

CHAPTER 7

Public Opinion Surveys: A New Scale¹

Bruno Castanho Silva, University of Cologne²
Ioannis Andreadis, Aristotle University of Thessaloniki
Eva Anduiza, Autonomous University of Barcelona
Nebojša Blanuša, University of Zagreb
Yazmin Morlet Corti, National Autonomous University of Mexico
Gisela Delfino, Argentine Catholic University and National Scientific and Technical
Research Council, Argentina
Guillem Rico, Autonomous University of Barcelona
Saskia P. Ruth, University of Zurich, NCCR Democracy
Bram Spruyt, Free University of Brussels
Marco Steenbergen, University of Zurich
Levente Littvay, Central European University

With the ideational turn in populism studies (Mudde and Rovira Kaltwasser 2013), researchers have started to conceptualize and measure populism as a set of attitudes individuals hold about politics and society (e.g. Akkerman et al. 2014; Elchardus and Spruyt 2014; Hawkins et al. 2012; Rooduijn 2014b; Spruyt 2014; Stanley 2011). As proposed in the

¹ This is an Accepted Manuscript of a book chapter published by Routledge/CRC Press in The Ideational Approach to Populism on 11-10-2018, available online: <https://www.routledge.com/The-Ideational-Approach-to-Populism-Concept-Theory-and-Analysis-1st/Hawkins-Carlin-Littvay-Kaltwasser/p/book/9781138716537>

²Contact author: BCS. BCS wrote the paper with substantial support from BS; BCS, IA, LL ran the analyses; BCS and LL designed the study; IA, EA, NB, YMC, GD, GR, SR, MS collected data, provided valuable comments and edits, and are listed in alphabetical order; LL led the project. The authors would like to thank Andreea Nicutar, Daniel Kovarec, Elisa Totino, Federico Vegetti, Selina Kurer, and Sharon Belli for their help with questionnaire translation and survey implementation, and Sebastian Jungkunz and Nemanja Stankov for assistance with data cleaning and writing the codebooks.

introduction to this volume, such attitudes are ordinarily dormant, but may be activated given a favorable context for populist discourse and its articulation by political actors. The measurement of these attitudes, however, has been far from uniform, as the review by Van Hauwaert, Schimpf, and Azevedo in the previous chapter shows. The basis of the most commonly scale used today was set in Hawkins, Riding, and Mudde (2012). It was extended into the popularized six-item version by Akkerman, Mudde, and Zaslove (2014), and used by Spruyt et al. 2016, and in the chapters by Andreadis and Ruth; Singer et al.; and Busby et al. in this volume.

However, as Van Hauwaert, Schimpf, and Azevedo have shown in their chapter, there is room for improvement in scale development. From a survey methodology perspective, the items fail to identify strong levels of populism and anti-populism and can only discriminate among moderate forms of it. They are not polarizing enough, as there seems to be a general trend of agreement: for all countries and items, the item averages are above the scales' middle point. A further limitation of the existing measures is that in most scales all items are positively worded – meaning that more agreement indicates more populism. For this reason it is impossible to discriminate between actual agreement with the content and acquiescence bias.

Our purpose with this study is to tackle the issue of scale development following practices common in psychology but that have yet to make their way into political science. We start with a large number of items, and use various techniques to select the few ones that work better at capturing populist attitudes. Next we test which items are *invariant* across countries – i.e., whether they measure the same thing, the same way, in different countries. Recent research has shown that several scales, some of which have been around for decades in social sciences, should not be used for cross-country comparisons because the measure is not invariant across cultures (Alemán and Woods 2016, Ariely and Davidov 2010, Piurko et al. 2011). Our analyses

result in a short questionnaire of six or nine items which has high cross-cultural validity, and captures a relatively wide range of information for this construct.

Dimensions of Populism

We start with the definition of populism adopted in this volume: it should be seen as a set of ideas (whether a discourse, discursive frame, or thin-centered ideology, see Mudde 2004; Hawkins 2009; and Aslanidis 2016 for further debate), which opposes the good people against an evil elite, in a Manichaeian division of politics where the voice of the good people should prevail (Mudde 2004; Mudde and Rovira Kaltwasser 2013; Hawkins 2009). From it we derive three elements, which we call the "core components" of populist attitudes: a) the notion of a good, homogeneous people as a political actor; b) anti-elitism; and c) the view of politics as a moral struggle, where one side is clearly good and the other evil – the Manichaeian outlook. These are somewhat different from those proposed by Mudde (2004) and Mudde and Rovira Kaltwasser (2017): for them, people-centrism and popular sovereignty are distinct constructs. However, as the items and analyses below show, these two are hardly distinguishable from one another empirically, reason why we put them together.

These constructs can exist independently from one another. For example, not all Manichaeian discourses are populist. It is possible to see politics as a struggle between good and evil and not fill these positions with "people" and "elites." Measuring the Manichaeian element in its "pure" form (i.e., not applied to any ideology) enables us to assess its empirical relationship with other constituting elements of populism. The same applies for having a romanticized view of common people, or despising political elites.³ Considering that all three

³Our measurement approach is very close to the elite-level ones conducted by Hawkins and Castanho Silva in this volume (based on Hawkins 2009), and by Rooduijn, de Lange, and van der Brug (2014): they also consider that all dimensions of populism must exist simultaneously,

are necessary components of the definition adopted here, we suggest that populism sits at the intersection of these three broader kinds of discourse, as depicted by the shaded area in

>>> Figure 7.1. AROUND HERE <<<

This conceptual map is of absolute importance in scale development because if populism indeed sits at the intersection of three kinds of discourse, its measurement should incorporate the different facets separately. Previous research rarely acknowledges this (for notable exceptions see Schulz et al. 2017 and Stanley 2011), and most often proposes unidimensional measurements, eliminating any items that fail to load together with the others. However, if populism has distinct subcomponents, one should expect that not all items will behave as if they are measuring a single construct.

Core Constructs of Populism and their Measurement

Proceeding from this conceptual discussion, we now move to identifying measures for the core components of ideational populism. The first is praise of “the people”, common to virtually any definition of populism (Ionescu and Gellner 1969; Canovan 1981). Second, anti-elitist, or anti-establishment ideas, which claim that a powerful and corrupt minority has taken over politics. And, third, a Manichaeian, or good-versus-evil, view of politics (Hawkins 2009), in that populism only exists when the two sides – people and elites – are seen as in *moral* opposition to one another, instead of merely having programmatic disagreements.

in the same text, for it to be considered populist. For example, texts that are anti-elitist but do not praise the people are not classified as populists in those scales. Seeing populism as a configural concept where all aspects have to be present for it to be characterized is, therefore, at the core of an ideational understanding.

Praise of the People/People's values

Praise of "the people" is the first identified characteristic of populism, no matter what specific definition one uses (see, for instance, Ionescu and Gellner 1969; Canovan 1981). The definition of who belongs to this people is one of the essential points in distinguishing between different kinds of populism,⁴ and changes according to the time and context (Panizza 2005), making it an "empty signifier" (Laclau 2005). This variously and indeterminately defined people is glorified as a virtuous entity which embodies ideals of hard-work and honesty (Taggart 2000). There is a strong sense of the "common" or "ordinary" man, whose values and behavior are morally superior to those of other groups in society.

Populist discourse not only praises the people and its values, it also understands that *a*) the people is a homogeneous entity who *b*) has an identifiable "general will" which should be the basis of all politics (Mudde 2004).⁵ There is no space for disagreements within the people – it is seen as having a single set of values, preferences, and interests, without room for legitimate differences (Müller 2016). Populism has a strong emphasis on popular sovereignty and the idea that the people's voice is not being heard by those in power (Canovan 1999; Mudde and Rovira Kaltwasser 2013). This results in calls, by populist actors, to "return the power to the people."

To capture this dimension, we have designed or collected 29 survey items from existing sources. Twelve items focus on the dimension of praising common people, while the other 17 tap into the idea of the people's general will as the basis of politics, or the homogeneity of the

⁴We come back to this under the discussion of left- and right- varieties of populism.

⁵These are two of the three separate dimensions proposed and measured in the scale by Schulz et al. (2017).

people (as defined in Schulz 2017). Examples of the former include *"generally speaking, average people are hard-working,"* and *"I take pride in being an ordinary person."* For the latter, some examples are *"The politicians in Congress need to follow the will of the people,"* and *"The will of the people should be the highest principle in this country's politics."* We have also included several negative-worded items, such as *"There is no such a thing as 'the will of the people'"* and *"The worst politicians are those who come from the common people."* The full list of items is in the Appendix.

Anti-Establishment/Anti-Elite Feelings

Populists always see an elite in opposition to that good people. The elite is a minority of corrupt forces who have subverted the political system to work for their benefit (Mudde and Rovira Kaltwasser 2013, 502). It may be found, depending on the context, dominating politics, the economy, culture, media, and/or the judiciary (Rooduijn 2014, 577). The elite exploits the people in its pursuit for more power and profit, meaning that liberation from this domination is needed (Hawkins 2009). Who is categorized as elite (or as the people) varies according to time and place. Usual elite targets may be governments in general and its officials, the rich, supranational organizations, international financial bodies, or foreign countries and their leaders. What is essential is that this elite is represented in domestic politics as well – for example, the "lackeys of imperialism" in Latin America.

