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UNIVERSITY OF CALIFORNIA
RIVERSIDE

Fiscal Policy Preferences in the U.S. Context: Theory, Measurement, and Practice

A Dissertation submitted in partial satisfaction
of the requirements for the degree of

Doctor of Philosophy

in

Political Science

by

Justin Paul Freebourn

September 2023

Dissertation Committee:

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2023

The Dissertation of Justin Paul Freebourn is approved:

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University of California, Riverside

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complicated and challenging. It would not have been possible without their encouragement and support. *Ad astra per aspera.*

DEDICATION

For my partner, Izzy, and for our mothers. For all our mothers.

ABSTRACT OF THE DISSERTATION

Fiscal Policy Preferences in the U.S. Context: Theory, Measurement, and Practice

by

Justin Paul Freebourn

Doctor of Philosophy, Graduate Program in Political Science

University of California, Riverside, September, 2023

Dr. Jennifer Merolla, Chairperson

In this dissertation, I examine the theoretical and methodological bases for drawing inferences about Americans' fiscal policy preferences. American fiscal policy preferences are somewhat contradictory, with Americans expressing high levels of support for helping the poor, but low levels of support for fiscal policies like welfare that help the poor. Existing scholarship attributes this to individual-level racism, a set of beliefs that link race to merit and deservingness of aid, and a norm of equal treatment. However, I argue past survey-based research is limited by the topics assessed and compatibility of item wording across surveys. To broaden the fiscal policies assessed, I conduct three primary survey experiments that compare preferences for low-risk, particularistic fiscal policies (e.g., Welfare) to high-risk, universalistic fiscal policies (e.g., Universal Basic Income). I find support for my hypotheses that American fiscal policy preferences are driven by perceptions of whether fiscal policies treat people equally, consistent with past research on the fiscal policy preferences in the United States, United Kingdom, and Germany, with Americans tending to prefer fiscal policies they perceive as treating people more equally.

This effect persists after controlling for individual-level racism, demographic variables, and other factors using a psychometric model developed in this dissertation to account for multicollinearity among variables. A preference for fiscal policy universalism is consistent with the paradox of redistribution in sociology, and a preference for equal treatment is consistent with a strategic theory of social identity advanced in this dissertation. Controlling for policy risk, Americans prefer the fiscal universalism of Social Security and Universal Basic Income over other, particularistic fiscal policies like Reparations and Welfare. To facilitate objective comparisons of items across surveys, I advance a computational psycholinguistic theory of survey research that allows for quantitative textual analysis of survey items, news articles, and other texts using the deterministic, automated hyperspace analogue to language. HAL does not require human judgement, allowing researchers to control for the influence of environmental heuristics (e.g., news articles) to identify true-score values more accurately for individual level traits, like the trait preference for equal treatment I hypothesize drives American fiscal policy preferences. I conclude with an examination of the emerging science of neurodiversity—the opposite of eugenics—connecting it to republican political theory.

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Chapter 1: Introduction

How can fiscal policy preferences—preferences for government taxing and spending—be conceptualized and measured? This question is of scholarly and practical importance to political economists, political psychologists, and political scientists concerned with public opinion, generally. On the one hand, understanding what Americans want is of normative importance to democratic theory and the performance of representative democracy (Bartels, 2016; Pitkin, 1967; Bishin, Freebourn, & Teten, 2021; Bowler, Freebourn, Teten, Donovan, & Vowles, 2022; Abernathy, Esterling, Freebourn, Kennedy, Minozzi, Neblo, & Solis, 2019; Camobreco, 1998). On the other hand, evidence from public opinion and political economy suggests Americans fiscal preferences are unstable and contingent on measurement context (Zaller, 1992; Ballard-Rosa, Martin, & Scheve, 2017). Thus, in this dissertation I ask:

Research Question 1) How can we best measure fiscal policy preferences?

Research Question 2) What types of fiscal policies will Americans support, and why?

These questions are motivated by the disparate liberal republican and democratic perspectives on the promise and practice of American democracy. While both perspectives emphasize popular sovereignty, or the notion that the people should rule, liberal republicans and democrats tend to conceptualize institutional performance in terms of different criteria, complicating a straightforward interpretation of their preferences. Republicans emphasize the long-term preservation of democracy as of paramount importance, while democrats emphasize the short-term responsiveness of

democracy as of paramount importance (Dahl, 2003; see also, Dickson & Scheve, 2010). In a broader theoretical sense, I therefore seek to construct a framework that integrates liberal republican and democratic criteria to understand the performance of American democracy in a scientific way.

