitudes (Canovan 1999, Farrell and Laughlin 1976, Taggart 2000). *Anti-elitism* conversely asserts that the problems with society are due to the machinations of elites, whether they are defined in political, economic, or cultural terms (Mudde 2004, Mudde and Rovira Kaltwasser 2017). The last component, *Manichean outlook*, indicates that populism is characterized by a belief that politics is a life-and-death struggle between these two forces, the good people and the bad elite (Albertazzi and McDonnell 2008, Hawkins and Kaltwasser 2019). We comment further on this multi-dimensional conceptualization in the next section and analyze the scale in the data section.

Following the logic that voters should choose parties whose leaders ostensibly possess similar values to their own (Caprara et al. 2003), this cluster of called populist attitudes should in turn be associated with support for parties, leaders, and movements which espouse

these values in their political discourse. A number of studies have found associations between populist beliefs and support for populist parties and leaders (Akkerman et al. 2013, Van Hauwaert and Van Kessel 2018, Rahn 2019), but the results are inconsistent (Akkerman et al. 2017, Andreadis et al. 2019, Rooduijn 2018, Stanley 2011, Quinlan and Tinney 2019). Critically, it is unclear whether populist attitudes are simply derived from some more fundamental psychological dispositions or even demographic characteristics. For example, previous research has shown that populist attitudes are correlated with respondent gender, class, and ethnicity (Anduiza and Rico 2019, Kenny and Holmes 2019, Spierings et al. 2017, Spierings and Zaslove 2017). As we argue below, there is good reason to think that populist attitudes are themselves partly the result of underlying psychological constructs and that the psychological bases of support for populist parties is the result of complex and even mediated processes.

Theorizing Populist Attitudes as Intermediary Constructs

This section theorizes that populist attitudes should be understood and modeled as a *multi-dimensional intermediary psychological construct* that sits somewhere between deeper psychological predispositions and political preferences. We concur with recent conceptual and theoretical research that posits an association between populist attitudes and vote choice. However, following a large body of research in political psychology, we further theorize that populist attitudes, as *politically oriented* psychological constructs, should have a basis in personality. Thus, in turn, we argue that populist attitudes should partially mediate the effect of personality on political behavior. Populist attitudes in this sense are an intervening variable.

There are numerous forms of personality scale but here we adopt the commonly used

Big Five personality traits (McCrae and Costa 1997). These are *Emotional Stability/Neuroticism (N)*, *Extraversion (E)*, *Openness to Experience (O)*, *Agreeableness (A)*, and *Conscientiousness (C)*. These personality traits capture “enduring patterns of thoughts, feelings, and actions” and are largely biological in origin (McCrae and Costa 2008: 160). The notion that there could be direct links between personality and vote choice, including for populist candidates, has been around for some time. We know, for instance, that that party identification is directly correlated with personality in this sense (Barbaranelli et al. 2007, Caprara et al. 2006, Caprara and Zimbardo 2004, Van Assche et al. 2019). There is also some evidence that personality may be specifically related to support for populist parties and candidates (Aichholzer et al. 2016, Bakker et al. 2016, Czikora 2015, Fatke 2019, Van Assche et al. 2018). Nai and Martínez i Coma (2019) find that populist leaders are rated lower by experts on *Agreeableness*, *Emotional Stability* and *Conscientiousness*. It may therefore come as little surprise that *Agreeableness* has been found to be directly negatively associated with support for populist parties (Bakker et al. 2016, Bakker et al. 2018).

Although it may be the case that “populist ideas are not reducible to a personality trait” (Hawkins and Rovira Kaltwasser 2019: 7), as a political psychological construct, there is also good reason to expect that populist attitudes should be at least partially dependent on underlying psychological dispositions. For example, one of the most well-known relationships concerning the political effects of personality is the association between *Openness to Experience* and liberalism and *Conscientiousness* and conservatism (Carney et al. 2008, Gerber et al. 2011, Hibbing et al. 2013) Some early evidence indicates that populist attitudes may have roots in personality. Using data from Germany and the UK, Fatke (2019) finds that *Agreeableness* is *positively* related to a composite measure of populist attitudes, whereas *Emotional Stability* is negatively related to these attitudes; *Openness* is also

positively related to populist attitudes but only in the UK, while *Conscientiousness* and *Extraversion* are positively related to populist attitudes but only in Germany. Thus, although empirical research thus far is suggestive, it is far from conclusive on the nature of the links between personality and populist attitudes. We argue that the empirical links between personality, populist attitudes, and political preferences should be clearer a.) when populist attitudes are disambiguated, and 2.) when populist attitudes are modeled as intervening variables.

Existing research on the upstream and downstream correlates of populist attitudes have tended to model populist attitudes as a single composite construct, comprising a combination of people-centrism, anti-elitism, and Manicheanism. Conceptual and theoretical research in the ideational school generally holds that individuals are “populist” only to the extent that they hold all three of these attitude sets simultaneously (Hawkins and Kaltwasser 2019, Wuttke et al. 2019). As Hawkins and Rovira Kaltwasser (2019: 6) put it, the “peculiarity of the populist set of ideas lies precisely in the combination of these elements.” However, there is good reason to believe that populist attitudes, as a complex and multi-dimensional construct, should be empirically disambiguated. Multidimensional psychological constructs should have intercorrelated factors (i.e., factors which at least moderately intercorrelate and create a higher order construct). If they do not have this feature, they refer to distinct and independent psychological constructs. For instance, conservatism has distinct social and economic dimensions, which are often best empirically separated (Everett 2013). In this case, although there is some reason to expect *People-centrism* and *Anti-elitism* to intercorrelate, there is no reason that either should necessarily correlate with *Manichean outlook* (Castanho Silva et al. 2019). It is thus not at all clear how these diverse constructs should be combined (e.g., multiplicatively or additively) (Wuttke et al. 2019). Bundling

Manichean outlook with *People-centrism* and *Anti-elitism* is likely to introduce unnecessary measurement error, potentially obscuring otherwise substantively and statistically significant relationships between these constructs and of these constructs with external variables, such as personality traits. Empirically, to the extent that *Manichean outlook* is associated with different underlying personality traits from populism's two other dimensions, we would have reason to believe that it stems from distinct underlying psychological processes.

In turn, we argue that populist attitudes are best conceived of, and modeled as, intervening psychological variables. There is considerable basis in political psychology for modeling ideological attitudes as intermediary constructs. The Five-factor Model (FFM) assumes that personality traits are biological dispositions that affect behavior (such as voting) via characteristic adaptations (such as populist attitudes). These adaptations are thus partially resultant from underlying genetic predispositions and partly from lived experience. Prior empirical research indeed suggests that personality may affect political choice directly but that it may also do so through a set of more proximate political or policy preferences (Gerber et al. 2011, McCrae and Costa 2008). As we noted, a large body of evidence demonstrates a relationship between populist attitudes and political preferences. However, we cannot rule out the possibility that some omitted factors may explain both the adoption of populist attitudes and support for populist politicians. We theorize that personality, or underlying psychological dispositions, may be one such omitted factor. Different personality traits are likely to be correlated to different degrees with the three elements of populist attitudes. As a result, personality may operate in a more complex way than previously assumed in explaining support for populist parties and leaders. We theorize that support for populist parties may be the result of both direct effects of personality and populist attitudes and of the indirect effect of personality through populist attitudes.

The Australian Context

Australia prior to the 2019 Federal Election provides the context for our study. The conservative/right-wing Liberal National Coalition and the liberal/left-wing Labour Party have traded power since the 1930s.¹ The 2019 election saw the governing Liberal National Coalition retain power. The opposition Labour Party, for its part, saw its seat and vote share fall. Between them, the Liberal National Coalition and Labour won 145 of 151 seats, which is the exact same share they held in the last parliament (2016—19). One of the more significant additions to the Australian party system in recent decades has been Pauline Hanson's One Nation Party. Hanson founded the eponymous party in 1997 after having been elected to the House of Representatives as an independent candidate in 1996. Hanson had previously been expelled from the Liberal Party over derogatory comments she made about indigenous Australians and she gradually adopted anti-Asian and subsequently anti-Muslim platforms through the late 1990s and early 2000s (Gibson et al. 2002). The party went into decline in the 2000s as Hanson herself took a back seat amid intraparty struggles. The party was rebranded as *Pauline Hanson's One Nation Party* in 2015 and it relied very much on Hanson's renown and charisma. The party picked up four seats in the Senate in 2016, including one for Hanson herself. Although the party continues to be strongly nativist, it has also adopted a more generally anti-establishment or populist discourse,² with Hanson herself critical of how "chardonnay-sipping" elites have betrayed the interests of "ordinary" Australians (Jackman 1998). One Nation is thus widely regarded as a populist party (Gibson et al. 2002, Hogan and Haltinner 2015, Mughan and Paxton 2006). Although Australia has been relatively neglected in the comparative literature on populism (but see Moffitt 2017),

¹ The Liberal National Coalition is comprised of the Liberal Party and the National Party; the latter ran under the National Country Party label from 1975—82 and before that as the Australian Country Party from 1920—1975.

² <https://www.theguardian.com/australia-news/2017/mar/27/looking-back-and-angry-what-drives-pauline-hansons-voters>

there is no obvious reason why it should be an outlier with respect to the prevalence of populist attitudes or support for populist parties.

Data

This section describes the data. We surveyed 2,200 Australian residents (92.6 percent Australian citizens) in a national random sample of the adult population (using the ‘Life in Australia’ panel). The poll was conducted via the Internet (88 per cent of respondents) and phone (12 per cent of respondents) to ensure coverage of households without Internet access. Respondents’ mean age was 53.1 ($SD = 17.0$; range = 18 to 95) and 53.6 percent were female (while 0.3 percent reported their gender as Other). There were 66.8 percent of respondents residing in a capital city (as opposed to the rest of a state or territory), and 13.6 percent of participants reported speaking a language other than English at home. As for their socioeconomic status (by area) (SSE), 14.8 percent resided in quantile 1 (most disadvantaged) areas, 17.3 percent in quantile 2, 19.3 percent in quantile 3, 20.6 percent in quantile 4, and 27.9 percent in quantile 5 (least disadvantaged). They reported their highest education as: Secondary Education – Years 9 and below (10.5 percent), Certificate I & II Level (0.6 percent), Secondary Education – Years 10 and 11 (10.5 percent), Secondary Education – Year 12 (11.9 percent), Certificate III & IV Level (15.5 percent), Advanced Diploma and Diploma Level (11.6 percent), Bachelor Degree Level (21.3 percent), Graduate Diploma and Graduate Certificate Level (8.6 percent), Postgraduate Degree Level (14.2 percent), and 2.3 percent did not report their education.

Participants completed two key measures, related to populist attitudes and personality, in addition to completing data on demographics and prospective vote choice.

Populist Attitudes Scale. To measure populism, we used a recently developed scale

that has been shown to successfully measure populist attitudes across nations in a series of convenience samples (Castanho Silva et al., 2018). The scale has three components, as we noted, with each component made up of three items. The three questions in each component are listed in Table 1. A five-point Likert-type scale (1 – *Disagree strongly*; 5 – *Agree Strongly*) was used to measure participants' agreement with items. We graph the distribution of responses of each of the nine items in the Supplementary Appendix (Figures A1 to A9) and of the composite index (Figure A10). Some items, such as *Pp11* are highly skewed, with almost all respondents agreeing with the statement. *People-centrism* as a whole is also relatively skewed. Most other items are well distributed.