Items were designed to capture the idea of anti-elite feelings without going into detail of who the establishment⁶ is – this is done at the sections that try to differentiate left- and right-wing populisms. Otherwise, ideology would certainly be a confounder. Therefore, it is often restrained to the political establishment and the idea of elites in abstract. Examples of items

⁶In this chapter we treat "elite" and "establishment" as equivalent. Within the concept of populism, they are both referring to the same group.

include *"Elected politicians sell out to big business," "Politicians do not want to improve the lives of ordinary people,"* and *"The government is pretty much run by a few big interests looking out for themselves."* Some of the reverse-worded items are *"Politicians are actually interested in what people like me think"* and *"Most politicians seek power to serve others."*

Manichaeian Outlook on Politics

As the description in previous sections already indicates, the division between the people and the elite is primarily moral (Mudde and Rovira Kaltwasser 2013), with one side being the monopolist of virtue, and the other of vice. In the existing measures (e.g. Hawkins et al. 2012; Akkerman et al. 2014) this element was incorporated in the wording of anti-establishment items. The Manichaeian outlook was expressed by statements that accused established politicians of having betrayed the people. In this way the Manichaeian outlook was not considered an essential element of politics per se but rather of the current state of democracy.⁷ We follow a different track. No measurement attempt up to date has tried to gauge Manichaeian attitudes of politics directly and individually (with the partial exception of Hawkins et al. 2012 and Stanley 2011), even though this is theoretically plausible. Keeping with the idea of measuring these dimensions separately, we developed questions on whether the respondent perceives politics as a moral struggle, without referring to people or elite. Our aim is to measure the Manichaeian outlook of politics in its pure form and subsequently assess how this dimension relates to other dimensions of populist attitudes. Examples of items are

⁷Indeed, one of the items that presented the Manichaeian outlook of politics in essentialist language (i.e., *"Politics is ultimately a battle between 'good' and 'evil'"*) failed to load on the populism dimension in the Netherlands (Akkerman et al., 2014). Because there was only one such item, it was impossible to determine whether this item was part of a separate latent dimension that could not be tapped with all other items (which all were applied to populism).

"You can tell if a person is good or bad if you know their politics" or "People I disagree with politically are driven solely by greed." Reverse items include *"The people I disagree with politically are not evil"* and *"In politics, everyone wants what they think is the best for the country."* It is important to note that because we see this dimension as a kind of political cosmology or worldview (Hawkins and Rovira Kaltwasser, 2017) the items do not exclusively refer to the differences between "the people" and "the elite." On the contrary, the first three items refer to differences among the people themselves.

Potential Populism Dimensions

Any attempt would be incomplete if we ignored the plurality of views on what constitutes populism. We have conducted a literature review to find other constructs which have been considered part of the concept and, afterwards, used the mailing list of *Team Populism*⁸ to ask for further inputs on what dimensions and questions might be considered. We have settled with the potential dimensions listed in the following sections, and collected or designed a number of survey items for each one individually as well.

Strong Leader

Populism is sometimes associated with preference for a strong leader, along the lines of "delegative democracy" (O'Donnell 1994). Populist leaders, especially in Latin America, have claimed that being directly elected gives them a popular mandate to override other institutions if that is necessary for implementing the "general will" (Levitsky and Loxton 2013). For some, populism would necessarily involve a preference for a personalist authority over institutions of representative democracy (Pappas 2014). To tap into this idea, we propose items such as *"What our country needs is a leader who will be admired"* or *"Our presidents should do what the people want even when the laws prohibit him from doing it."*

⁸See more at teampopulism.com and in the Preface.

Simple, Direct Style

Much work on populism sees it not so much as a discourse, but as a style of dress, language, and performance (Moffitt 2016; Ostiguy 2017). Populism is said to have a direct and unmediated connection between leader and followers (Weyland 2001), based on charismatic appeal (Pappas 2016). To achieve this, the usage of a colloquial language, popular mannerisms and informal clothing are some of the tools employed by populist leaders who want to "look like the people" (see, e.g., de la Torre 2013, 37). We suggest a scale that taps into this preference for a "politician like me," and has negative attitudes towards what may be seen as complex political dealings or trade-offs. Examples of items in it are *"I prefer politicians who tell it how it is,"* and *"It's important for a political leader to be like the people he or she represents."*⁹

Perception of Crisis

In populist discourse, traditional parties are charged with having created an oligarchical system where there is no difference among them, thus hollowing the meaning of real democracy (Mouffe 2005, 64). This makes it necessary that a new, truly popular, kind of party appears (Mudde 2004, 546), in a call for liberation (Hawkins 2009). Proclaiming that there is a crisis of representation and in the functioning of democracy may be seen, therefore, as an essential aspect of populism (Rooduijn 2014; Moffitt 2015). We tap into this dimension with items such as *"The rights of individuals have been systematically curtailed in this country"* (Dryzek and Berejikian 1993).

Anything-goes attitude

Hawkins (2010, 36) argues that a consequence of populist discourse is an "anything-goes" attitude, where formal procedures and liberal rights are seen as a hindrance to the

⁹Both conceptually and empirically (as we see in the analysis) this construct is eerily similar to the idea of glorifying the people.

realization of the will of the people. In short, because this general will is the highest principle in politics, anything and anyone setting limits to it is naturally seen as illegitimate. As such, this obstacle deserves to be removed, even if by illegal means, in the name of the greater good. This idea is very close to authoritarianism, or that populism essentially is *democratic illiberalism* (Pappas 2014). We have items that tap into a willingness to limit checks and balances institutions, as well as the rights of some groups that may be seen as enemies of the people (Seligson 2007). Namely, we use items from the Latin American Public Opinion Project's questionnaires¹⁰, from several waves, which read, for example, *"It is necessary for the progress of the country that our presidents limit the voice and vote of the opposition parties."*

Left and Right Populisms

What makes populism left or right is how "the people" and "the elite" are defined, based on the ideology with which it is associated in each case. Populists on the left, on one hand, see this division as one rooted in economic inequality (March 2007), where the people are seen as a majority of economically and socially disadvantaged groups, oppressed by a minority who, because of their resources, controls politics. The elite are the rich, financial institutions (both internal and external), and whoever may be associated with and subordinated to those actors. Right-wing populism, on the other hand, has a more nationalist understanding of "the people" which does not emphasize how it is dominated economically, but how the nation and its symbols are threatened by a minority (the "nativism" dimension in Mudde 2007). In economic terms, it frequently sees the people as middle class, hard-working individuals oppressed by the government, who want to take their money and give to privileged minorities. The elites are

¹⁰Source: The AmericasBarometer by the Latin American Public Opinion Project (LAPOP), available at: <http://www.lapopsurveys.org>.

politicians, local and international, who use their control of the state to harm the national majority, benefiting themselves and their allies.

To complement the more neutral items from the batteries on core constructs, we have developed specific statements to reflect right- and left-wing versions of populism, associating actors to the roles of "people" and "elite" accordingly. For right-wing populism, we include items such as *"People who pay no taxes should have no say in how this country is run,"* and *"In this country, liberal intellectuals are the real enemy of the people."* On the left, examples include *"Big corporations accumulate wealth by exploiting the people"* and *"The unemployed, underemployed, marginalized groups – these are the real people who should have more voice in politics."*

Data

Altogether, there are 145 survey items proposed for the ten dimensions outlined above. For our first two studies, we collected data in eight countries. In the United States, we used an online survey through Amazon's Mechanical Turk (MTurk), with 234 respondents, in May 2015. In Argentina, Croatia, Greece, Mexico, Spain, and Switzerland, we relied on samples of undergraduate and graduate students.¹¹ The sample sizes are 257 in Argentina, 193 in Croatia, 172 in Spain, 262 in Greece, 163 in Mexico, and 247 in Switzerland. In Belgium, we complemented a sample with students from the Free University in Brussels with respondents recruited through social media and university mailing lists. The survey was administered only

¹¹At the following institutes and dates: Argentine Catholic University (Argentina), June-August 2016, University of Zagreb (Croatia), Fall 2015; Aristotle University Thessaloniki (Greece), June 2015 and February/March 2016; Autonomous University of Barcelona (Spain), Fall 2015, National Autonomous University of Mexico, February/March 2016, and University of Zurich (Switzerland), September 2016.

in Dutch (N = 153). None of the samples approaches nationally representative, in line with the general practice of scale development in psychology. The main goal of this exercise is to explore dimensionality and questionnaire reduction, by getting a first glimpse into what items of the full list tap into populism constructs, and which ones work across different cultures. Therefore, the seven countries with student samples, plus the American online sample, offer enough variation to permit us, first, to reduce the long list into a shorter one with items that load together in the relevant dimensions, and second, to test which items are invariant across groups.

For our third study, we use a new round of data collected online in nine countries. For the United States we once again used Amazon's MTurk, while for the other eight (Brazil, France, Greece, Ireland, Italy, Mexico, Spain, and the United Kingdom) we used the crowdsourcing platform CrowdFlower. Because of its international pool of contributors, scholars have begun using it for scientific surveys. Results of testing show that respondents give answers with similar levels of quality to other online providers such as MTurk (Peer et al. 2017). Our sample sizes vary between 200 and 300 respondents for each country, except for a larger American sample of 505; all samples were collected between November 2016 and March 2017.¹²

¹²The Irish sample was completed with 100 respondents from Qualtrics panels, due to there being too few CrowdFlower users in this country to reach our target of 250. While we also collected data through CrowdFlower and Qualtrics for Hungary, we have left it out of the analyses reported here due to concerns about response quality. While there is a sizeable useful sample, diagnostics show that many respondents there powered through the questionnaire without giving faithful answers, and several were able to reach the validation code at the end

Despite distortions in CrowdFlower samples relative to national populations, they are still more diverse than student and other convenience samples. Median ages for countries are around 27-30, with most respondents between 20 and 40. This is a bias towards younger respondents less pronounced than that observed with students. Education and income distributions are also more varied, as is geographic location. There are important gender imbalances – one of our samples is 80% male. However, ideological balance is more closely achieved than with undergraduate students. In sum, the imbalances in CrowdFlower samples (the largest being gender) are different from those in student samples (location, age, occupation and ideology), in relation to their representativeness. Therefore, we do not expect biases to be correlated across the two.