I focus on the American context because of the outsized role the United States plays in the global economy, because of the unique complexity of American political development, and because the American context is familiar to me.

Past research finds that while Americans would prefer a more equal society (Norton & Ariely, 2011), neither institutional changes regulating union power nor partisan changes in government are sufficient to lower inequality in democratic societies (Scheve & Stasavage, 2009), necessitating a broadly integrative and interdisciplinary approach to public policy and American democracy. Thus, I focus on how traits and contexts interact, e.g., thought trait activation and inhibition, to explain policy preferences relevant to redistributive politics.

I build on extant research on fiscal policy preferences, which demonstrates that a trait-like preference for a norm of equal treatment motivates opposition to progressive taxation (Scheve & Stasavage, 2023), producing wealth inequality in democracies (Scheve & Stasavage, 2017). Across contexts of Germany, the United Kingdom, and the United States, perceptions of fiscal policy fairness arise from a preference for equal treatment of individuals by the state (Scheve & Stasavage, 2023; see also, Scheve & Stasavage, 2016). I depart from this research in two ways. First, I examine fiscal *spending* policies in response to calls by fiscal policy preference scholars for such

research (Ballard-Rosa, Martin, & Scheve, 2017). I situate this focus at the intersection of survey-based and public opinion research as an examination of group-based interest in policy preference formation (Gilens, 1999; Ballard-Rosa, Jensen, & Scheve, 2022). Second, I develop a typology of fiscal policies to add theoretical rigor to the study of fiscal policy preferences. I situate this typology at the intersection of political theory as an examination of fiscal ideology and political psychology as an examination of individual-level traits (Sidanius & Pratto, 2001; Huddy, Sears, & Levy, 2013; Newman, Hartman, Lown, & Feldman, 2015; Scheve, 2010; Ballard-Rosa, Jensen, & Scheve, 2022).

Of general concern in this dissertation is contamination of fiscal policy preference measurement by effects of framing, or variation in how items are worded, and issues portrayed, e.g., in partisan terms (Murphy, Burgess, Johnson, & Bowler, 2012; Ballard-Rosa, Martin, & Scheve, 2017). For example, Americans generally support the concept of an estate tax as a fiscal policy necessary to ensure equality of opportunity for each generation (Bartels, 2016). This support changes, however, when the estate tax is framed as a “death tax” and mortality salience is primed (Bartels, 2016), consistent with research that mass mobilization for war changes support for taxing inheritances (Scheve & Stasavage, 2012).

This gets at the important concept in psychometrics—the science of measuring mental capacities and processes—of construct relevant versus construct irrelevant variance (Raykov & Marcoulides, 2011). A psychological construct refers to the theorized explanation for some phenomenon (Binning & Barrett, 1989). For example,

“happiness” as a psychological construct may explain observed behaviors like smiling or socializing. Here, both the frequency of smiling or duration of socialization are variables relevant to the psychological construct of happiness. In contrast, happiness may be conceptually unrelated to the number of cups of coffee or tea a person drinks, making such behaviors irrelevant to the construct of interest. For psychologists, framing studies introduce construct relevant variance (e.g., whether taxation is mentioned), as well as construct irrelevant variance (e.g., words like “a”, “an” or “the” shared across frames).

Examining fiscal policy preferences in the American context is of particular interest to scholars of public opinion, in part because rich survey data sets have been collected over a broad historical period, allowing for examination of these random and systematic sources of measurement variance. As Figure 1.1 shows, asking Americans about their spending preferences varies widely depending on whether particularistic, class-based fiscal policies are framed as “Aid to the poor” or “Welfare”. As this data from the General Social Survey (GSS; a nationally representative opinion poll of the United States running 1972 - present) illustrates, Americans like the idea of aid to the poor, with a high percentage wanted to “spend more,” but they tend to oppose the welfare policies that provide such aid! It makes little sense to construe Americans’ fiscal policy preferences as (*Aid to the poor* > *Welfare*) without additional information (e.g., attitudes towards the components of welfare or the identities of the poor). Care must be taken when assessing fiscal policy preferences using survey data to ensure the results are valid (Ballard-Rosa, Martin, & Scheve, 2017).