Following Van Hauwaert et al. (2019), we use Item Response Theory (IRT) to capture the accuracy of the scale and its component parts. Test information curves (for the populism scale and its three components) and trace lines (for the nine individual items) are presented in the Supplementary Appendix (Figures A11 to A17). In our sample, the scale performs somewhat more poorly than in Castanho Silva et al. (2018). We find that the nine-item populist attitudes scale captures only a fairly narrow range of the construct, performing well only for those in the middle of the scale [-4.0:2.5]. The *People-centrism* scale had the broadest range [-6.0:2.0] while the *Manichean outlook* scale had the narrowest range [-2.0:2.0], with the *Anti-elitism* scale falling in between [-4.0:3.0]. Items *Man2* and *Man3* captured the least information of all, providing almost no variation. The Cronbach's alpha for the overall nine-item scale is 0.62 and McDonald's omega is 0.63. In our sample, the reliability of the three component scales was comparable to that of the original study: a) the *People-centrism* component (Cronbach's alpha = 0.40, McDonald's omega = 0.47); b) the *Anti-elitism* component (Cronbach's alpha = 0.69, McDonald's omega = 0.70); and c) the *Manichean outlook* component: (Cronbach's alpha = 0.43, McDonald's omega = 0.55).

Although reliabilities were not that high, given the length of the subscales, and the McDonald's omegas, we deemed the subscales suitable for further study.

[Insert Table 1 about here]

The Big Five Personality traits. Personality was measured using the Ten Item Personality Inventory (TIPI) (Gosling et al. 2003). Each trait was measured by two items (one positively-worded and one negatively-worded) that asked "To what extent do you agree or disagree that you see yourself as having... [specified personality characteristics]?" A seven-point Likert-type scale (1 – *Disagree strongly*; 7 – *Agree Strongly*) was used to measure participants' agreement with these statements. The ten questions and the construction of the scale are given in the Supplemental Appendix at A1. Although we acknowledge that this short scale is not ideal (Bakker and Lelkes 2018), it generates tolerable measures given the resource constraints many researchers face in collecting both personality measures and political variables of interest.

The TIPI yielded a measure of the five main personality traits as follows (Spearman-Brown coefficients are provided in parentheses as a measure of association between the two items for each trait): a) *Extraversion* (0.62), b) *Openness to experience* (0.37), *Agreeableness* (0.35), *Conscientiousness* (0.51), and *Emotional stability* (0.59). It should be noted that the developers of the TIPI argue that internal consistency is not essential for this very short measure, given that it strongly correlates with other and longer established measures with higher internal consistency and that it has high test-retest reliability.

Voting for One Nation. To determine participants' voting preferences, a question was asked: "If a federal election for the House of Representatives was held today, which one of the following parties would you vote for?" Participants were instructed to choose one party

form a list of Australian political parties – or to state whether they are a swing voter, would vote for someone independent, would not vote for a party, or would vote for some other party that is not on the list. Seventy-two respondents (3.2 percent of the total sample) indicated that they would vote for One Nation. One Nation received 3.08 percent of votes cast in May 2019, suggesting that the survey accurately picked up the level of support for the party.

Results

All statistical analyses were conducted using R (R Core Team, 2019). There were 0.03 percent of missing data (excluding demographic information) and these were imputed using multiple imputation. Table 2 presents the means and standard deviations for the key variables. As can be seen, participants on average tended to agree with *People-centrism* and somewhat with *Anti-elitism* but tended to somewhat reject *Manichaeian outlook*. Participants scored above the mid-point of the scale on all Big Five personality traits and were particularly high on *Conscientiousness*.

[Insert Table 2 about here]

Correlations. Zero-order correlations were computed for the variables of interest. These are presented in Table 3. It should be noted that the following variables were dummy-coded: Gender (1 – Female, 0 – Male), Australian Citizen (1 – Yes, 0 – No), Capital City Residence (1 – Yes, 0 – No), Language Other than English (1 – Yes, 0 – No), Voting for One Nation (1 – Yes, 0 – No). Although the three facets of populism intercorrelated, these correlations were not strong – with the one between *People-centrism* and *Manichaeian outlook* being only .05 – suggesting that these three attitudes are very loosely related and quite disparate in this nationally representative Australian sample. This confirms the finding of Castanho Silva et al. (2018), who find in their multi-country convenience samples that the

three populism sub-scales are not strongly correlated with one another.

Openness to Experience was consistently positively related to each dimension of populism – including the overall scale – suggesting that this is a personality trait that systematically predisposes people to populism. Correlations with other personality traits were less consistent and much weaker – with *Extraversion* being only very weakly positively related to *People-centrism*. *Conscientiousness* was weakly positively related to *People-centrism*, and weakly negatively to *Anti-elitism*. Finally, *Emotional stability* was negatively related to overall populism – including its facets of *Anti-elitism* and *Manichaeian outlook*.

[Insert Table 3 about here]

Apart from gender and citizenship status, which were not related to populism and any of its facets, other demographic characteristics tended to be generally weakly related to at least some populist attitudes. SES and education were consistently – though weakly – negatively related to populism, including its three facets. Age was related negatively to populism, including two of its facets, but positively to *People-centrism*. Living in a capital city was related to *Manichean outlook* but living in regional Australia was related to *People-centrism*. Speaking a language other than English at home was related very weakly to overall populism and *Manichaeian outlook*.

Voting for the largest Australian populist party, One Nation, was positively correlated with overall populism and its three facets, *Openness to experience* and *Age*, but negatively with *Gender* (males were slightly more likely to vote for One Nation), Education, SES, and residence in a capital city (with participants in regional Australia more likely to vote for One Nation).

Structural Equation Modeling (SEM). We use structural equation modelling (SEM)

to determine whether populist attitudes mediate between underlying psychological traits and political behavior. We use SEM and not classical regression analysis because SEM has numerous advantages (see Gunzler, Chen, Wu, & Zhang, 2013). For example, it provides fit indices to evaluate our hypothesised model and is better suited to test causal models. In addition, it allows us to control for measurement error in the measures of personality and populism. Two structural equation models were investigated. The first one investigated the distinct role of each personality trait in each of the three facets of populist attitudes. The second one investigated indirect and direct effects of personality traits in predicting voting for One Nation via the three facets of populist attitudes. These analyses were conducted using the lavaan package for R (Rosseel, 2012). The first SEM used the maximum likelihood (ML) estimation given that outcome variables were continuous, and the second SEM used diagonally weighted least squares (DWLS) estimation given that the outcome variable was categorical. SEM allowed us to investigate unique effects of each personality trait—given that all but one correlation between the traits were significant—controlling for the other personality traits, relevant demographic characteristics and also for measurement error. We used the following fit indices and related criteria to assess different aspects of the model fit: CFI close to or better than 0.95, 0.06 for RMSEA, and 0.08 for SRMR (Hu & Bentler, 1999). These analyses, therefore, were a much more stringent and specific test of the exact role that personality has in populism—including its role in voting for a populist party than the correlational analyses presented above.

Model 1. The full lavaan syntax for this model is included in the Supplemental Appendix. Items measuring each personality trait and each populism dimension were modeled to load on their respective latent variables. Each of the five personality latent variables was modeled to predict each of the latent variables of populism dimensions. As

gender and citizenship were not related to any of the dimensions of populism, we included the remaining five demographic variables as predictors of each of the dimensions of populism.

[Insert Table 4 about here]

The model converged and had good fit indices: $\chi^2(204) = 1592.22, p < .001$; SRMR = .050, RMSEA = .056 (CI₉₀ = .054–.059). It should be noted that the baseline model's RMSEA was .10, and according to Kenny (2019a), CFI values are not informative and should not be computed when the baseline model's RMSEA values are less than .158. The model's standardized coefficients for predicting populist attitudes are included in Table 4. After controlling personality traits for each other, demographic variables, and measurement error, *People-centrism* was predicted positively by *Agreeableness* and negatively by *Emotional stability*, *Anti-elitism* was predicted positively by only *Openness to experience*, and *Manichaeian outlook* was predicted positively by only *Extraversion*. When it comes to demographic characteristics, people-centrism was higher in older people and people from lower SES areas and with lower education level, whereas both *Anti-elitism* and *Manichean outlook* were higher in younger people and people from lower SES areas and with lower education level – with *Manichaeian outlook* also more likely to be higher in people from capital cities and those who spoke a language other than English at home. These predictors overall explained more than 10% of variance in each of the measures of populism.

Model 2. The next SEM analysis tested all direct and indirect effects of personality traits via the three populism dimensions on voting for One Nation. The full lavaan syntax for this model is included in the Supplemental Appendix at A2. Items measuring each personality trait and each populism dimension were modeled to load on their respective latent variables. Each of the five personality latent variables was modeled to predict each of the dimensions of

populism. In addition, the five personality and three populism latent variables were modeled to predict voting for One Nation (which was included as a categorical outcome variable). Further, the six demographic variables which were significantly correlated with populism or with voting for One Nation (all except language and citizenship were significantly related to voting for One Nation) were included as covariates in the model. These covariates were modelled to predict both the populism facets and voting for One Nation. The model converged and had good fit indices: $\chi^2(231) = 1833.45, p < .001$; SRMR = .044, RMSEA = .057 (CI₉₀ = .054–.059). Again, the baseline model's RMSEA was less than .158 (it was .123), indicating that CFI values were not informative, and CFI was therefore not considered in assessing model fit.

[Insert Tables 5A and 5B about here]

Table 5A and 5B present direct, indirect, and total effects from the model. Table 5A also includes effects of the mediators on voting for One Nation and effects of the six demographic variables on the three mediators and voting for One Nation. To test for significance, we used bootstrap confidence intervals as they provide better information and are preferred when investigating indirect effects and when effects are not based on the normal distribution. If zero is not included in the bootstrap confidence interval, in this case based on 5,000 resamplings, then an effect is significant. Out of the five personality traits, there was only a significant, and negative, direct effect of *Agreeableness* on voting for One Nation, and out of the three populist dimensions, there was only a significant positive effect of *People-centrism* on voting for One Nation. Out of the six demographic characteristics, lower education and gender (i.e., being male) predicted voting for One Nation. There was only one indirect effect – which effect size of .06 can be considered to be weak to medium – of *Emotional stability* on voting for One Nation via *People-centrism*. Note that Kenny (2019b)

proposed that for indirect effect sizes, .01 is small, .09 is medium, and .25 is large.

Accordingly, people low in *Emotional stability* were more likely to score high on *People-centrism*, which in turn predisposed them to vote for One Nation. When it comes to total effects, it was only the effect of *Agreeableness* – also negative and small to medium – that was a significant predictor of voting for One Nation, suggesting that people low on *Agreeableness* were more likely to report that they would vote for One Nation. Several other direct and indirect effects were approaching significance, and therefore, this model explained 46% of variance in voting for One Nation. Although the effect sizes are modest, that we find these results using a short (two-item) personality scale, which tends to bias correlations with other political constructs towards zero, is nevertheless suggestive (Bakker and Leikes 2018).