Scale Development, Step by Step

We proceed with reducing our initial 145 items into a manageable scale in three steps. First, all of them are included in factor analysis models, to identify the latent dimensions underlying all of these questions. We seek to find what constructs, of those theorized, can be retrieved from the data. This step gives us the coherent sub-dimensions to be measured, and a smaller list of items measuring each one. Second, we perform a test of measurement invariance on the student samples. This test tells us which items have high cross-cultural validity, and which ones should be dropped from the scale due to not working well across different cultures. Last, with a new round of cross-national data, we validate those findings about the cross-national validity of the remaining short scale.

Step 1: The Factor Structure of Populism Dimensions

without actually taking the survey. Including the Hungarian sample in the analysis, however, does not change results either for invariance tests or information curves.

The first study we conduct aims at identifying the underlying dimensions across the 145 survey items. We use exploratory factor analysis (EFA)¹³ to uncover the number of latent variables (dimensions, or factors) that can explain the largest amount of variation in the items. EFA helps us observe whether our proposed items load on the proposed constructs, and which constructs grant the most explanatory leverage within these data. We apply the model to the pooled data with student samples and the first Amazon MTurk sample.

We run eleven EFA models, having from 2 to 12 factors. There is no consensus on how to choose the appropriate number of factors (m) to retain after EFA. We have tried several existing alternatives, as described in the Online Appendix B. They fail to converge on a single solution, and we choose to follow an approach of using absolute indicators of model fit. This works by selecting the solution with the smallest number of factors that gives acceptable fit (Preacher et al. 2013). We pick the solution with four factors, as the first one in which both SRMR (Standardized Root Mean Square Residual) and RMSEA (Root Mean Square Error of Approximation) indicate good fit (meaning they are below 0.05).¹⁴ We also follow a substantive interpretation: inspecting the items in each factor for solutions with a larger m , there are four stable and clearly identifiable factors, with more or less the same indicators across solutions; the others that show up tend to have few indicators or fail to present a meaningful

¹³With an oblique rotation, since the dimensions are expected to correlate with one another (see Browne 2001).

¹⁴The full table with model fit indicators for all solutions between 2 and 12 factors is in the Online Appendix B.

theoretical construct. The solution with three factors does not discriminate indicators which seem to belong to different constructs.¹⁵

Conceptually, the four factors identified are interpreted as *people-centrism*, *anti-elitism*, *Manichaeian outlook*, and *authoritarianism*. The first three are core constructs of populism, while the fourth is a construct whose connection to populism is debated conceptually (Mudde and Rovira Kaltwasser 2017; Müller 2016) and empirically (see Aguilar and Carlin in this volume). For each dimension we look at items with an absolute factor loading greater than 0.35. There are 19 for people-centrism, 37 for anti-elitism, 15 for Manichaeian outlook, and 20 for authoritarianism. Table 7.2 presents the factor correlations from the EFA. While people-centrism and anti-elitism have a moderate correlation with one another ($r = 0.28$), the other factor correlations are rather small. This evidence suggests we are indeed capturing different dimensions that can be seen as separate constructs and should, accordingly, be measured separately.

>>> TABLE 7.1 AROUND HERE <<<

Step 2 – First Test of Measurement Invariance

Given our large number of items, we could expect that EFA would return several ones for each possible dimension. While EFA completes the dimensionality reduction, questionnaire

¹⁵Table 7.A1, in the Online Appendix A, includes all items that have a factor loading above 0.3 in each of the constructs. Further, it indicates which items load into single dimensions on a Mokken Scale Analysis (Mokken 1971; Van Der Ark 2012). As we can see, there is broad agreement regarding the composition of dimensions between MSA and EFA for anti-elitism and on the items with higher loadings in authoritarianism and Manichaeian outlook. MSA produces a larger number of dimensions for the people-centrism dimension than EFA.

reduction continues with our first test of measurement invariance. This test tells us which items, for each dimension, should be retained as they work in similar ways across different countries. After this part, our goal of creating a more manageable scale, with few statements per dimension, can be obtained.

The most common way of testing the equivalence of measurement instruments is with multiple group Confirmatory Factor Analysis (MGCFA, Jöreskog 1971). In this strategy, three CFA models are fit to the data: the first where all estimated parameters are allowed to vary across groups (configural model), the second where factor loadings are constrained to be the same across groups (metric invariance), and the third where loadings and intercepts are held constant (scalar invariance). In other words, the configural one is equivalent to fitting separate CFA models in each country. In the metric invariance model, the factor loading of each single indicator on its latent variable (say, the loading of *"Quite a few of the people running the government are crooked"* on *Anti-elitism*) is forced to be the same in all countries. If the indicator measures that dimension similarly across countries, the factor loadings in the configural model would be similar anyway, and forcing equality is not expected to make the model worse. This evaluation is done with model fit information: if the more constrained models do not fit significantly worse than the less constrained, it means there is measurement invariance. Substantively, what the second model means is that an increase in one unit of the latent construct has the same impact on the observed indicators across all groups. The third model, scalar invariance, tests not only whether variation in the latent construct means the same for respondents in all groups, but also that respondents with the same level of the latent construct would give the same answer in all groups.¹⁶

¹⁶Metric invariance is usually accepted as sufficient, because for regression purposes it is enough that a change of one unit in the indicator means the same across groups.

Multigroup CFA has been criticized for being too strict (see, for instance, a comparison with alternatives in Davidov et al. 2015). In cross-national surveys, items rarely work perfectly the same way in all countries, and the invariant models tend to be rejected. Alternative approaches that allow for slight noninvariance have been proposed. In this step we use the alignment method (Asparouhov and Muthén 2014). It modifies the configural model to align factors and intercepts, similar to a rotation in EFA, taking into account actual factor means and factor variances. Not only is this method more practical than MGCFA, and not demanding exact invariance, it also lists which indicators are (non)invariant in each group. MGCFA is used in our last validation test, in step 3.

For our model, we select all constructs we retain from EFA, and include twelve items with the highest absolute factor loadings as indicators of the predicted latent variables in the CFA alignment model.¹⁷ We strive to include at least three negative-worded statements in each dimension, even if these would not be on the list of highest absolute loadings, because of their value in questionnaire design. Table 7.2 shows information for the 5-7 best working items in each dimension at this stage. Items are chosen based on invariance, average loadings, and distributional characteristics, and we sought to include at least one negative-worded item in each category. It is possible to find at least four items with invariant factor loadings across all eight samples for each construct, and a few even have invariant intercepts across all countries. Those that violate invariance do so in only one or two samples. Moreover, we observe items with both higher and lower than average means, indicating it is possible to get indicators that

¹⁷We limit to twelve per scale (eleven for Manichaeian outlook), leading to 47, so that the model is identified. With this number, the model has 147 free parameters, and our limit is 152: the number of observations in the smallest sample (153, Flanders), minus 1.

people disagree with. Factor loadings are high for most of the indicators, with a few exceptions in the *people-centrism* dimension.

Broadly, items have face-validity in capturing the proposed concepts. A few points must be noticed at this stage: first, we observe a clear and distinctive Manichaeian outlook element in populist attitudes. This is the first time such a construct has been tested, and it contributes to our empirical and conceptual understanding of how populist attitudes are structured. Second, exploratory factor analysis results show one cannot clearly distinguish between three theoretical constructs: "*praise of the people*," "*homogeneous people/general will*" and "*simple, direct style*." The six items in the people-centrism part of Table 7.2 are an amalgam with contributions from all three theorized constructs, amounting to a coherent idea of glorifying common people in politics. This is contrary to previous findings by Schulz et al. (2017), who distinguish between people homogeneity and popular sovereignty. While scholars go through great lengths to theoretically distinguish between these concepts, we find that individuals make less fine-grained distinctions when thinking about politics.

Third, the *anti-elitism* dimension has items not only from the original scale proposed for it, but also from those for left- and right-wing populism. Item *Ant4* in Table 7.3 was originally drafted for the left-wing populism scale, as it clearly frames corporations as the elite against whom to fight. *Ant2*, on the other hand, is a reverse-worded item from the right-wing populism scale. Nevertheless, both load together with more generic anti-establishment statements. The fourth point to highlight is that noninvariance is most egregious in two samples: Croatia (four loadings and five intercepts) and Switzerland (one loading and five intercepts). That might be caused by specificities of these student samples, or by different characteristics of populism in both countries in relation to the rest. For this reason it is essential to conduct an independent validation as we do in the next step.

>>> TABLE 7.2 AROUND HERE<<<

Step 3 – Cross-National Validation

In our final step, the items in Table 7.2 were fielded in new surveys in nine countries. To that we added three more negative-worded items for the Manichaean outlook battery since the best performing items there are all (but one) positively worded. Moreover, we do not include authoritarianism; this is a well defined distinct construct with over a half a century of scale development and its relation to populism is conceptually controversial. While the EFA identified an authoritarianism dimension from all those items, and several were invariant across student samples, it is distinct from the construct we are trying to measure. For this reason, items were selected only for *people-centrism*, *anti-elitism*, and *Manichaean outlook*.