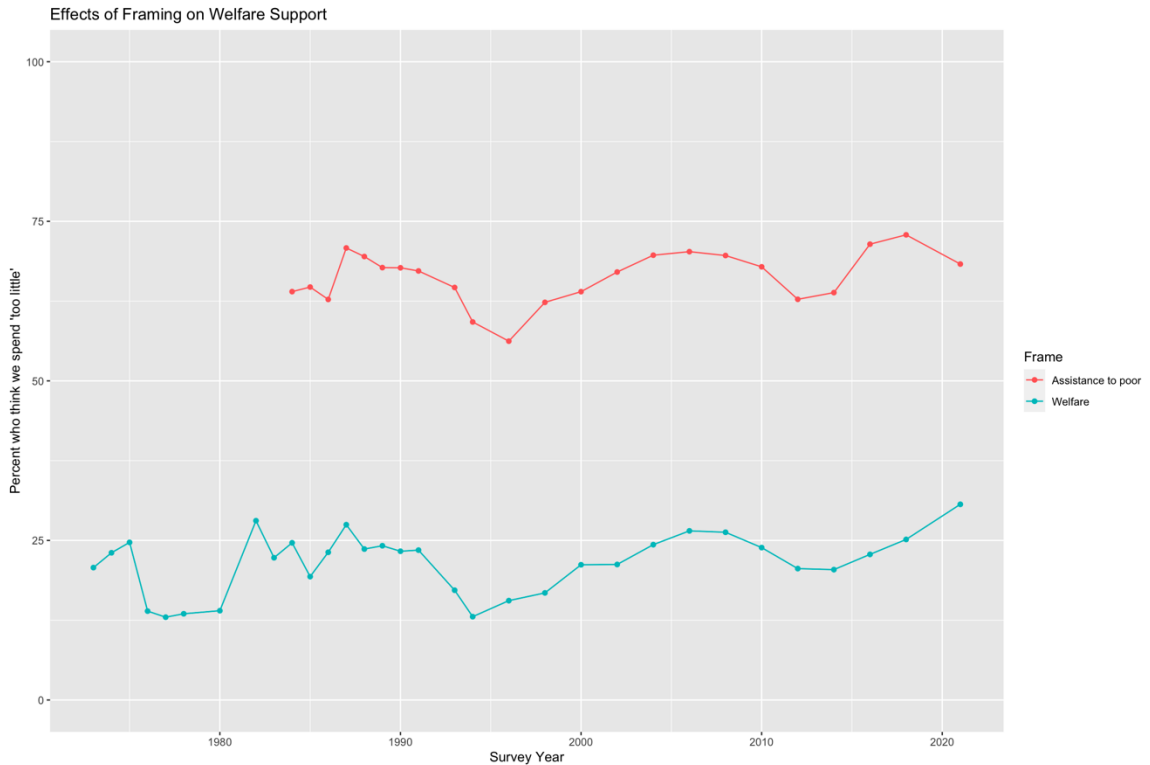


Figure 1.1: Effects of framing on fiscal policy support.

A close examination of these GSS items further serves to illustrate important concepts in psychometrics, like shared construct-irrelevant variance. Across these (non-experimental) items, a common frame introduces some psycholinguistic variance in wording shared across the set of fiscal policy preference items:

[GSS: Q64, Q65] We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount.

For several specific items, the format is shared and introduces construct irrelevant variance to the measurement of fiscal preferences. For Welfare, the GSS asks: [GSS: NATFARE] “Welfare are we spending too much, too little, or about the right amount on

welfare?” The word “welfare” is relevant to the construct of “support for welfare,” while other items introduce variance relevant to the construct of interest for each item (e.g., the phrase “social security”). However, the psychological construct “support for welfare” is not well-defined.

In addition to the previous item, the GSS asks: [GSS: NATFAREY] “Assistance to the poor, are we spending too much, too little or about the right amount on assistance to the poor?” While asking about welfare may assess preferences towards that specific policy, or class of policies, asking about assistance to the poor assesses preferences towards unspecific policies.