Discussion and Conclusion

This paper makes several contributions, both conceptual and empirical, to understanding the psychological roots of populist political behavior. We find that populist attitudes result partly from deeper underlying personality traits (c.f., Hawkins and Rovira Kaltwasser 2019: 7). According to the zero-order correlations we present, *Openness to experience* is positively related to each dimension of populism – including the overall scale – suggesting that this is a personality trait that could predispose people to populism. However, the trait becomes insignificant when other traits and characteristics are included. Additionally, we found that some personality traits, namely *Agreeableness* and *Conscientiousness*, were negatively related to some populist components but positively to others. Populist attitudes, in other words, are second order psychological constructs that derive at least in part from deeper psychological traits. As with the first wave of empirical research on the association between the so-called authoritarian personality and political attitudes (Adorno 1950, Altemeyer 1996), this raises the question of whether populist beliefs as currently measured may be excessively

proximate to the outcomes they purport to explain. As yet, because we do not have panel data estimating populist attitudes, we know very little about the conditions that lead to change in those attitudes. That is, we do not know how political behavior itself feeds back to effect populist attitudes.

Next, using an SEM approach, we find evidence of both direct and indirect effects of personality on support for populist parties. Previous research has argued for various direct effects of personality on party choice (Barbaranelli et al. 2007, Caprara et al. 2006, Caprara and Zimbardo 2004, Carney et al. 2008, Gerber et al. 2011, Osborne and Sibley 2012, Van Assche et al. 2019). Our research thus bolsters the idea that support for populist parties has a basis in personality (Aichholzer et al. 2016, Bakker et al. 2016, Fatke 2019, Van Assche et al. 2018). In particular, we find additional evidence that *Agreeableness* is directly negatively associated with support for populist parties (Bakker et al. 2016, Bakker et al. 2018). However, also find that evidence of a modest negative indirect effect of *Emotional stability* on voting for One Nation via *People-centrism*. That is, those with higher *Neuroticism* scores tended to have higher *People-centrism* and in turn to be more likely to support One Nation. This finding lends support to idea that the relationship between personality and vote choice may be mediated by other political attitudes such as populism (Fatke 2019, Schimpf and Schoen 2017).

Psychological research on support for populism remains a fruitful and thus far only lightly explored area of research. Our two-fold conclusion is that the psychological constructs associated with populism, namely people-centrism, anti-elitism, and Manichean outlook, have a deeper basis in personality, and perhaps even in biology, and that the psychological foundation of support for populist parties is likely to be both direct and indirect (i.e., mediated through other political attitudes). Although our evidence indicates that populist

attitudes are associated with support for the populist One Nation party, because these attitudes are proximate to the outcome of interest, there is the potential for reverse causality that our cross-sectional data cannot determine. Further research may be able to address this question through the collection of individual panel data. Nevertheless, it does appear that as psychological dispositions, populist attitudes sit somewhere between underlying personality traits and political behavior. We thus recommend that researchers interested in isolating the causal effects of populist attitudes on political preferences control for personality in addition to the usual demographic characteristics.

References

- Acemoglu, D., G. Egorov & K. Sonin (2013). A political theory of populism. *The Quarterly Journal of Economics* **128**(2): 771-805.
- Adorno, T. W. (1950). *The Authoritarian personality*. New York, Harper.
- Aichholzer, J., & Zandonella, M. (2016). Psychological bases of support for radical right parties. *Personality and Individual Differences*, 96, 185-190.
- Akkerman, A., C. Mudde & A. Zaslove (2013). How Populist Are the People? Measuring Populist Attitudes in Voters. *Comparative Political Studies*.
- Akkerman, A., A. Zaslove & B. Spruyt (2017). 'We the People' or 'We the Peoples'? A Comparison of Support for the Populist Radical Right and Populist Radical Left in the Netherlands. *Swiss Political Science Review* **23**(4): 377-403.
- Albertazzi, D. & D. McDonnell (2008). Introduction: The Sceptre and the Spectre. Twenty-first century populism : the spectre of western European democracy. D. Albertazzi & D. McDonnell. Basingstoke, Palgrave Macmillan.
- Altemeyer, R. A. (1996). *The authoritarian specter*. Cambridge, Harvard University Press.
- Andreadis, I., K. Hawkins, I. Llamazares & M. M. Singer (2019). Conditional Populist Voting in Chile, Greece, Spain, and Bolivia. The Ideational Approach to Populism: Concept, Theory, and Analysis. K. Hawkins, R. E. Carlin, L. Littvay & C. Rovira Kaltwasser. New York, Routledge.
- Bakker, B. N., & Lelkes, Y. (2018). Selling ourselves short? How abbreviated measures of personality change the way we think about personality and politics. *The Journal of Politics*, 80(4), 1311-1325.
- Bakker, B. N., Rooduijn, M., & Schumacher, G. (2016). The psychological roots of populist

voting: Evidence from the United States, the Netherlands and Germany. *European Journal of Political Research*, 55(2), 302-320.

Bakker, B. N., Schumacher, G., & Rooduijn, M. (2018). The populist appeal: Personality and antiestablishment communication. Unpublished manuscript

Barbaranelli, C., Caprara, G. V., Vecchione, M., & Fraley, C. R. (2007). Voters' personality traits in presidential elections. *Personality and Individual Differences*, 42(7), 1199-1208.

Canovan, M. (1999). Trust the people! Populism and the two faces of democracy. *Political Studies* 47(1): 2-16.

Caprara, G. V., Barbaranelli, C., Consiglio, C., Picconi, L., & Zimbardo, P. G. (2003). Personalities of politicians and voters: Unique and synergistic relationships. *Journal of Personality and Social Psychology*, 84(4), 849.

Caprara, G. V., Schwartz, S., Capanna, C., Vecchione, M., & Barbaranelli, C. (2006). Personality and politics: Values, traits, and political choice. *Political psychology*, 27(1), 1-28.

Caprara, G. V., & Zimbardo, P. G. (2004). Personalizing politics: a congruency model of political preference. *American Psychologist*, 59(7), 581.

Carney, D. R., Jost, J. T., Gosling, S. D., & Potter, J. (2008). The secret lives of liberals and conservatives: Personality profiles, interaction styles, and the things they leave behind. *Political Psychology*, 29(6), 807-840.

Castanho Silva, B., I. Andreadis, E. Anduiza, N. Blanusa, Y. Morlet Corti, Delfino, Gisela, , G. Rico, S. Ruth-Lovell, B. Spruyt, M. Steenbergen & L. Littvay (2019). Public Opinion Surveys: A New Scale. The Ideational Approach to Populism: Concept, Theory, and Analysis. K. Hawkins, R. E. Carlin, L. Littvay & C. Rovira Kaltwasser.

New York, Routledge.

Czikora, E. (2015). *Populism and Personality: Citizens attitudes and responses to populist party rhetoric by personality traits*. MA Thesis, Central European University.

Dornbusch, R. & S. Edwards, Eds. (1991). *The Macroeconomics of Populism in Latin America*. Chicago, University of Chicago Press.

Elchardus, M., & Spruyt, B. (2016). Populism, persistent republicanism and declinism: An empirical analysis of populism as a thin ideology. *Government and Opposition*, 51(1), 111-133.

Everett, J. A. (2013). The 12 item social and economic conservatism scale (SECS). *PloS one*, 8(12), e82131.

Farrell, J. J., & Laughlin, P. R. (1976). A scale to measure populist attitudes. *The Journal of Psychology*, 94(1), 33-38.

Fatke, M. (2019). The personality of populists: How the Big Five traits relate to populist attitudes. *Personality and Individual Differences* **139**: 138-151.

Gerber, A. S., Huber, G. A., Doherty, D., & Dowling, C. M. (2011). The big five personality traits in the political arena. *Annual Review of Political Science*, 14, 265-287.

Gibson, R., I. McAllister & T. Swenson (2002). The politics of race and immigration in Australia: One Nation voting in the 1998 election. *Ethnic and Racial Studies* **25**(5): 823-844.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B. J. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, 37, 504–528.

[https://doi.org/10.1016/S0092-6566\(03\)00046-1](https://doi.org/10.1016/S0092-6566(03)00046-1)

Gunzler, D., Chen, T., Wu, P., & Zhang, H. (2013). Introduction to mediation analysis with structural equation modeling. *Shanghai archives of psychiatry*, 25(6), 390.

- Hameleers, M., L. Bos, & C. de Vreese (2017). The Appeal of Media Populism: The Media Preferences of Citizens with Populist Attitudes. *Mass Communication and Society* 20 (4): 481–504.
- Hawkins, K., S. Riding & C. Mudde (2012). Measuring Populist Attitudes. *Committee on Concepts and Methods Working Paper Series* 55.
- Hawkins, K. & C. Rovira Kaltwasser (2019). Introduction: The Ideational Approach. The Ideational Approach to Populism: Concept, Theory, and Analysis. K. Hawkins, R. E. Carlin, L. Littvay & C. Rovira Kaltwasser. New York, Routledge.
- Hawkins, K. A. (2010). *Venezuela's Chavismo and populism in comparative perspective*. New York, Cambridge University Press.
- Hawkins, K. A., Rovira Kaltwasser, C., & Andreadis, I. (2018). The activation of populist attitudes. *Government and Opposition*, 1-25.
- Hawkins, K. A., & Rovira Kaltwasser, C. (2018). Measuring populist discourse in the United States and beyond. *Nature human behaviour*, 2(4), 241.
- Hibbing, J. R., Smith, K. B., & Alford, J. R. (2013). *Predisposed: Liberals, conservatives, and the biology of political differences*. New York, Routledge.
- Hieda, T., M. Zenkyo, & M. Nishikawa. 2019. Do populists support populism? An examination through an online survey following the 2017 Tokyo Metropolitan Assembly election. *Party Politics* 23 (4): 135406881984811.
- Hogan, J., & Haltinner, K. (2015). Floods, invaders, and parasites: Immigration threat narratives and right-wing populism in the USA, UK and Australia. *Journal of Intercultural Studies*, 36(5), 520-543.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation*

Modeling: A Multidisciplinary Journal, 6, 1–55.

<https://doi.org/10.1080/10705519909540118>

Jackman, S. (1998). Pauline Hanson, the mainstream, and political elites: The place of race in Australian political ideology. *Australian Journal of Political Science*, 33(2), 167-186.

Judis, J. B. (2016). *The populist explosion : how the great recession transformed American and European politics*. New York, Columbia Global Reports.

Kenny, D. A. (2019a). Measuring model fit. Retrieved 11 September 2019, from <http://davidakenny.net/cm/fit.htm>

Kenny, D. A. (2019b). Mediation. Retrieved 13 September 2019, from <http://davidakenny.net/cm/mediate.htm>
R Core Team. (2019). *R: A language and environment for statistical computing*. Retrieved from <https://www.R-project.org/>

Kenny, P. D. (2017). *Populism and Patronage: Why Populists Win Elections in India, Asia, and Beyond*. New York, Oxford University Press.

Kenny, P. D. (2019). *Populism in Southeast Asia*. New York, Cambridge University Press.

Kenny, P. D. & R. D. Holmes (2019). A New Penal Populism? Rodrigo Duterte, Public Opinion, and the War on Drugs in the Philippines. Unpublished manuscript, Australian National University.