The model tested is a multigroup CFA with three latent variables, and three indicators for each latent variable, as depicted in Figure 7.2. The results in it are those for the model with factor loadings constrained to be the same across countries (the loadings invariant model). Model fit is acceptable, with RMSEA and SRMR below 0.07, and TLI above 0.90. CFI is a bit below the recommended minimum of 0.95, and the chi-square test is significant (however, this test is known to be sensitive to large samples, as noted in Kline 2016). We have included a method factor to take into account the fact that some items are worded negatively, and because research shows that individuals respond differently to positive- and negative-worded

statements (DiStefano and Motl 2006).¹⁸ Factor loadings reported for individual items are unstandardized.¹⁹

Items work well for both the *anti-elitism* and *people-centrism* scales, with high absolute loadings. For Manichaeism outlook, the first two work better, while the last ("*The people I disagree with politically are just misinformed*") has a somewhat lower loading. This is an interesting finding because in terms of stereotype content (Fiske et al. 2002) the first two items differ from the third. Specifically, while the first two refer to "warmth" (i.e., people's intentions), the items that attribute political disagreement to misinformation taps into a "competence" related claim. It is clear that the Manichaeism view on politics is basically a view which refers to people's intentions, so it is perhaps not surprising to find that exactly the items that refer to that element turn out to work best. From the top three suggestions for each dimension in Table 7.2, *Man2* had a low factor loading and decreased model fit substantively

¹⁸Four models were fit, following the suggestions by DiStefano and Motl (2006): model (a), reported, with a method-factor for positive-worded items; model (b) with a method factor for negative-worded items; model (c) with correlations among residuals of all positive-worded items, and model (d) with correlations among residuals of all negative-worded items. In the main text we present model (a), which has the best model fit. Fit indices for the others are: (b): Chi-square = 760.487, $df = 254$, $p < .001$, RMSEA = .085 (90% CI: .078-.091), SRMR = .088, TLI = .812, CFI = .853. Model (c): Chi-square = 357.662, $df = 129$, $p < .001$, RMSEA = .080 (90% CI: .071-.089), SRMR = .054, TLI = .838, CFI = .935. Model (d): Chi-square = 703.797, $df = 237$, $p < .001$, RMSEA = .084 (90% CI: .077-.091), SRMR = .086, TLI = .814, CFI = .864.

¹⁹Items measured in Likert scales from 1 (Strongly disagree) to 7 (Strongly agree).

in this test.²⁰ We replaced it with another option of a negative worded item that had been present in the original questionnaire: "*The people I disagree with politically are not evil.*" The final, nine-item scale tested is:

Box 1. Final Item Suggestions

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.

Manichaeian outlook:

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.

>>> FIGURE 7.2 AROUND HERE <<<

A measurement invariance test with multigroup CFA shows that this model does not fit significantly worse than the configural model, i.e., one where factor loadings are allowed to vary across countries (meaning, in practice, one CFA is fit in each country), as seen in Table

²⁰This item has a very positively skewed distribution in all samples, meaning that it was invariant on step 2, since most respondents agree with it in all countries, but does not provide much information since answers are clustered on the upper end.

7.3. These indicators capture the latent variables across all nine countries included in this sample in a similar manner. In other words, this survey instrument has a high degree of cross-national validity, at least for the countries tested. Note that the countries were selected to represent several regions, with variation in left and right-wing populism and varying degrees of populism overall. Model comparison is done with a chi-square test of model difference. It works the following way: each model has a chi-square statistic indicating fit, where lower values indicate better fit. If we compare the difference in chi-squares between two nested models and there is a significant difference, it means that the second (more restricted) has a significantly worse fit than the first. If the model with constrained loadings is not significantly worse, the next step is constraining intercepts to be the same across groups, and once again testing whether the chi-square difference is significant. Measurement invariance, therefore, is achieved when we do not observe significant differences between models (i.e., $p > 0.05$). As a comparison, we have also tested the invariance of the six-item scale proposed by Akkerman et al. (2014) in the same data, which is currently the most used for measuring populist attitudes. Results in the lower part of Table 7.3 show that factor loadings are not invariant across countries: the model with constrained loadings fits significantly worse than the configural ($p = 0.02$).

>>> TABLE 7.3 AROUND HERE<<<

While these results may seem a bit dark for the Akkerman et al. (2014) scale, we emphasize that a multigroup CFA is a conservative test of invariance. A p-value of .02 does not indicate a strongly non-invariant instrument. This means that researchers who have already collected data with the scale suggested by Akkerman et al. (2014) should conduct the appropriate measurement invariance tests on their own data before analyzing substantive results, but it does not *a priori* invalidate any analyses using their scales, including those in this book. However, if one plans to include a battery in cross-national surveys with multiple

countries, non-invariance in the Akkerman et al. 2014 instrument would likely become an issue.²¹

Scale and Item Information

Following the analyses by Van Hauwaert, Schimpf, and Azevedo in the previous chapter, we conclude the assessment of this scale with a model to test the amount of information it contains, and how much of the latent construct it is able to capture. We have pooled the data for all nine countries and run a graded ratings scale model (Muraki 1992) to identify, first, the amount of information of this scale along the construct, and second the amount of information that each item contributes. This analysis was done in two ways: first, each dimension separately; and second, with the two top items of each construct pooled to form a short, unidimensional scale for populism.

>>> FIGURES 7.3 – 7.5 AROUND HERE<<<<

Figures 7.3-7.5 have the information curves for each dimension on the left-hand side of each panel (solid lines). As can be seen, each set of items captures a different area of their respective dimensions, with the first two mostly on the negative side (on the [-3:1] interval) while the last (Manichaeian outlook) performs better on individuals higher on this trait (those in the [-1:3] range). At the extremes the dashed error curves become higher, indicating that the measure is less apt to capture individuals positioned on those levels of the construct. Item information curves show that for each scale there is one most informative item (Ant3, Pp11,

²¹The problematic item in this battery, for invariance, is “I would rather be represented by a citizen than by a specialized politician”. If the factor loading for only this indicator is allowed to vary across groups, the constrained model does not fit significantly worse than the configural ($p=.18$). Doing the same for each of the other indicators still result in models with significantly worse fit.

and Man1), and that the negative-worded items (Ant2, Ppl2, Man2) contribute by capturing information further away from the center in all three, even if it is not the highest level of information.

Information curves also suggest that the two positive-worded items in each scale capture a similar range of their constructs. Therefore, we test an aggregate short version of our scale with six items – the first positive and the negative-worded for each dimension (Ant1, Ant2, Ppl1, Pp2, Man1, Man2) – loading on a single construct.²² The information curve for this short scale is in Figure 7.6, with a comparison to the information curve obtained with the Akkerman et al. (2014) six-item scale, which Van Hauwaert, Schimpf and Azevedo found to have a broad range in the previous chapter. Here we see that the short version of the new scale captures a somewhat broader range than Akkerman et al. (2014), primarily on the low end of the scales, but both still fall short when discriminating extremely high levels of populism.

>>> FIGURE 7.6 AROUND HERE <<<

Conclusion

The first goal of this project is to suggest a psychometrically validated scale to measure populism as an attitude. We start with the core dimensions that compose the concept, develop batteries of questions to tap into them, and conduct exploratory analyses to identify those dimensions which can be found among the public. Confirming the ideational theory, we find three stable constructs that are clearly part of populism among our original 145: *people-centrism*, *anti-elitism*, and *Manichaeian outlook*. We use two rounds of cross-national

²²Model fit: Chi-square = 53.873, df = 3, $p < .001$, RMSEA = .079, SRMR = .03, CFI = .959, applied on the pooled data (n = 2708). The lowest standardized loading is .331, for *Ppl2*. All residuals of negative-worded items are correlated to one another, as are those of positive-worded ones, to correct for method bias.

validation in order to reduce the original number of items for each into a short scale, and reach a final battery that can be used either with nine or six statements. Confirmatory factor analysis and Item Response Theory models show that the scale captures a broad range of the construct and has high cross-national validity.

This new scale has several advantages over existing alternatives: first, it has been developed with the concern for cross-cultural validity from its inception. Few, if any, of the existing scales have had their invariance tested to know whether they do work in a similar way to capture the phenomenon of populism in different countries. Until such an exercise is done, they should not be used to compare levels of populism, or even correlates, across large numbers of countries. The scale proposed here is a reliable instrument across seventeen samples from thirteen different countries, including both convenience (student) samples and more diverse, online ones. Moreover, in this process we have also mitigated potential translator effects for the languages we tested. Researchers who wish to apply this battery have a pool of languages into which these items have already been translated and in which their validity has been tested, available in the Online Appendix C. While it is not possible to assure that the scale would be invariant in other countries than those included here, we sought for large regional coverage, as well as examples of cases with distinct kinds of populist parties (including no successful populists at all), to maximize the possibility that the scale would work well in countries we did not include.

A second advantage of this scale is dividing populism into its subcomponents and measuring each one separately. While some other scales have done that (e.g. Schulz et al. 2017, Stanley 2011, Oliver and Rahn 2016), ours is the first to depart inductively from a range of potential conceptual constructs and narrow the scale down into those that appear to be the most stable on the data, as well as conceptually sound following an ideational definition. Researchers now have the flexibility of investigating not only correlates of populist attitudes writ large, but

how each one of its subcomponents might be related to a different set of social and psychological characteristics. Additionally, our analysis highlighted the importance of authoritarianism in relation to the other facets of populist attitudes. The structure of relationships between these concepts warrant additional work. And we encourage scholars to work with these dimensions in a flexible and theory-based way when they do their own research.