These effects of item wording and issue framing serve as one set of limits on the validity and generalizability of inferences drawn from survey items, e.g., about fiscal policy preferences (Ballard-Rosa, Martin, & Scheve, 2017; Scheve & Stasavage, 2023). In terms of fiscal practices, the United States has a complicated federal system of taxation and spending, as well as non-fiscal regulation (Gritter, 2017; Jensen, Marble, Scheve, & Slaughter, 2021). Both the federal government and individual states, for example, set minimum wage policies that help the poor (Hacker & Pierson, 2010). However, it is unclear whether respondents to the GSS would include “raising the minimum wage” in their interpretation of “spending too little on assistance to the poor,” and lack of GSS items on minimum wage laws—be they federal, state, or local—reduce the ability of public opinion scholars to make valid inferential claims about whether or the degree to which American political institutions deliver responsive democracy or substantive policy representation to the American people. If surveys do not ask about fiscal or regulatory

policies, scholars cannot make claims about the quality of democracy within the unmasked fiscal or regulatory domains. The complicated nature of federal spending on redistributive policies of assistance to the poor, like welfare block grants to the states (Gritter, 2017; Rom, Peterson, & Scheve, 1998; Scheve, Peterson, & Rom, 1996), further illustrates the limitations of making inferences rooted in the mere descriptivism of standard public opinion research: In a representative democracy, policymaking is a multi-level game where citizens may lack knowledge of their legislative agents' true agendas or past behaviors (Zaller, 1992; Bishin, 2009).

Beyond this complexity, levels of abstraction (e.g., *Welfare* \in *Concrete Policies* and *Aid to the poor* \in *Abstract Policies*?)¹ pose challenges to drawing valid inferences from survey data (e.g., *Abstract Policies* $>$ *Concrete Policies*?). It is unclear, for example, whether respondents to the GSS would include the Supplemental Nutrition Assistance Program (SNAP) or the Temporary Assistance for Needy Families (TANF)—i.e., food aid—programs in their interpretation of “Welfare” (i.e., $\{SNAP, TANF\} \in Welfare?$). Existing research in American public opinion (e.g., Bartels, 2016; Gilens, 1999) suggests that asking about specific policies related to welfare, like feeding the poor, enjoy higher levels of support when compared, again, with “Welfare” (i.e., *Feeding the poor* \notin *Welfare*). Again, effects of framing limit the ability of scholars of representation to link descriptive inferences about fiscal

¹ The character \in signifies that an item is an element of some larger set. For example, $\{a\} \in Alphabet$ means “a” is an element or member of the set of “Alphabet” items. Likewise, $\{a, b\} \in Alphabet$ means that “a” and “b” are members of “Alphabet” while $\{1,2\} \notin Alphabet$ are not.

policy preferences from public opinion survey data to actual practices about fiscal policies enacted by their democratically elected policymakers (Bartels, 2016). Indeed, one might forgive politicians for appearing at times ignorant of what Americans want, and perhaps appearing to rely on the incomplete heuristics of their political ideologies, when trying to mirror the will of the American public through the policies they enact.

Of specific concern to this dissertation is the need to move the measurement of fiscal policy preferences from an approach grounded in mere descriptivism (e.g., the level of support for “Welfare”) to an approach grounded in psychological traits (e.g., working memory). Traits refer to characteristics of animals that vary within species between individuals (e.g., neuroticism versus agreeableness) and are evolutionary conserved over time (e.g., extroversion versus introversion, which can be observed from humans to tigers). Social animals, like humans, must evolve traits that influence norms and behaviors related to how the older, weaker, or disabled members of their group are treated, even if those social animals, like bees, lack fiscal policies. A trait-based approach to fiscal policy preferences and norms of fairness is therefore necessary to explain change and stability in behaviors over time and should explain variation and stability in norms across organismic or social systems.

A Trait-based Approach to Fiscal Policy Preferences

A trait-based approach is important because economists, psychologists, and opinion scholars typically study different phenomena, but they agree on the basics of human biology. Where behavioral economists (e.g., Wood, 1998) may be concerned with the trait preferences of consumers regarding consumption—ability to delay

gratification—over multiple time periods, political psychologists (e.g., Merolla & Zechmeister, 2009) may be interested in the effects of exogenous shocks—like the 9/11 attacks—on risk aversion or mortality salience. For both, identification of a trait that is activated or inhibited serves as the theoretical basis to explain behavior.