McCrae, R. R. & P. T. Costa Jr (2008). A five-factor theory of personality. Handbook of Personality: Theory and Research. O. P. John, R. W. Robins & L. A. Pervin. New York, The Guilford Press: 159.

McCrae, R. R., & Costa Jr, P. T. (1997). Personality trait structure as a human universal. *American psychologist*, 52(5), 509.

Mizuno, K. S. & P. Pasuk, Eds. (2009). *Populism in Asia*. Singapore, NUS Press in association with Kyoto University Press.

- Moffitt, B. (2016). *The global rise of populism: performance, political style, and representation*. Palo Alto, Stanford University Press.
- Moffitt, B. (2017). Populism in Australia and New Zealand. Rovira Kaltwasser, C., Taggart, P. A., Espejo, P. O., & Ostiguy, P. (Eds.). *The Oxford handbook of populism*. Oxford, Oxford University Press: 121-139.
- Mohrenberg, S., Huber, R. A., & Freyburg, T. (2019). Love at first sight? Populist attitudes and support for direct democracy. *Party Politics*, 1354068819868908.
- Mudde, C. (2004). The populist zeitgeist. *Government and Opposition* 39(4): 542-563.
- Mudde, C. & Rovira Kaltwasser, C. (2017). *Populism: a very short introduction*. New York, Oxford University Press.
- Mughan, A. & P. Paxton (2006). Anti-immigrant sentiment, policy preferences and populist party voting in Australia. *British Journal of Political Science* 36(02): 341-358.
- Nai, A., & Martínez i Coma, F. (2019). The personality of populists: provocateurs, charismatic leaders, or drunken dinner guests?. *West European Politics*, 1-31.
- Norris, P. & R. Inglehart (2019). *Cultural backlash: Trump, Brexit, and authoritarian populism*, Cambridge University Press.
- Oliver, J. E., & Wood, T. J. (2014). Conspiracy theories and the paranoid style (s) of mass opinion. *American Journal of Political Science*, 58(4), 952-966.
- Osborne, D., & Sibley, C. G. (2012). Does personality matter? Openness correlates with vote choice, but particularly for politically sophisticated voters. *Journal of research in Personality*, 46(6), 743-751.
- Ostiguy, P. (2009). The high and the low in politics: A two-dimensional political space for comparative analysis and electoral studies. *Kellogg Institute Working Paper*, University of Notre Dame.

- Quinlan, S. & D. Tinney (2019). A Populist Wave or Metamorphosis of a Chameleon? Populist Attitudes and the Vote in 2016 in the United States and Ireland. *The Economic and Social Review*, 50(2): 281-324.
- Rahn, W. M. (2019). Populism in the US: The Evolution of the Trump Constituency. The Ideational Approach to Populism: Concept, Theory, and Analysis. K. Hawkins, R. E. Carlin, L. Littvay & C. Rovira Kaltwasser. New York, Routledge.
- Rico, G., & Anduiza, E. (2019). Economic correlates of populist attitudes: an analysis of nine European countries in the aftermath of the great recession. *Acta Politica*, 54(3), 371-397.
- Roberts, K. M. (2014). *Party Systems in Latin Americas Neoliberal Era* . New York, Cambridge University Press.
- Rooduijn, M. (2014). The nucleus of populism: In search of the lowest common denominator. *Government and Opposition* 49(4): 573-599.
- Rooduijn, M. (2018). What unites the voter bases of populist parties? Comparing the electorates of 15 populist parties. *European Political Science Review* 10(3): 351-368.
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1–36. <https://doi.org/10.18637/jss.v04>
- Schimpf, C. & H. Schoen (2017). On the psychological roots of populist voting: A discussion of Bakker, Rooduijn, and Schumacher (2016). Unpublished manuscript.
- Schulz, A., P. Müller, C. Schemer, D. S. Wirz, M. Wettstein & W. Wirth (2017). Measuring Populist Attitudes on Three Dimensions. *International Journal of Public Opinion Research* 30(2): 316-326.
- Spierings, N., Lubbers, M., & Zaslove, A. (2017). ‘Sexually modern nativist voters’: do they exist and do they vote for the populist radical right? *Gender and Education*, 29(2),

216-237.

Spierings, N., & Zaslove, A. (2017). Gender, populist attitudes, and voting: explaining the gender gap in voting for populist radical right and populist radical left parties. *West European Politics*, 40(4), 821-847.

Stanley, B. (2011). Populism, nationalism, or national populism? An analysis of Slovak voting behaviour at the 2010 parliamentary election. *Communist and Post-Communist Studies* 44(4): 257-270.

Stenner, K. (2005). *The Authoritarian Dynamic*. New York, Cambridge University Press.

Taggart, P. A. (2000). *Populism*. Buckingham, Open University Press.

Van Assche, J., Dhont, K., Van Hiel, A., & Roets, A. (2018). Ethnic Diversity and Support for Populist Parties. *Social Psychology* 49(3), 182-189

Van Assche, J., Van Hiel, A., Dhont, K., & Roets, A. (2019). Broadening the individual differences lens on party support and voting behavior: Cynicism and prejudice as relevant attitudes referring to modern-day political alignments. *European Journal of Social Psychology*, 49(1), 190-199.

Van Hauwaert, S. M., C. H. Schimpf & F. Azevedo (2019). Public Opinion Surveys: Evaluating Existing Measures. The Ideational Approach to Populism: Concept, Theory, and Analysis. K. Hawkins, R. E. Carlin, L. Littvay & C. Rovira Kaltwasser. New York, Routledge: 128-149.

Van Hauwaert, S. M. & S. Van Kessel (2018). Beyond protest and discontent: A cross-national analysis of the effect of populist attitudes and issue positions on populist party support. *European Journal of Political Research* 57(1): 68-92.

Weyland, K. (2001). Clarifying a contested concept: populism in the study of Latin American politics. *Comparative politics* 34(1): 1-22.

Zaller, J. R. (1992). *The nature and origins of mass opinion*. New York, Cambridge University Press.

Table 1 Populist Attitudes Items

People Centrism

Ppl1. Politicians should always listen closely to the problems of the people.

Ppl2. Politicians don't have to spend time among ordinary people to do a good job.*

Ppl3. The will of the people should be the highest principle in this country's politics.

Anti-elitism

Ant1. The government is pretty much run by a few big interests looking out for themselves.

Ant2. Government officials use their power to try to improve people's lives.*

Ant3. Quite a few of the people running the government are crooked.

Manicheanism

Man1. You can tell if a person is good or bad if you know their politics.

Man2. The people I disagree with politically are not evil.*

Man3. The people I disagree with politically are just misinformed.

Note. * - Reverse-scored items.

Table 2 Descriptive Statistics of Populism, Its Dimensions, and the Big Five Personality

Variable	Traits	
	<i>M</i>	<i>SD</i>
Populism	3.35	0.48
People-centrism	4.16	0.64
Anti-elitism	3.40	0.82
Manichaeian outlook	2.48	0.64
Extraversion	4.17	1.55
Openness to Experience	4.57	0.81
Agreeableness	5.27	1.21
Conscientiousness	5.82	1.12
Emotional Stability	5.17	1.35

Note. $N = 2200$. Populism was measured on a 7-point scale and personality on a 5-point scale.

Table 3 Correlations Between the Measures of Populism, Personality, Demographic Characteristics, and Voting for One Nation

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Populism	-															
2. People-centrism	.63***	-														
3. Anti-elitism	.80***	.30***	-													
4. Manichaean outlook	.60***	.05*	.24***	-												
5. Extraversion	.02	.05*	-.00	.00	-											
6. Openness to Experience	.28***	.21***	.25***	.11***	.25***	-										
7. Agreeableness	-.04	.09***	-.07**	-.09***	.01	.13***	-									
8. Conscientiousness	.00	.10***	-.05*	-.04	.14***	.17***	.23***	-								
9. Emotional Stability	-.09***	.03	-.09***	-.12***	.20***	.13***	.28***	.31***	-							
10. Gender	.02	.02	.02	.00	.05*	.03	.26***	.10***	-.04	-						
11. Age	-.04*	.10***	-.12***	-.05*	.02	-.04	.26***	.20***	.19***	-.00	-					
12. SES	-.17***	-.09***	-.14***	-.10***	.04	-.05*	-.03	.01	.02	-.01	-.06**	-				
13. Education	-.17***	-.09***	-.12***	-.14***	.03	.07**	-.01	.06***	.07***	-.02	-.15***	.19***	-			
14. Citizen	.01	.02	.03	-.04	-.01	-.00	.03	.02	.00	.00	.15***	-.01	-.06**	-		
15. Capital City Residence	-.02	-.06***	-.03	.05*	.04	-.02	-.02	-.00	-.02	.01	-.14***	.39***	.11***	-.09***	-	
16. Language (Other than Eng.)	.06**	-.03	.02	.14***	.02	.02	-.04*	-.02	.01	-.01	-.25***	.03	.15***	-.24***	.21***	-
17. Voting for One Nation	.18***	.11***	.17***	.08***	.01	.07**	-.04	.02	-.01	-.06**	.05*	-.09***	-.14***	.03	-	-.03

Note. *N* varied between 2163 and 2220. Positive correlations with gender indicate that females were higher.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 4 Unstandardized and standardized regression parameter estimates from the SEM of personality traits and demographic variables predicting populist attitudes

	People-centrism	Anti-elitism	Manichaeian Outlook
Extraversion	0.004 (.02)	-0.02 (-.03)	0.05 (.11)*
Openness to Experience	0.06 (.13)	0.23 (.22)**	-0.06 (-.06)
Agreeableness	0.09 (.18)*	-0.10 (-.08)	-0.05 (-.05)
Conscientiousness	0.06 (.12)	0.01 (.01)	-0.01 (-.01)
Emotional Stability	-0.05 (-.14)*	-0.07 (-.09)	-0.06 (-.07)
Age	0.002 (.10)**	-0.01 (-.17)***	-0.004 (-.09)***
SES	-0.02 (-.09)*	-0.09 (-.16)***	-0.07 (-.14)***
Education	-0.03 (-.17)***	-0.05 (-.15)***	-0.06 (-.17)***
Capital City Residence	0.001 (.00)	0.04 (.02)	0.14 (.09)**
Language other than Eng.	0.02 (.02)	0.03 (.01)	0.43 (.20)***
R^2	.14	.11	.12

Notes: $N = 2162$. Standardized estimates are presented in brackets.

* $p < .05$. ** $p < 0.01$. *** $p < .001$.