A concern can be raised regarding the data we used. Student samples are much more homogeneous than national populations, and so it is natural that sometimes findings from studies with them do not generalize. We attempted to minimize this problem by relying on a different kind of convenience sample for the validation exercise: those recruited through CrowdFlower. Nevertheless, they are still not representative of any population, and formed by individuals who chose to take the survey. As we argue earlier, the imbalances in CrowdFlower samples are different from those in student samples. Therefore, biases should not be correlated between the two. For instance, if an item works very well only among well-educated young people, it would perform poorly in the CrowdFlower samples, which are more diverse in this respect. Our samples, therefore, offer enough variation that these shortcomings are minimized. Moreover, much of the causes behind measurement non-invariance include translation effects, and terms or concepts that do not make sense in different contexts. These can be captured with cross-national samples even if they are not diverse. Finally, from a practical perspective, including the full batteries into representative cross-national surveys would have been prohibitively expensive – even the shorter questionnaires in CrowdFlower were 10 minutes surveys. For the scale reduction exercise, we must rely on sub-optimal samples. However, now that we arrived at a short version, this can be included in surveys with representative samples, and their properties then reassessed.

From a theoretical perspective, we have two main findings. First, that a general Manichaean outlook of politics, dissociated from *people* and *elites*, is a component of populist attitudes. This had not been tested before, and in general only incorporated into how populists frame elites and the people. Second, we fail to statistically differentiate between praising common people and the idea of popular sovereignty in politics. These two are treated as conceptually distinct (e.g. in Mudde and Rovira Kaltwasser 2017), but at the attitudinal level are too close to be distinguished from one another. These findings call for a theoretical reevaluation of these dimensions' status within the concept of populism, at least when seen in its psychological dimension.

Further, while the measurement divides populism into its components, we offer a short version of the scale. It has six items that can be used to measure a single underlying dimension, for those researchers who have stricter limitations on the amount of survey space they can use. Another contribution is offering negative-worded items in each of the dimensions, making sure that we are indeed measuring populist attitudes and not acquiescence bias. This is a shortcoming in several scales (an exception is Stanley 2011), and explains at least in part why populist attitudes are found to be so widespread almost everywhere they are measured.

Finally, another shortcoming of existing scales found by Van Hauwaert, Schimpf, and Azevedo was that they fail to capture the full breadth of populist attitudes: all scales either discriminate only moderate populism/non-populism, or work better on one end (full populists or full non-populists). The best performing one in this regard was found to be that proposed by Akkerman, Mudde, and Zaslove (2014). The scale proposed here captures a somewhat broader range of the concept, offering information about full non-populists, and moderates on both sides of zero. Its advantage, however, lies in the cross-national validity of its application.

The benefit from this effort is not only the development of a more refined, psychometrically tested scale of populist attitudes. The division into dimensions also allows

researchers to 1) use the dimensions that best fit their definition when doing future studies, creating more precise measurements; 2) study the relations between dimensions of populism that were previously unexplored or only hypothesized, and 3) study the impact of each dimension of populism individually over other outcomes of interest. It opens the possibility of analyzing the varieties of populist discourse and attitudes, and how different aspects of populism might predict, or be predicted by, other attitudes and behavior. Moreover, the high cross-national validity will be an essential tool for the blossoming comparative research on populism across countries and regions. Researchers in several areas have much to gain from this improved measurement.

References

- Agger, Robert. E., Marshall. N. Goldstein, and Stanley. A Pearl. (1961). "Political Cynicism: Measurement and Meaning." *The Journal of Politics* 23(3): 477–506.
- Akaike, Hirotogu. (1973). "Information Theory and an Extension of the Maximum Likelihood Principle." In *Second international Symposium on Information Theory*, edited by Petrov, Boris N. and Frigyes Csaki, 267–281. Akademia Kiado, Budapest.
- Akkerman, Agnes, Cas Mudde, and Andrej Zaslove. (2014). "How Populist Are the People? Measuring Populist Attitudes in Voters." *Comparative Political Studies* 47(9): 1324–1353.
- Alemán, José, and Dwayne Woods. (2016). "Value Orientations From the World Values Survey: How Comparable Are They Cross-Nationally?" *Comparative Political Studies* 49(8): 1039–1067.
- Andreadis, Ioannis, and Yannis Stavrakakis. (2017) "European Populist Parties in Government: How Well are Voters Represented? Evidence from Greece." *Swiss Political Science Review*, online first. doi: 10.1111/spsr.12255.
- Ariely, Gal, and Eldad Davidov. (2010). "Can we Rate Public Support for Democracy in a Comparable Way? Cross-National Equivalence of Democratic Attitudes in the World Value Survey." *Social Indicators Research* 104(2): 271–286.
- Aslanidis, Paris. (2016). "Is Populism an Ideology? A Refutation and a New Perspective." *Political Studies* 64(15): 88–104.
- Asparouhov, Tihomir, and Bengt Muthén. (2014). "Multiple-group Factor Analysis Alignment." *Structural Equation Modeling: A Multidisciplinary Journal* 21(4): 495–508.
- Berinsky, Adam J., Gregory A. Huber, and Gabriel S. Lenz. (2012). "Evaluating Online Labor Markets for Experimental Research: Amazon.com's Mechanical Turk." *Political Analysis* 20(3): 351–368.
- Bozdogan, Hamparsum. (2000). "Akaike's Information Criterion and Recent Developments in Information Complexity." *Journal of Mathematical Psychology* 44(1): 62–91.
- Browne, Michael W. (2001). "An Overview of Analytic Rotation in Exploratory Factor Analysis." *Multivariate Behavioral Research* 36(1): 111–150.
- Cacioppo, John T., and Richard E. Petty. (1982). "The Need for Cognition." *Journal of Personality and Social Psychology* 42(1): 116–131.
- Canovan, Margaret. (1981). *Populism*. Junction Books, London.
- Canovan, Margaret. (1999). "Trust the People! Populism and the Two Faces of Democracy." *Political Studies* 47: 2–16.

- Cattell, Raymond. B. (1966). The Scree Test for the Number of Factors. *Multivariate Behavioral Research* 1(2): 245–276.
- Davidov, Eldad, Jan Cieciuch, Bart Meuleman, Peter Schmidt, René Algesheimer, and Mirjam Hausherr. (2015). “The Comparability of Measurements of Attitudes toward Immigration in the European Social Survey: Exact versus Approximate Measurement Equivalence.” *Public Opinion Quarterly* 79(SI): 244–266.
- de la Torre, Carlos. (2013). “Technocratic Populism in Ecuador.” *Journal of Democracy* 24(3): 33–46.
- Dryzek, John S. and Joffrey Berejikian. (1993). “Reconstructive Democratic Theory.” *The American Political Science Review* 87(1): 48–60.
- Elchardus, Marc and Bram Spruyt. (2016). “Populism, Persistent Republicanism and Declinism: An Empirical Analysis of Populism as a Thin Ideology.” *Government & Opposition* 51: 111–33.
- Fiske, Susan. T., Amy J. Cuddy, Peter Glick, and Jun Xu. (2002). “A Model of (Often Mixed) Stereotype Content: Competence and Warmth Respectively Follow From Perceived Status and Competition.” *Journal of Personality and Social Psychology* 82 (6): 878-902.
- Funke, Friedrich. (2005). “The Dimensionality of Right-Wing Authoritarianism: Lessons from the Dilemma between Theory and Measurement.” *Political Psychology* 26(2): 195-218.
- Hawkins, Kirk. (2009). “Is Chavez Populist?: Measuring Populist Discourse in Comparative Perspective.” *Comparative Political Studies* 42(8): 1040–1067.
- Hawkins, Kirk. (2010). *Venezuela’s Chavismo and Populism in Comparative Perspective*. Cambridge University Press, Cambridge.
- Hawkins, Kirk A., Scott Riding, and Cas Mudde. 2012. “Measuring Populist Attitudes.” *Working Paper Series on Political Concepts, ECPR Committee on Concepts and Methods*.
- Hawkins, Kirk A., and Cristóbal Rovira Kaltwasser. (2017). The Ideational Approach to Populism. *Latin American Research Review* 52(4): 513–528.
- Hibbing, John R. and Elizabeth Theiss-Morse. (2002). *Stealth Democracy: American’s Beliefs About How Government Should Work*. Cambridge University Press, New York.
- Horn, John L. (1965). A Rationale and Test for the Number of Factors in Factor Analysis. *Psychometrika* 30(2): 179–185.
- Ionescu, Ghita and Ernest Gellner, editors. (1969). *Populism: Its Meanings and National Characteristics*. Weidenfeld and Nicholson, London.