A trait-based approach to the study of human behavior is complicated by the context-dependence of trait activation, the endogeneity of traits, and the proliferation of constructs (Mischel & Shoda, 1995). A trait-ability to delay gratification may be influenced by genetics, but the epigenetic expression of genes depends on facets of maternal context, like stress, a facet of context that also affects the maturation of areas in the prefrontal cortex responsible for our ability to make strategic behavioral decisions (Reardon, 2016; Mani, Mullainathan, Shafir, & Zhao, 2013). Poverty, for example, is linked to epigenetic changes in mental illness (Reardon, 2016). These conceptual challenges have reinforced the proliferation of trait constructs in psychology—for every social, political, or economic context in which a decision can be made, a trait can be hypothesized to explain behavior, reducing the scientific utility of trait-based approaches asymptotically towards zero as the number of context-specific traits grows unbounded.

A person's fiscal policy preferences—like any process of learning—reflect the current state of the traits that have been activated and reinforced or inhibited and attenuated over the course of their lifetime (Mischel & Shoda, 1995; Zaller, 1992; Ballard-Rosa, Martin, & Scheve, 2017; Scheve & Stasavage, 2023). To avoid issues of construct proliferation (e.g., Newman, Hartman, Lown, & Feldman, 2015), hypothesized traits should explain behavior across contexts and across multiple levels of analysis

(Garcia, Desmarais, Branscombe, & Gee, 2005; Mlodinow, 2013). For maximal scientific utility and conceptual validity, a trait-based approach to understanding fiscal policy preferences should therefore rely on traits that can motivate behaviors across multiple social-cognitive domains (i.e., contexts) and across multiple evolutionary junctures (i.e., species).

Conceptual validity requires that such traits make sense when considered from an evolutionary perspective (Turner & Reynolds, 2003). It does not make evolutionary sense, for example, to speak of a trait preference for “Welfare”, because such a preference is a social constructed and culturally contingent set of fiscal policies. Past research on fiscal policy preferences in political economy (Ballard-Rosa, Martin, & Scheve, 2017) has sought to measure latent trait preference for “progressivity” in fiscal policy preferences, which at best makes sense for animals with complex social hierarchies, like humans. It would make less sense to discuss the trait preference of bees for progressivity in allocative decision-making in terms of the bees’ preferences for welfare. In this dissertation, I argue a trait preference for equal treatment serves the most valid and generalizable basis for a trait-based understanding of Americans’ fiscal preferences.

That is, psychologists and economists can agree that ability to process political and economic information varies across people, like a trait. Some people are able and motivated to develop complex mental models of fiscal policies, while others are cognitive misers who rely on simplistic ideological or emotional heuristics to evaluate policies. A cognitive miser might, for example, rely on simple heuristics (e.g., “socialism bad”)

when evaluating federal spending on “Welfare” as being too little, about right, or too much, while giving responses based on different heuristics (e.g., “Jesus said to feed the poor.”) when asked about “assistance to the poor.”

In this dissertation, I therefore focus on preference for fiscal policy universalism versus fiscal policy particularism as an indicator of trait-like fiscal policy preference. I conceptualize fiscal policy universalism as policies that allocate fiscal benefits on a basis by which most people can expect to directly benefit. Social Security, for example, allocates fiscal benefits on the basis of age—as most people can expect to benefit from the policy as they age, Social Security is a universalistic fiscal policy. In contrast, Welfare allocates fiscal benefits on the basis of class—as most people do not expect to become poor, Welfare directly benefits only a subset of people who actually become poor, making it a particularistic fiscal policy.

This directly responds to calls by political economists to extend existing research on tax policy preferences or distributive outcome preferences to include spending policy preferences for theoretical completeness (Ballard-Rosa, Martin, & Scheve, 2017, p. 15). Following past fiscal policy preference research (Scheve & Stasavage, 2023), I expect that Americans will prefer universalistic fiscal policies because such policies rely on the simple heuristic of equal treatment. Controlling for the effects of framing and policy risk, the simple heuristic of equal treatment ought to appeal to Americans who are cognitive misers and disinterested in or ignorant of American political economy (Zaller, 1992). While individuals may vary in their ability or willingness to process complex political information, I expect this to hold on average for the American public over time.

A trait-based approach to fiscal policy preferences implies generalizability and scientific utility beyond the singular context of the Americas (Scheve & Stasavage, 2023). However, observation of a preference for equal treatment may be complicated by cultural contexts where visible differences between people and groups provide a basis for differential treatment. In India, for example, differential treatment on the basis of skin color—i.e., colorism—has emerged as a behavioral strategy for the organization of society into hierarchical strata (Golash-Boza, 2016). Even in such contexts, however, the salience of these markers of difference to fiscal policy preferences may vary, e.g., with item framing, as traits related to colorism, universalism, and equal treatment are activated and inhibited, e.g., by daily news, over time, within groups, and across populations.