Table 5A Direct Effects from the SEM of the Influence of Personality on Voting for One Nation and Effects of the Mediators and Covariates on Voting for One Nation

	Direct effect on:															
	People-centrism			Anti-elitism			Manichaeian Outlook			Voting for One Nation						
	Unstd. Coef.	95% CI		Std. Coef.	Unstd. Coef.	95% CI		Std. Coef.	Unstd. Coef.	95% CI		Std. Coef.				
	Lower	Upper		Lower	Upper		Lower	Upper		Lower	Upper					
Extraversion	0.000	-0.03	0.03	.001	-0.03	-0.10	0.02	-.05	0.04	-0.01	0.09	.09	-0.001	-0.19	0.12	-.002
Openness to Experience	0.06	-0.03	0.17	.13	0.26	0.11	0.54	.24	-0.05	-0.22	0.14	-.05	0.21	-0.18	0.91	.14
Agreeableness	0.16	0.03	0.35	.19	-0.19	-0.58	0.04	-.10	-0.08	-0.38	0.15	-.05	-0.74	-1.94	-0.09	-.28
Conscientiousness	0.08	0.01	0.17	.16	0.02	-0.12	0.16	.02	0.03	-0.11	0.18	.02	0.05	-0.34	0.60	.03
Emotional Stability	-0.06	-0.12	-0.02	-.16	-0.09	-0.18	0.01	-.11	-0.11	-0.20	-0.02	-.14	0.07	-0.17	0.35	.06
People-centrism	-	-	-	-	-	-	-	-	-	-	-	-	0.98	0.05	2.33	.31
Anti-elitism	-	-	-	-	-	-	-	-	-	-	-	-	0.35	-0.14	0.72	.26
Manichaeian Outlook	-	-	-	-	-	-	-	-	-	-	-	-	0.10	-0.18	0.41	.07
Age	0.003	0.002	0.004	.14	-0.01	-0.01	-0.01	-.17	-0.004	-0.01	-0.001	-.10	0.005	-0.01	0.01	.07
SES	-0.02	-0.04	-0.01	-.10	-0.09	-0.12	-0.06	-.16	-0.07	-0.11	-0.04	-.15	-0.04	-0.14	0.04	-.06
Education	-0.02	-0.03	-0.01	-.13	-0.05	-0.07	-0.03	-.14	-0.07	-0.09	-0.05	-.20	-0.09	-0.16	-0.04	-.19
Capital City Residence	0.001	-0.05	0.05	.001	0.03	-0.06	0.12	.02	0.15	0.06	0.24	.10	-0.19	-0.45	0.07	-.08
Lang. Other Than Eng.	0.01	-0.06	0.08	.01	0.03	-0.08	0.13	.01	0.42	0.29	0.54	.20	-0.00	-0.53	0.34	-.002
Gender	0.01	-0.03	0.05	.01	0.03	-0.05	0.11	.02	0.01	-0.07	0.09	.01	-0.34	-0.59	-0.12	-.16

Notes: $N = 2162$. CI = percentile confidence interval; 5,000 bootstrap samples. Significant effects are in bold. Positive coefficients for gender indicate that females were higher. Voting for One Nation: $R^2 = .46$.

Table 5B. Indirect and Total Effects from SEM of the Influence of Personality on Voting for One Nation

Explanatory Variable	Indirect effect									Total effect						
	People-centrism			Anti-elitism			Manichaeian outlook			Unstd.	95% CI		Std.			
	Unstd.	95% CI		Unstd.	95% CI		Unstd.	95% CI			Unstd.	95% CI				
	Coef.	Lower	Upper	Coef.	Coef.	Lower	Upper	Coef.	Coef.	Lower	Upper	Coef.	Coef.	Lower	Upper	Coef.
Extraversion	0.00	-0.03	0.04	.00	-0.01	-0.04	0.01	-.01	0.00	-0.01	0.02	.01	-0.01	-0.17	0.11	-.01
Openness to Experience	0.06	-0.04	0.21	.04	0.09	-0.05	0.23	.06	-0.01	-0.05	0.02	-.003	0.36	-0.001	1.01	.24
Agreeableness	0.16	-0.004	0.62	.06	-0.07	-0.23	0.09	-.03	-0.01	-0.07	0.04	-.003	-0.66	-1.61	-0.09	-.24
Conscientiousness	0.08	-0.006	0.23	.05	0.01	-0.06	0.06	.004	0.00	-0.02	0.04	.002	0.14	-0.25	0.69	.09
Emotional Stability	-0.06	-0.18	-0.001	-.05	-0.03	-0.09	0.01	-.03	-0.01	-0.05	0.02	-.01	-0.03	-0.27	0.23	-.03

Notes: $N = 2162$. CI = percentile confidence interval; 5,000 bootstrap samples. Significant effects are in bold. Voting for One Nation: $R^2 = .46$.

Supplemental Appendix for the paper:

**“Is there a Populist Personality? Populist Attitudes as an Intervening Variable in Australian Public
Opinion”**

A1 TIPI Scale Construction

- 1 = Disagree strongly
- 2 = Disagree moderately
- 3 = Disagree a little
- 4 = Neither agree nor disagree
- 5 = Agree a little
- 6 = Agree moderately
- 7 = Agree strongly

To what extent do you agree or disagree that you see yourself as...

1. _____ Extraverted and enthusiastic.
2. _____ Critical and quarrelsome.
3. _____ Dependable and self-disciplined.
4. _____ Anxious and easily upset.
5. _____ Open to new experiences and complex.
6. _____ Reserved and quiet.
7. _____ Sympathetic and warm.
8. _____ Disorganized and careless.
9. _____ Calm and emotionally stable.
10. _____ Conventional and uncreative.

TIPI scale scoring (“R” denotes reverse-scored items): *Extraversion*: 1, 6R; *Agreeableness*: 2R, 7; *Conscientiousness*; 3, 8R; *Emotional Stability*: 4R, 9; *Openness to experience*: 5, 10R.

A2 Lavaan Syntax for Model 1

```
SEM1 <- '  
ext =~ ext1 + ext2  
op =~ op1 + op2  
agr =~ agr1 + agr2  
con =~ con1 + con2  
em.st =~ em.st1 + em.st2  
ppl =~ ppl1 + ppl2_r + ppl3  
ant =~ ant1 + ant2_r + ant3  
man =~ man1 + man2_r + man3  
ppl ~ ext + op + agr + con + em.st + p_age + ses + education + capital.city.dum  
+ lote.dum  
ant ~ ext + op + agr + con + em.st + p_age + ses + education + capital.city.dum  
+ lote.dum  
man ~ ext + op + agr + con + em.st + p_age + ses + education + capital.city.dum  
+ lote.dum  
'  
Modell <- sem(SEM1, data = (com.data.cov))  
nullRMSEA(Modell, scaled = FALSE, silent=FALSE)  
fitMeasures(Modell, c("chisq", "df", "pvalue", "srmr", "rmsea",  
"rmsea.ci.lower", "rmsea.ci.upper"))  
summary(Modell, standardized = TRUE)  
inspect(Modell, 'r2')  
modificationIndices(Modell, sort=TRUE, minimum.value=50)  
semPaths(Modell, title = TRUE, "std", style= "lisrel", edge.label.cex = 0.7,  
curvePivot = TRUE)
```

Lavaan Syntax for Model 2

```
SEM1 <- '  
ext =~ ext1 + ext2  
op =~ op1 + op2  
agr =~ agr1 + agr2  
con =~ con1 + con2  
em.st =~ em.st1 + em.st2  
ppl =~ ppl1 + ppl2_r + ppl3  
ant =~ ant1 + ant2_r + ant3  
man =~ man1 + man2_r + man3  
#direct effects  
one.nation ~ c1*ext + c2*op + c3*agr + c4*con + c5*em.st  
#mediators  
ppl ~ a1.1*ext + a2.1*op + a3.1*agr + a4.1*con + a5.1*em.st  
ant ~ a1.2*ext + a2.2*op + a3.2*agr + a4.2*con + a5.2*em.st  
man ~ a1.3*ext + a2.3*op + a3.3*agr + a4.3*con + a5.3*em.st  
one.nation ~ b1.1*ppl  
one.nation ~ b1.2*ant  
one.nation ~ b1.3*man  
#covariates  
one.nation ~ p_age + ses + education + capital.city.dum + lote.dum +  
gender.dum  
ppl ~ p_age + ses + education + capital.city.dum + lote.dum + gender.dum  
ant ~ p_age + ses + education + capital.city.dum + lote.dum + gender.dum  
man ~ p_age + ses + education + capital.city.dum + lote.dum + gender.dum  
# indirect effects (a*b)  
#for ppl  
ind_ext.ppl := a1.1*b1.1
```

```
ind_op.ppl := a2.1*b1.1
ind_agr.ppl := a3.1*b1.1
ind_con.ppl := a4.1*b1.1
ind_em.st.ppl := a5.1*b1.1
#for ant
ind_ext.ant := a1.2*b1.2
ind_op.ant := a2.2*b1.2
ind_agr.ant := a3.2*b1.2
ind_con.ant := a4.2*b1.2
ind_em.st.ant := a5.2*b1.2
#for man
ind_ext.man := a1.3*b1.3
ind_op.man := a2.3*b1.3
ind_agr.man := a3.3*b1.3
ind_con.man := a4.3*b1.3
ind_em.st.man := a5.3*b1.3
#total effects
total.ext := c1 + (a1.1*b1.1)+(a1.2*b1.2)+(a1.3*b1.3)
total.op := c2 + (a2.1*b1.1)+(a2.2*b1.2)+(a2.3*b1.3)
total.agr := c3 + (a3.1*b1.1)+(a3.2*b1.2)+(a3.3*b1.3)
total.con := c4 + (a4.1*b1.1)+(a4.2*b1.2)+(a4.3*b1.3)
total.em.st := c5 + (a5.1*b1.1)+(a5.2*b1.2)+(a5.3*b1.3)
#covariances between the mediators
ppl ~~ ant
man ~~ ant
man ~~ ppl
,
Model1<-sem(SEM1, data = com.data.cov, estimator = "DWLS",
```

```
ordered="one.nation", se = "bootstrap", bootstrap = 5000)
nullRMSEA(Model1, scaled = FALSE, silent=FALSE)
fitMeasures(Model1, c("chisq", "df","pvalue", "srmr", "rmsea",
"rmsea.ci.lower", "rmsea.ci.upper"))
summary(Model1, standardized = TRUE)
inspect(Model1, 'r2')
modificationIndices(Model1, sort=TRUE,minimum.value=50)
# Visualise ##
semPaths(Model1, title = TRUE, "std", style= "lisrel", edge.label.cex = 0.7,
curvePivot = TRUE)
boot.Model1 <- parameterEstimates(Model1, boot.ci.type="perc",level=0.95,
ci=TRUE,standardized = TRUE)
boot.Model1
```