- Jöreskog, Karl G. (1971). "Simultaneous Factor Analysis in Several Populations." *Psychometrika* 36: 409–26.
- Kline, Rex B. (2016). *Principles and Practice of Structural Equation Modeling*. The Guilford Press, New York, 4th. edition.
- Laclau, Ernesto. (2005). *On Populist Reason*. Verso, London.
- Levitsky, Steven. and James Loxton. (2013). "Populism and Competitive Authoritarianism in the Andes." *Democratization* 20(1): 107–136.
- March, Luke. (2007). "From Vanguard of the Proletariat to Vox Populi: Left-Populism as a 'Shadow' of Contemporary Socialism." *SAIS Review* 27(1): 63–77.
- Moffitt, Benjamin. (2015). "How to Perform Crisis: A Model for Understanding the Key Role of Crisis in Contemporary Populism." *Government and Opposition* 50(2): 189–217.
- Moffitt, Benjamin. (2016). *The Global Rise of Populism*. Stanford: Stanford University Press.
- Mokken, Rob J. (1971). *A Theory and Procedure of Scale Analysis*. The Hague: Mouton & Co.
- Mouffe, Chantal. (2005). "The 'End of Politics' and the Challenge of Right-Wing Populism." In *Populism and the Mirror of Democracy*, edited by F. Panizza. London: Verso.
- Mudde, Cas. (2004). "The Populist Zeitgeist." *Government and Opposition* 39(4): 542-563.
- Mudde, Cas. (2007). *Populist Radical Right Parties in Europe*. Cambridge: Cambridge University Press.
- Mudde, Cas, and Cristóbal Rovira Kaltwasser. (2013). "Populism." In *Oxford Handbook of Political Ideologies*, edited by M. Freedon, L. T. Sargent, and M. Stears, 493-512. Oxford: Oxford University Press.
- Mudde, Cas, and Cristóbal Rovira Kaltwasser. (2017). *Populism: A Very Short Introduction*. Oxford University Press, New York.
- Müller, Jan-Werner. (2016). *What Is Populism?*. Philadelphia: University of Pennsylvania Press.
- Muraki, Eiji. (1992). "A Generalized Partial Credit Model: Application of an EM Algorithm.", *Applied Psychological Measurement* 16(2): 159-176.
- O'Donnell, Guillermo. (1994). "Delegative Democracy." *Journal of Democracy* 5(1): 55–69.
- Ostiguy, Pierre. (2017). "Populism: A Socio-cultural Approach." In *The Oxford Handbook of Populism*, edited by C. Rovira Kaltwasser, P. A. Taggart, P. Ochoa Espejo, and P. Ostiguy. Oxford: Oxford University Press.

- Panizza, Francisco. (2005). *Populism and the Mirror of Democracy*. London: Verso.
- Pappas, Takis. S. (2014). "Populist Democracies: Post-authoritarian Greece and Post-communist Hungary." *Government and Opposition* 49(1): 1–23.
- Pappas, Takis. S. (2016). "Are Populist Leaders 'Charismatic'? The Evidence from Europe". *Constellations* 23(3): 378-390.
- Peer, Eyal, Sonam Samat, Laura Brandimarte, and Alessandro Acquisti. (2017). "Beyond the Turk: Alternative Platforms for Crowdsourcing Behavioral Research." *Journal of Experimental Social Psychology* 70: 153-163.
- Piurko, Yuval, Shalom H. Schwartz, and Eidad Davidov. (2011). "Basic Personal Values and the Meaning of Left-Right Political Orientations in 20 Countries." *Political Psychology* 32(4): 537–561.
- Preacher, Kristopher J., Guangjian Zhang, Cheongtag Kim, and Gerhard Mels. (2013). "Choosing the Optimal Number of Factors in Exploratory Factor Analysis: A Model Selection Perspective." *Multivariate Behavioral Research* 48(1): 28–56.
- Rooduijn, Matthijs. (2014). "The Nucleus of Populism: In Search of the Lowest Common Denominator." *Government and Opposition* 49(4): 573–99.
- Rooduijn, Matthijs. (2014b). "Vox Populismus: A Populist Radical Right Attitude among the Public?" *Nations and Nationalism* 20(1): 80–92.
- Rooduijn, Matthijs, Sarah L. de Lange, and Wouter van der Brug. (2014). "A Populist Zeitgeist? Programmatic Contagion by Populist Parties in Western Europe." *Party Politics* 20(4): 563-575.
- Rydgren, Jens. (2004). "Explaining the Emergence of Radical Right-Wing Populist Parties: The Case of Denmark." *West European Politics*, 27(3):474–502.
- Satorra, Alberto. and Peter M. Bentler. (2001). "A Scaled Difference Chi-square Test Statistic for Moment Structure Analysis." *Psychometrika* 66: 507-514.
- Schulz, Anne, Philipp Müller, Christian Schemer, Dominique S. Wirz, Martin Wettstein, and Werner Wirth. (2017). Measuring Populist Attitudes on Three Dimensions. *International Journal of Public Opinion Research*. Online first. doi: .
- Schwarz, Gideon. (1978). "Estimating the Dimension of a Model." *The Annals of Statistics*, 6(2): 461–464.
- Seligson, Michael A. (2007). "The Democracy Barometers: The Rise of Populism and the Left in Latin America." *Journal of Democracy* 18(3): 81-95.
- Simons, Daniel J. and Christopher F. Chabris. (2012). "Common (Mis)Beliefs About Memory: a Replication and Comparison of Telephone and Mechanical Turk Survey Methods." *PloS one* 7(12): 1–5.

- Spruyt, Bram. (2014). "An Asymmetric Group Relation? An Investigation into Public Perceptions of Education-based Groups and the Support for Populism." *Acta Politica*, 49: 123–143.
- Spruyt, Bram, Gil Keppens, and Filip Van Droogenbroeck. (2016). "Who Supports Populism and What Attracts People to It?" *Political Research Quarterly* 69(2): 335-346.
- Stanley, Ben. (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.
- Stavrakakis, Yannis, Ioannis Andreadis, and Giorgos Katsambekis. (2016). A New Populism Index at Work: Identifying Populist Candidates and Parties in the Contemporary Greek Context. *European Politics and Society*, advance view, <http://dx.doi.org/10.1080/23745118.2016.1261434>.
- Taggart, Paul A. (2000). *Populism*. Buckingham: Open University Press.
- Van Der Ark, L. Andries. (2012). New Developments in Mokken Scale Analysis in R. *Journal of Statistical Software*, 48(5).
- Van Hauwaert, Steven, Christian Schimpf, and Flavio Azevedo. (2016). "Measuring Populism as a Demand-side Phenomenon: A Psychometric Evaluation of Populist Attitudes across Europe." *Team Populism January Conference: The Causes of Populism*, Jan 28–30, Provo (UT).
- Weyland, Kurt. (2001). "Clarifying a Contested Concept: Populism in the Study of Latin American Politics." *Comparative Politics* 34(1): 1–22

Table 7.1 Correlation Matrix after EFA

	Praise people	Anti-elitism	Manichaeian outlook	Authoritarianism
Praise people	1.00			
Anti-elitism	.278	1.00		
Manichaeian Outlook	.073	.095	1.00	
Authoritarianism	.034	.006	.108	1.00

Table 7.2 Invariance Test with the CFA Alignment Method

Order	Item	NI Load.	NI Int.	Mean int.	Mean load.
<i>People-centrism</i>					
Ppl1.	Politicians should always listen closely to the problems of the people.	–	GR	6.29	0.50
Ppl2.	Politicians don't have to spend time among ordinary people to do a good job.*	–	–	2.87	-0.82
Ppl3.	The will of the people should be the highest principle in this country's politics.	–	–	5.15	0.90
Ppl4.	In a democracy, the will of the majority should prevail.	–	–	5.46	0.57
Ppl5.	It's important for a political leader to be like the people he or she represents.	–	–	4.86	0.92
Ppl6.	I prefer politicians who tell it how it is.	–	HR	6.00	0.50
<i>Anti-elitism</i>					
Ant1.	The government is pretty much run by a few big interests looking out for themselves.	–	–	5.23	1.18
Ant2.	Government officials use their power to try to improve people's lives.*	HR, CH	MX	3.66	-0.92
Ant3.	Quite a few of the people running the government are crooked.	–	HR, CH	5.48	1.10
Ant4.	Big corporations accumulate wealth by exploiting the people.	HR	–	5.11	1.22
Ant5.	Politicians are not really interested in what people like me think.	–	ES, CH	4.76	1.21
Ant6.	Politicians are actually interested in what people like me think.*	–	BE, CH	3.00	-1.01
Ant7.	The government is currently run for the benefit of all the people.*	HR	HR, AR	2.70	-0.87
<i>Manichaeian outlook</i>					
Man1.	You can tell if a person is good or bad if you know their politics.	–	–	3.69	0.81
Man2.	I would never stop talking to a friend because of their political opinions.*	–	BE, CH	5.37	-0.88
Man3.	The people I disagree with politically are just misinformed.	–	HR	2.73	0.92
Man4.	Politics is a struggle between good and evil.	–	US, ES, BE, CH	3.94	0.60
Man5.	The difference between me and those who support other parties is that I care about what's good for everyone.	HR, MX	HR	4.13	0.80
<i>Authoritarianism</i>					
Aut1.	People who only say bad things about [country] should not be allowed to conduct even	–	–	1.85	1.12

	peaceful demonstrations. (any4)				
Aut2.	People who only say bad things about this country have the same right as anyone else to appear on television to make speeches.* (any8)	–	CH	5.81	-1.20
Aut3.	People who only say bad things about our form of government, not just the current administration but the system of government, should not have the right to vote. (any3)	–	AR	1.84	0.94
Aut4.	People who only say bad things about [country] should have the same right as anyone else to conduct peaceful demonstrations.* (any5)	–	–	5.95	-1.16
Aut5.	People who only say bad things about this country should not be allowed to appear on television to make speeches. (any7)	–	–	2.06	1.20

Table 7.3: Multigroup CFA Invariance Test

Model	Chi-square	Chi-sq. Diff.	df	p
<i>New scale</i>				
Configural	440.58			
Loadings	599.12	102.20	88	.14
Intercepts	912.57	322.17	40	<.001
<i>Akkerman et al. (2014)</i>				
Configural	230.76			
Loadings	297.15	59.935	40	.02
Intercepts	553.11	253.283	40	<.001

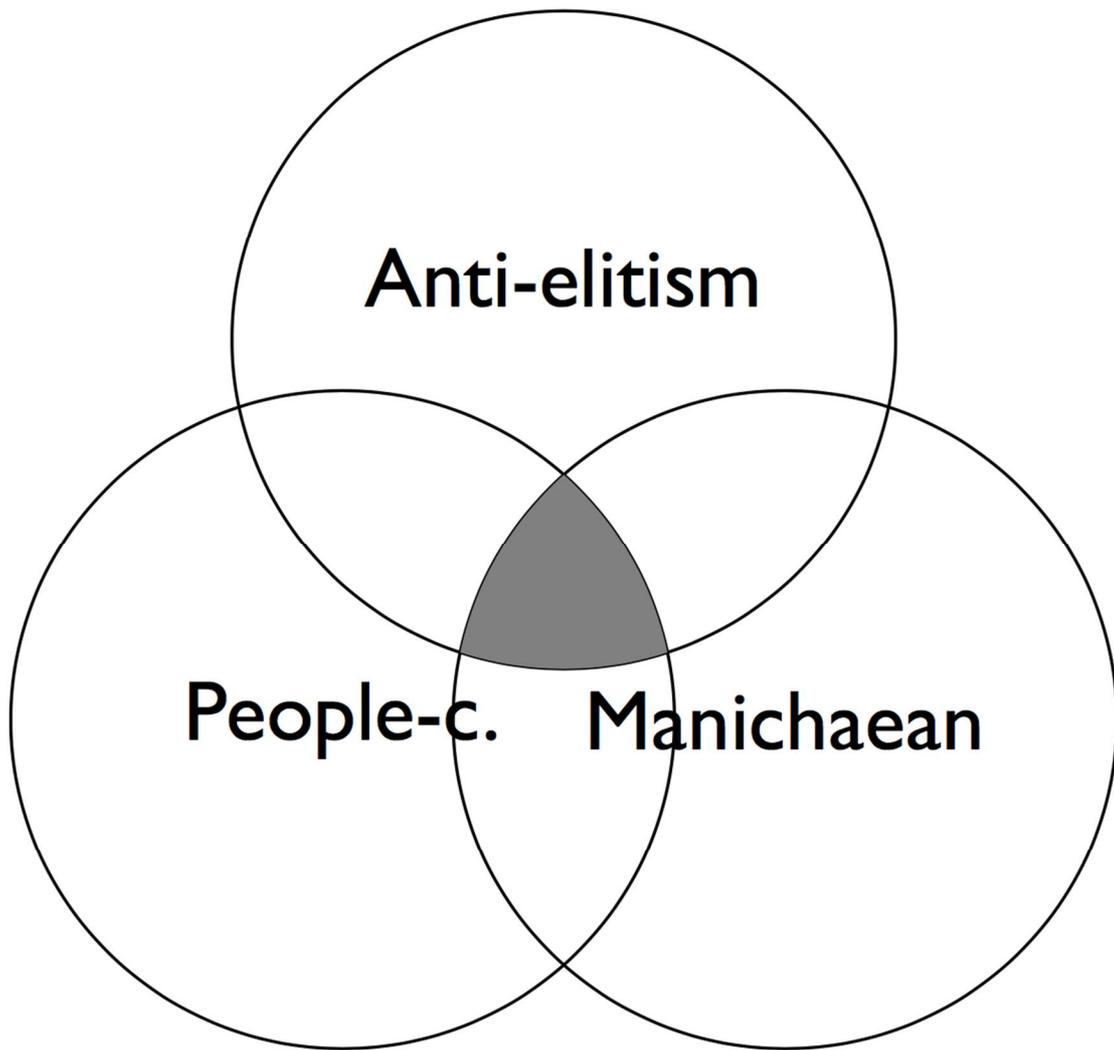


Figure 7.1

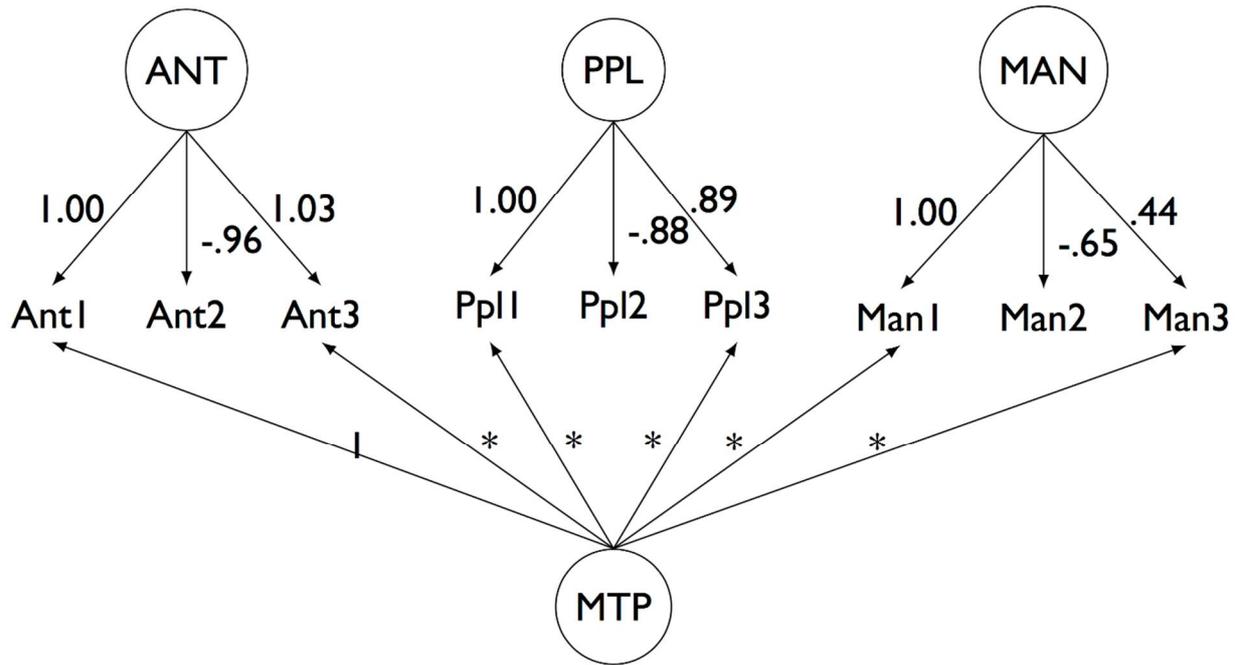


Figure 7.2

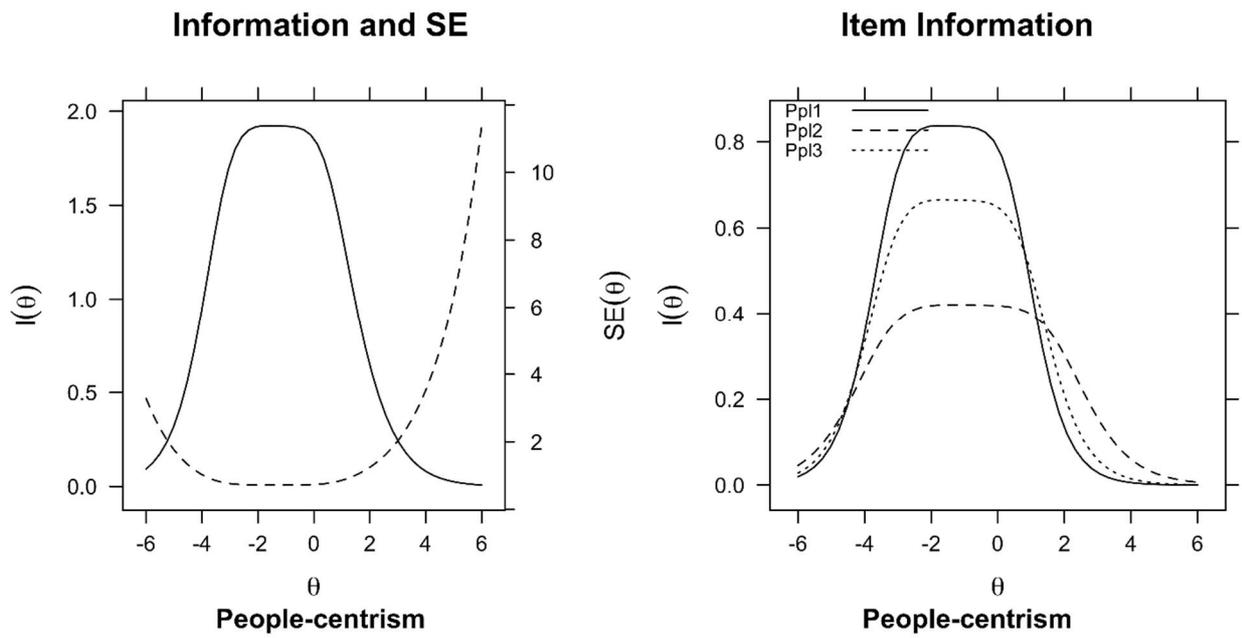


Figure 7.3

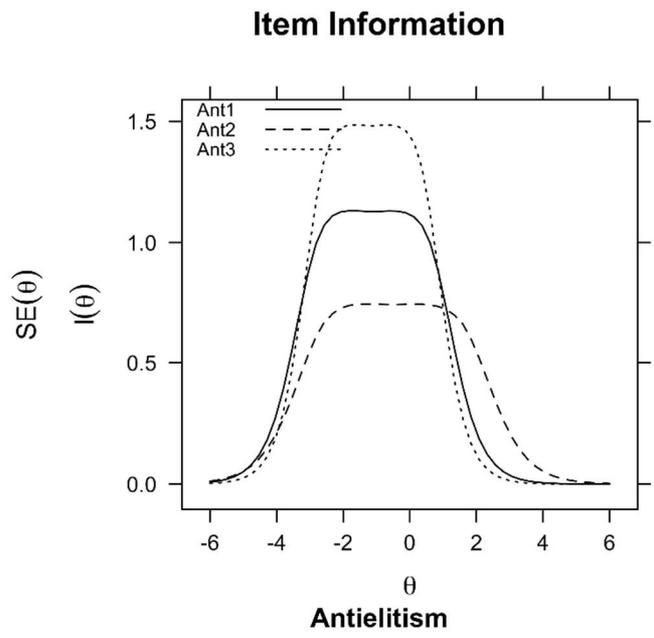
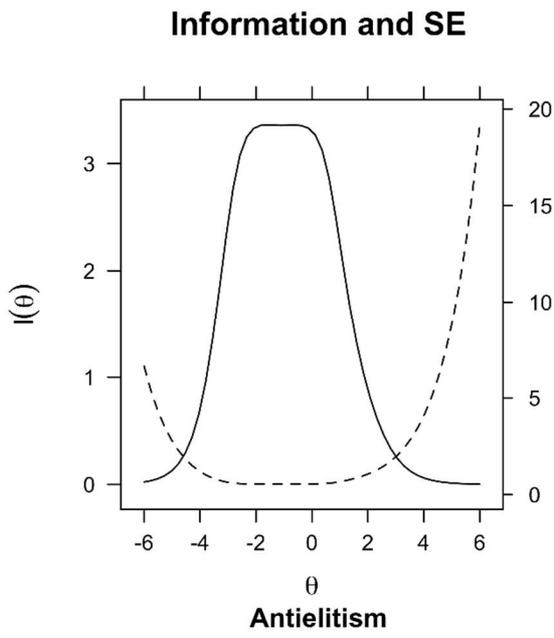