Figure A1 Ppl1

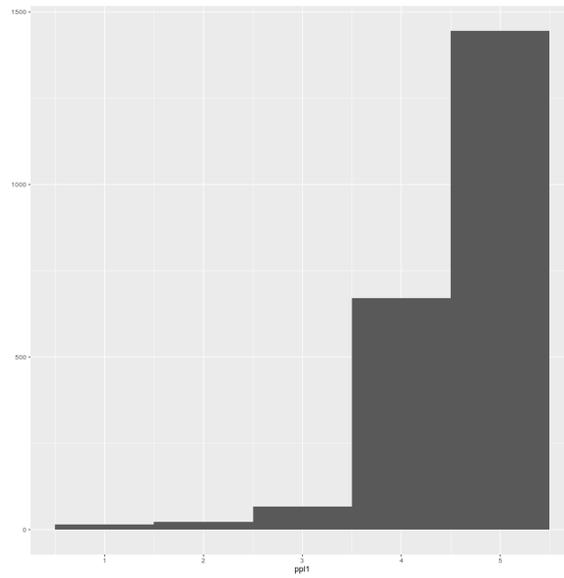


Figure A2 Ppl2

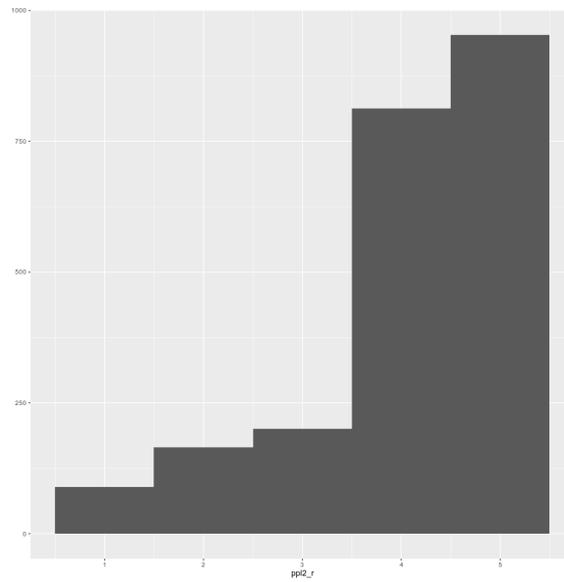


Figure A3 Ppl3

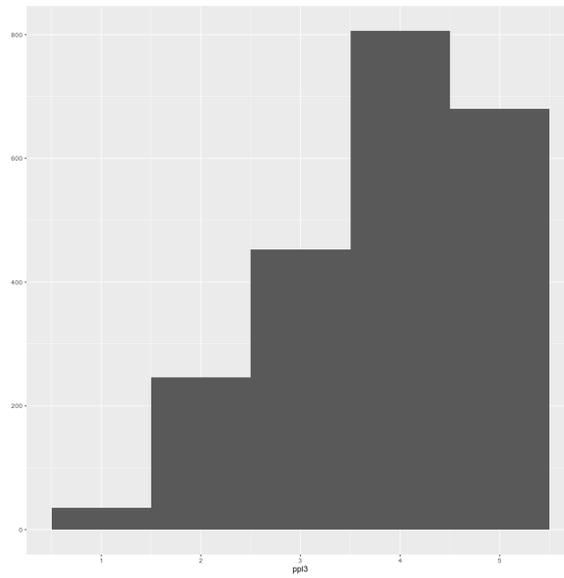


Figure A4 Ant1

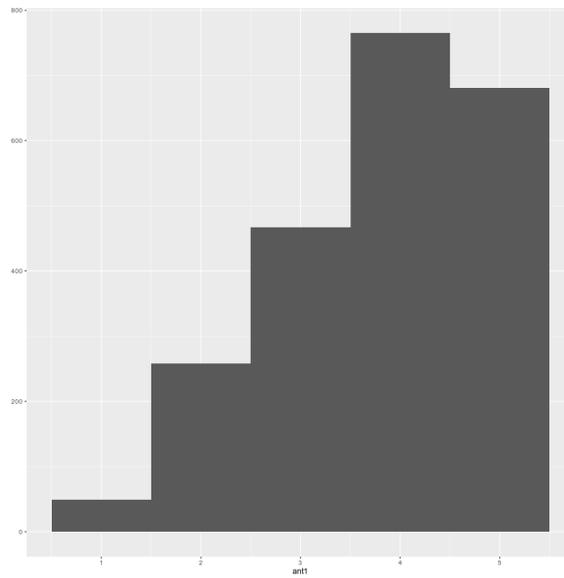


Figure A5 Ant2

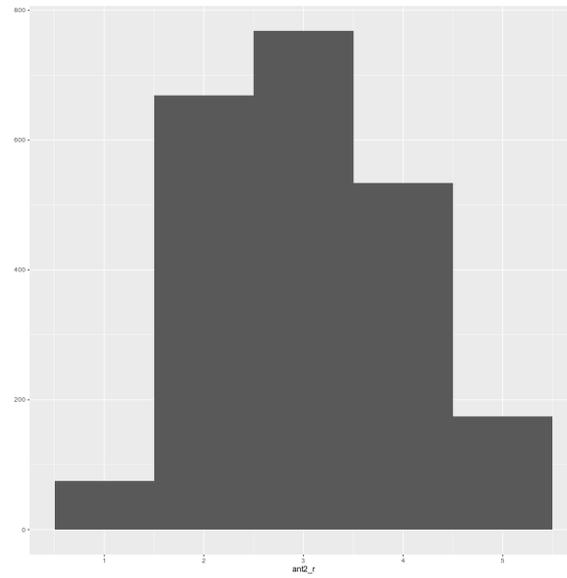


Figure A 6 Ant3

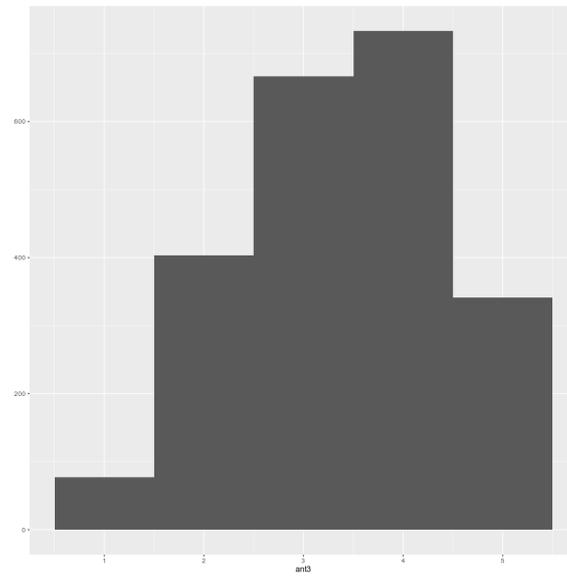


Figure A7 Man1

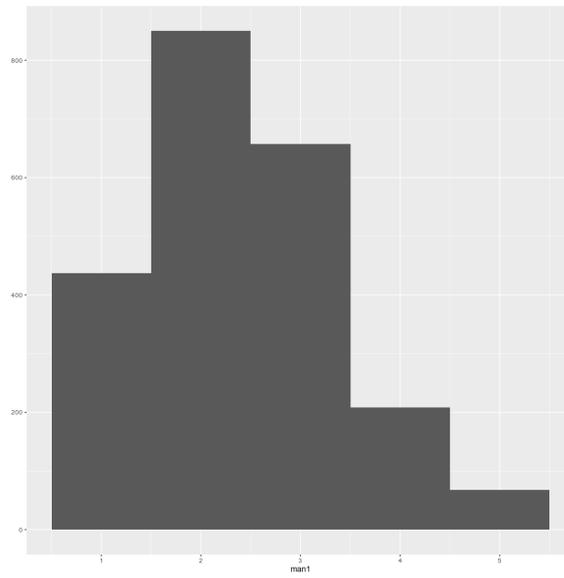


Figure A8 Man2

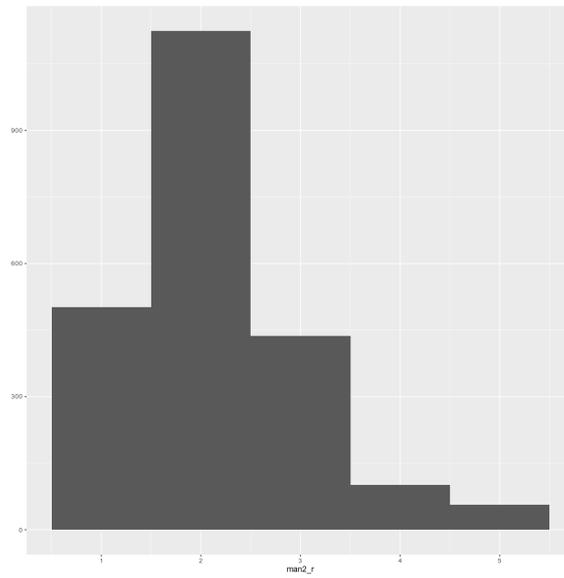


Figure A9 Man3

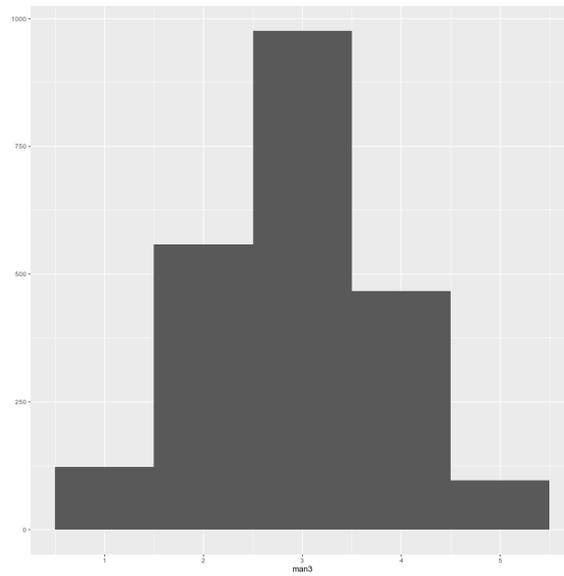


Figure A10 Populist Attitudes

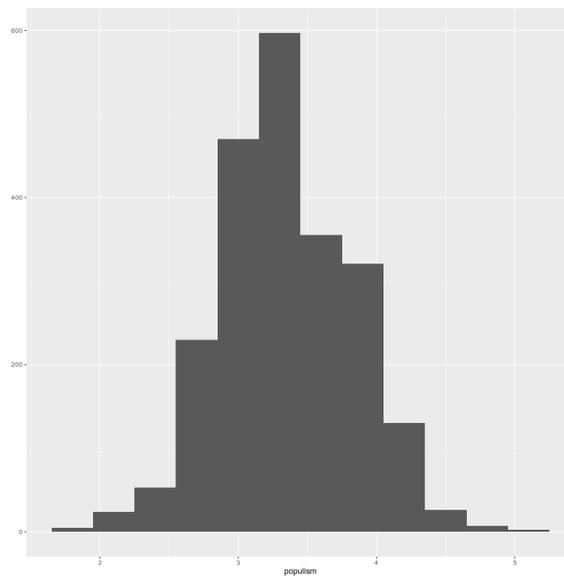


Figure A11 People-centrism

Test Information and Standard Errors

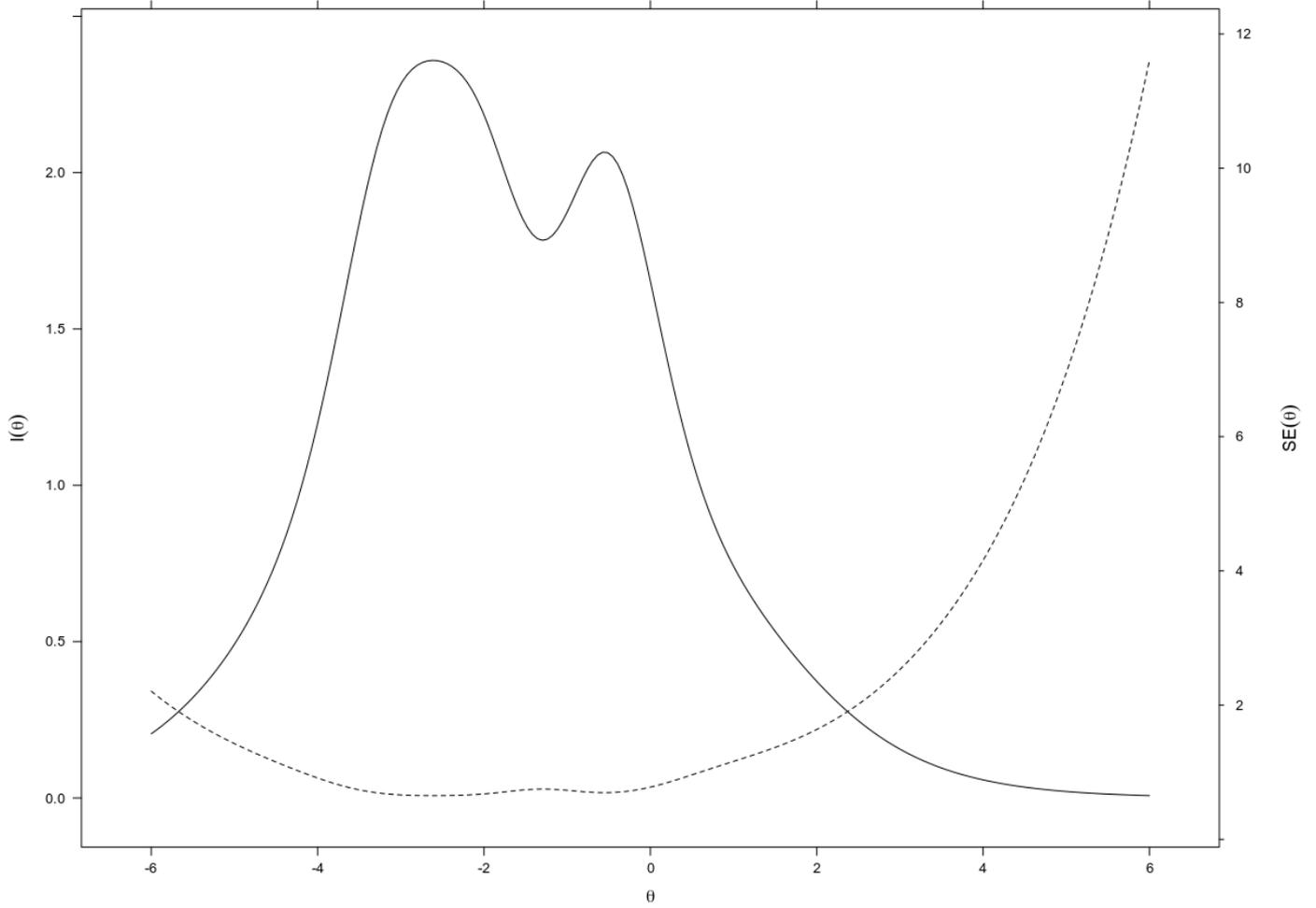


Figure A12 Anti-elitism

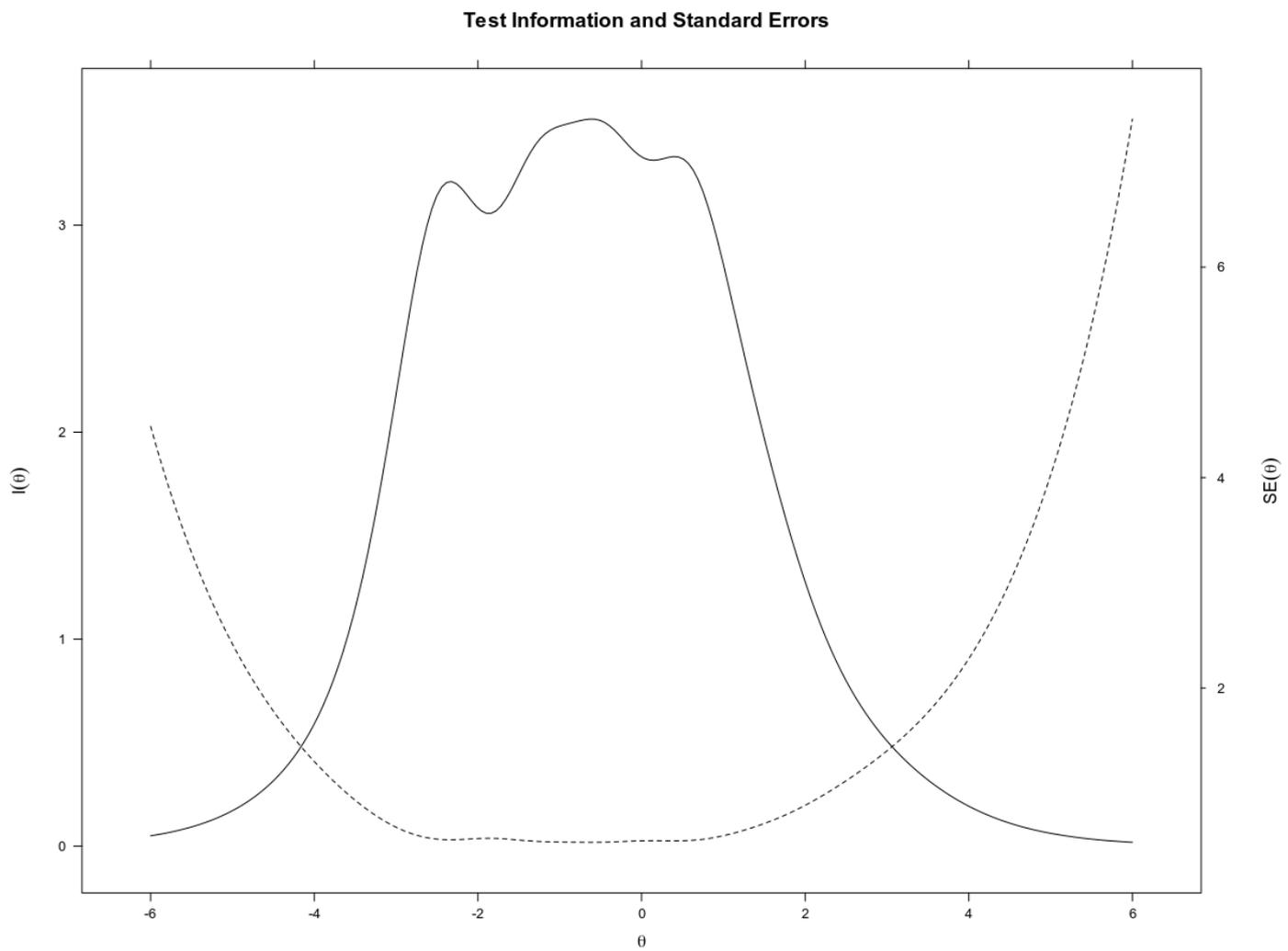


Figure A13 Manichean Outlook

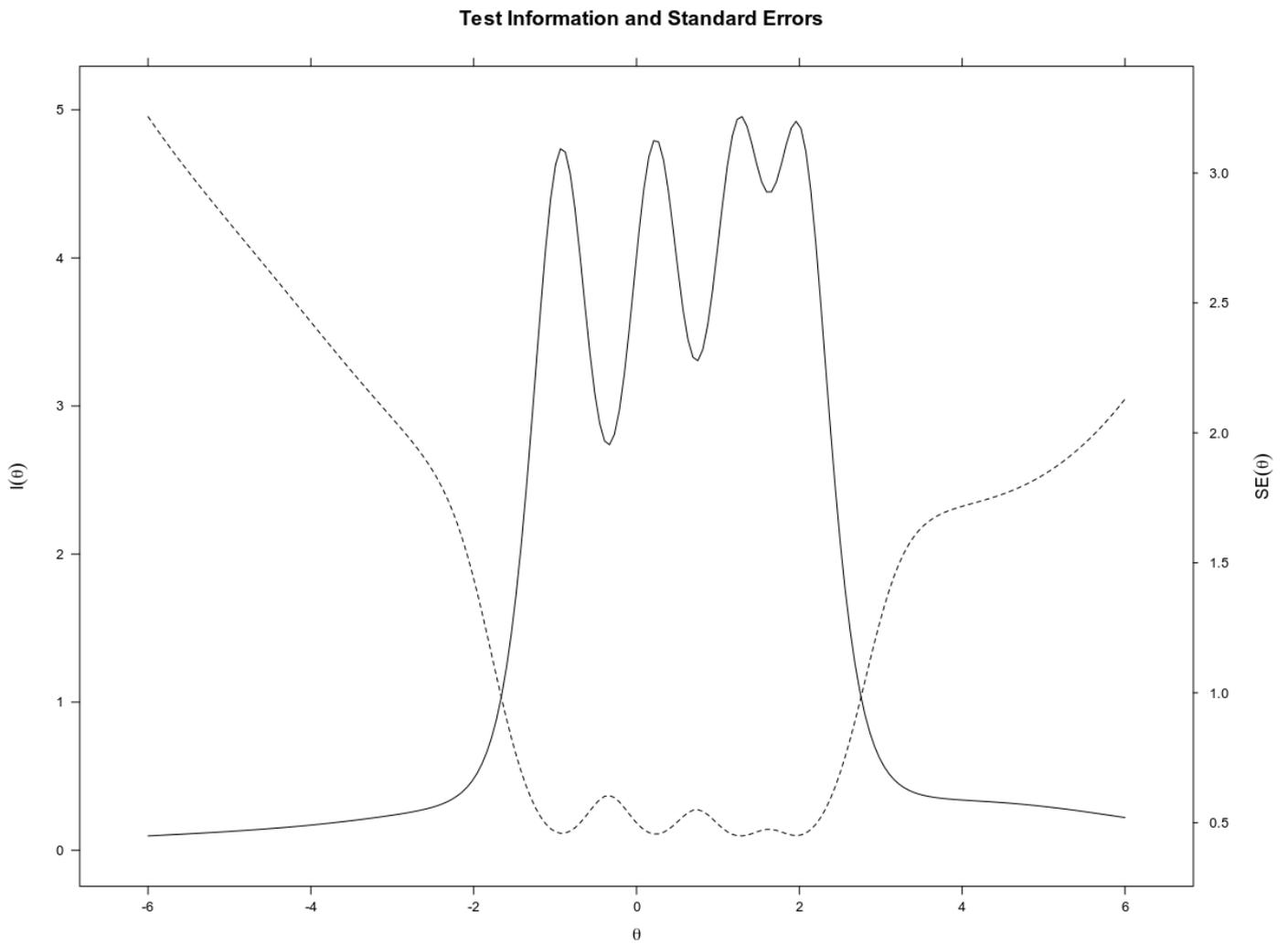


Figure A14 Populist Attitudes (9-item scale)