Figure 7.4

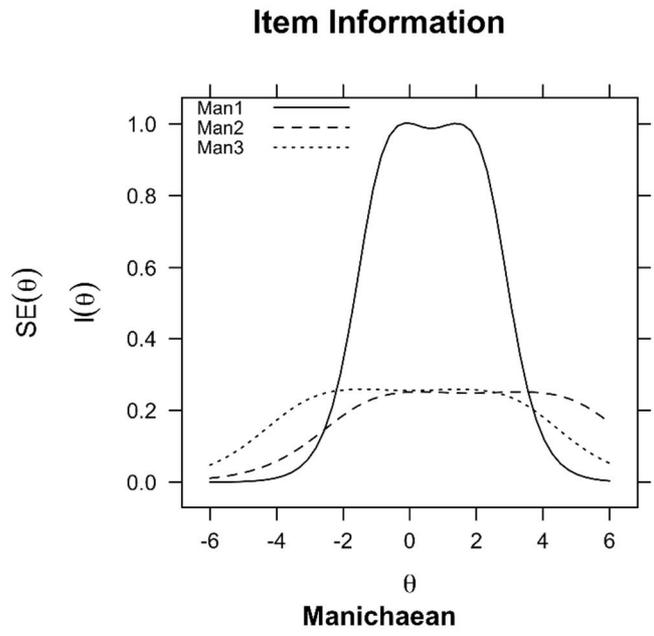
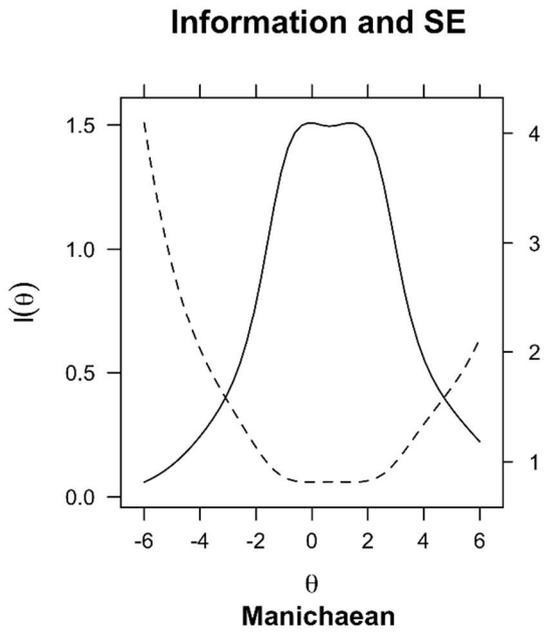


Figure 7.5

Information and SE

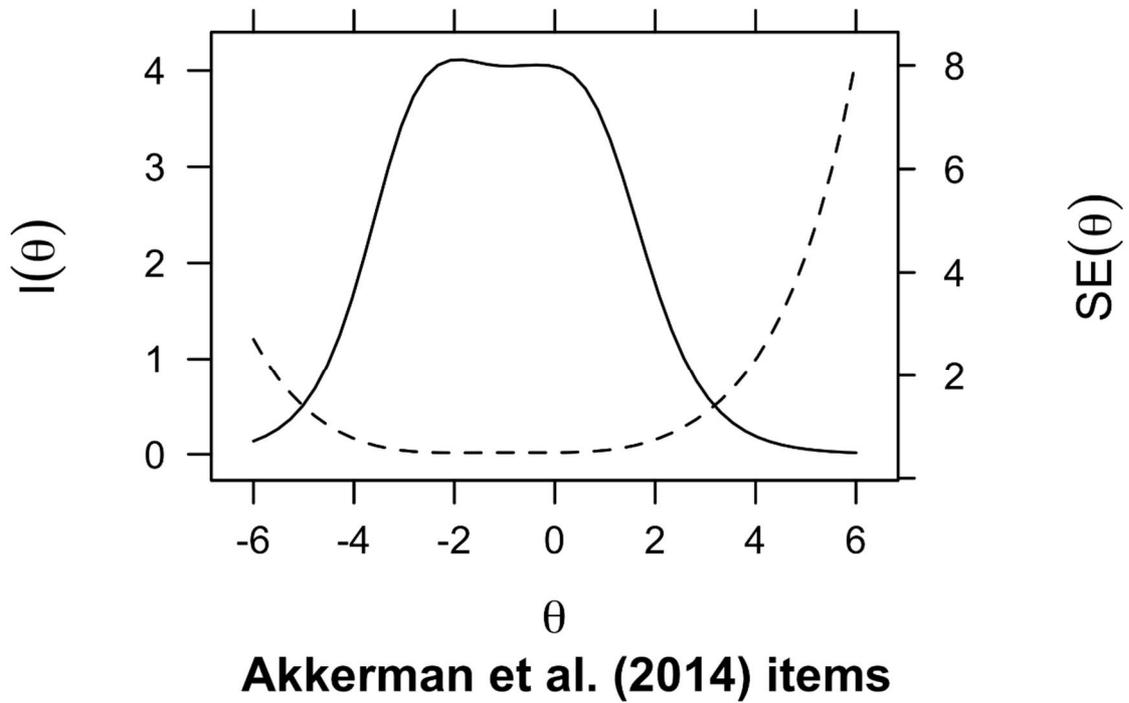
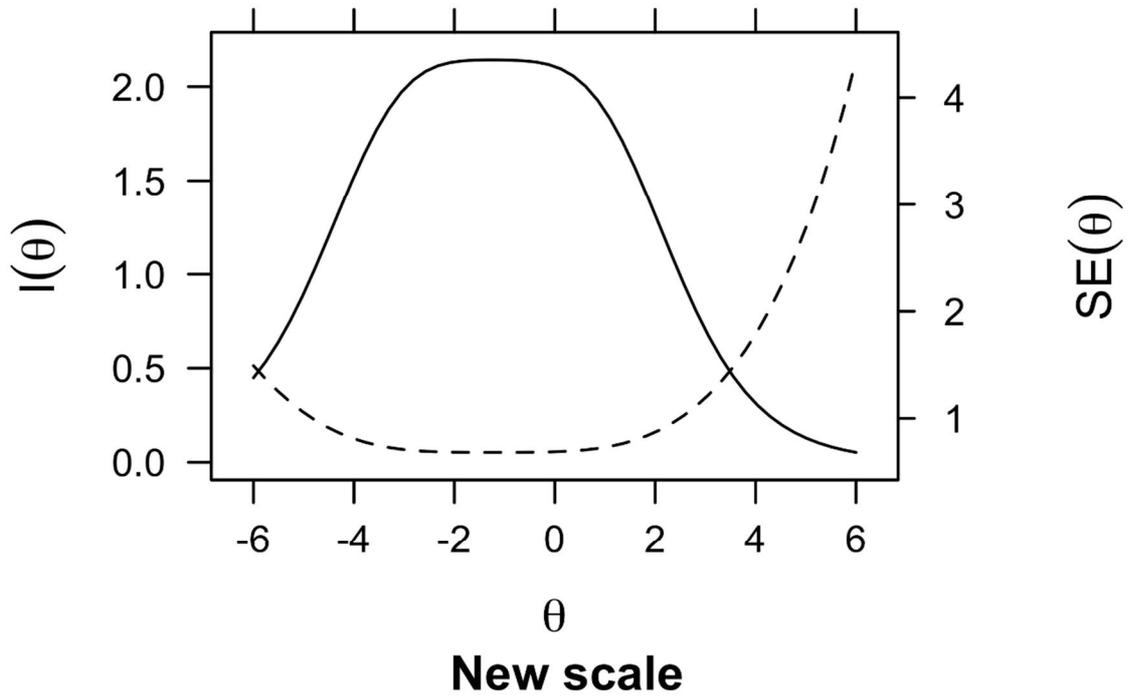


Figure 7.6