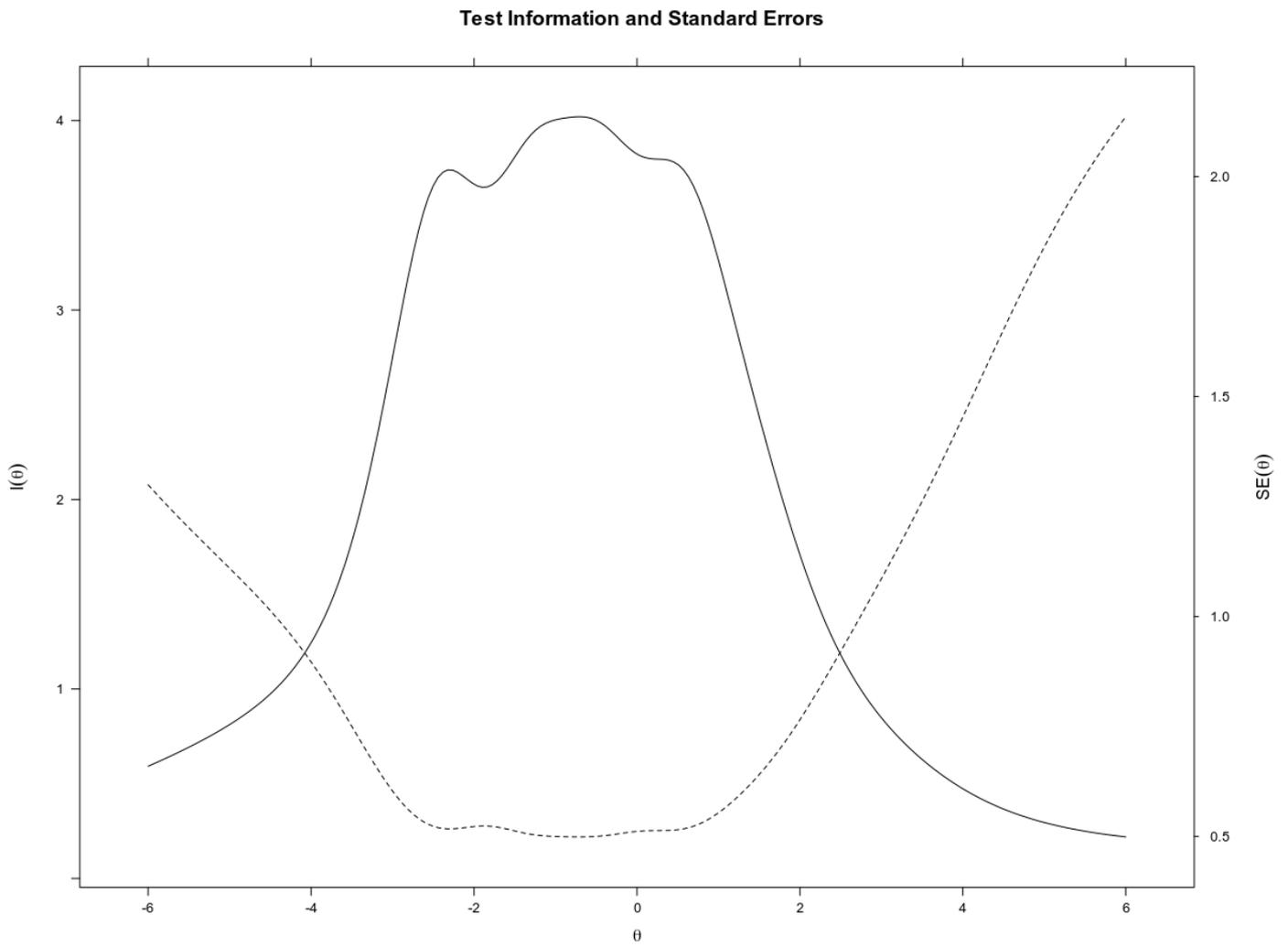


Figure A15 People-centrism

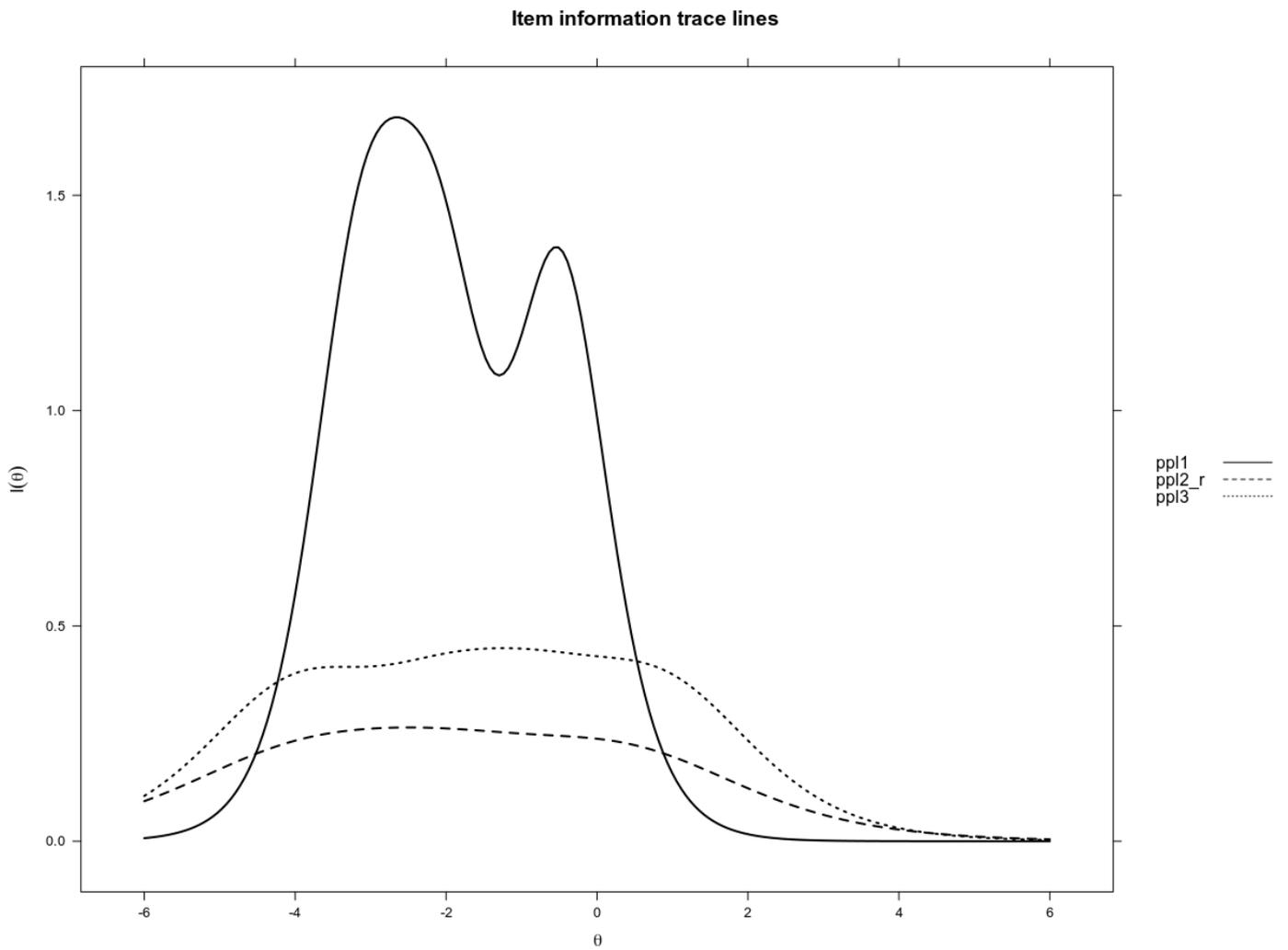


Figure A16 Anti-elitism

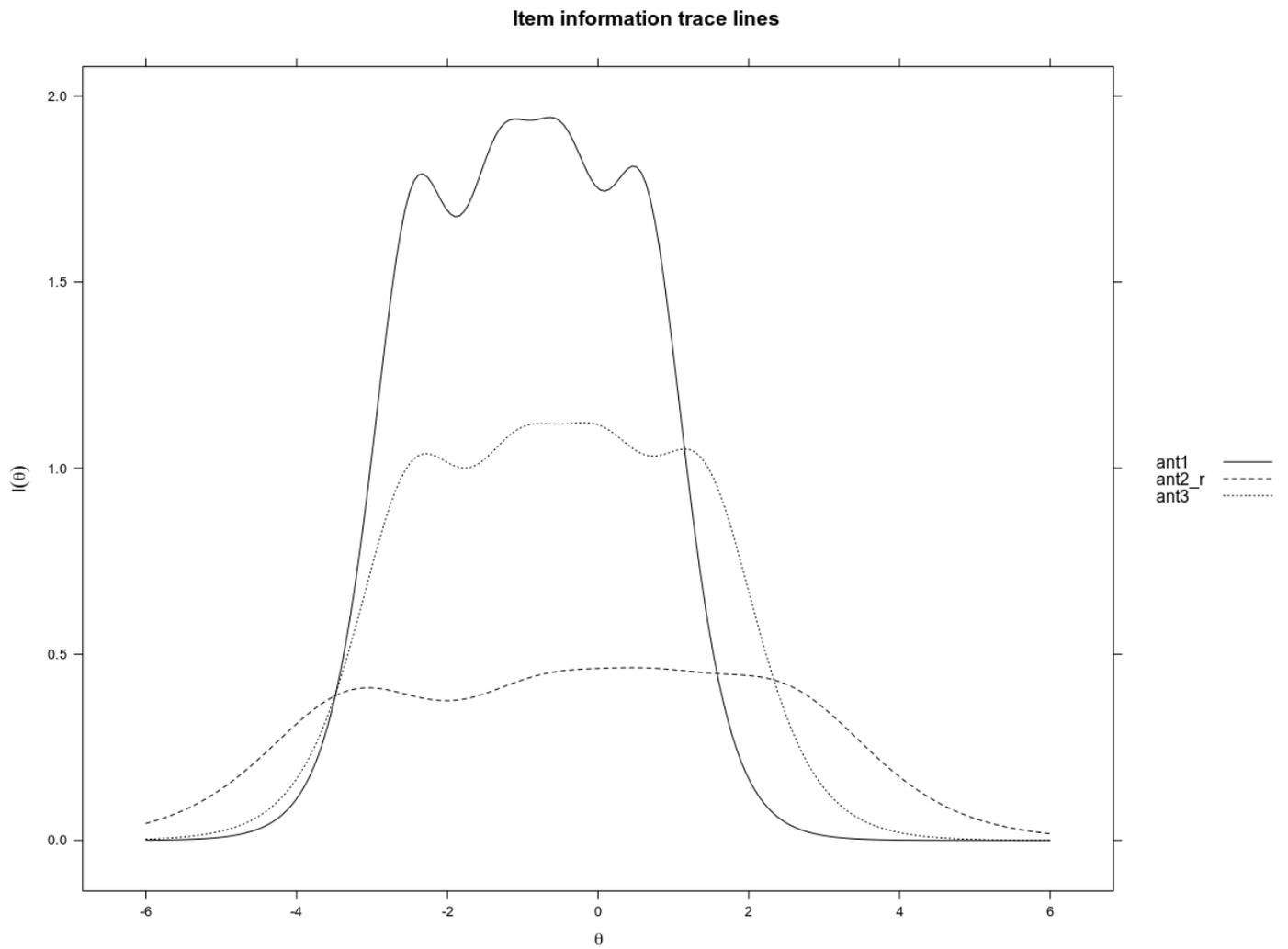


Figure A17 Manichean outlook