Across these levels and units of analysis, I posit evolutionary pressures explain a trait-based preference for equal treatment, generally, and for universalistic fiscal policies, specifically. Absent specific information about an individual (e.g., their ability or need) or a group (e.g., their age or color) that would justify differential treatment, like food aid, equal treatment allows for individual merit or comparative advantage to select persons or nations for political or economic leadership as the needs of the population change.

Theoretical incommensurability across disciplines necessitate special attention to the nature of the policies examined here. On the one hand, economists adopt a high level of construct specificity when conceptualizing and analyzing policy preferences. Wage policies, for example, are treated as distinct from fiscal policies. This may facilitate the proliferation of constructs to explain and predict behavior in each policy domain. On the other hand, psychologists adopt a low level of construct specificity when conceptualizing

and analyzing policy preferences. Rather than conceptualizing affirmative action as a *labor* policy, for example, work in social psychology examines opposition to gender-based affirmative action as a *redistributive* policy (Garcia, Desmarais, Branscombe, & Gee, 2005). Likewise, fiscal policies are economic tools used by the government to manipulate the macroeconomy (Buchanan, 1967), not necessarily tools used by the government to offer justice to historically marginalized groups. Thus, while the focus of this project is principally on fiscal policy preferences (e.g., towards universal basic income), attention is paid to the generalizability of theory, methods, and findings for public policies more broadly (e.g., for a maximum wage). Across these social cognitive domains, I expect a trait preference for universalism and equal treatment to explain and predict variation in public policy preferences.

The trait-based approach I advance in this dissertation builds on the paradox of redistribution in sociology (Gugushvili & Laenen 2021; Korpi & Palme 1998), which examines why universalistic policies—those from which most people can expect to directly benefit—tend to be more effective at reducing poverty and inequality compared with particularistic policies targeted to help only the poor. I argue a strategy rooted in universalism is an adaptive response by any population facing uncertain future selection pressures (i.e., when eugenics is unviable), and that this strategy is motivated by an individual trait preference for equal treatment, as an adaptive response to living in a large population where information about specific people that would warrant differential treatment (e.g., whether a stranger is of high or low general mental ability) is unavailable.

To investigate, I draw on archival survey data about Americans' fiscal preferences to examine preference for universalistic policies in greater detail, propose a psychometric model of public utility with an integrative typology of fiscal policies and reconceptualization of risk, and conduct a series of survey experiments. I generally find support for the strategic social identity theory of preference for fiscal universalism and equal treatment that I propose, and I demonstrate the robustness of the findings to an extended set of fiscal and non-fiscal policies, too. Because political scientists conceptualize behavior in ideological terms, e.g., with respect to partisan politics, it is necessary to also examine fiscal and non-fiscal policy preferences using an ideological approach and computational psycholinguistic methods.

An Ideological Approach to Fiscal Preferences

In addition to a trait-based approach to fiscal policy preferences, understanding fiscal policy preferences in ideological terms is of interest to political scientists and theorists (Feldman & Johnston, 2014). An important starting point for such an exploration is found in political economy, which roughly traces perspectives on economic theory from the 1600s, through the 1700s, to the 1800s (Oatley, 2018). Thus, while much of this dissertation focuses on the paradox of redistribution in sociology, which emphasizes the universalism versus particularism in fiscal policies, and a norm of equal treatment in political science, a more general ideological approach is outlined here.

As is shown in Table 1.1, the 1600s saw an emphasis on *mercantilism*, which conceptualizes economics in terms of competition for wealth and power among states. I take the corresponding fiscal ideology to emphasize projects that contribute to the welfare

of a specific nation, like defense spending in the United States. The 1700s saw the rise of *liberalism*, which was contemporary to the rise of the scientific Enlightenment that emphasized individual rationality as an important tool for understanding and organizing the world. I take the corresponding fiscal ideology to emphasize projects that contribute to collective wellbeing, like the universalism of Social Security advocated by Thomas Paine. The 1800s saw the emergence of *Marxism*, which has come to be associated with the class-based particularism of the modern welfare state. I take the corresponding fiscal ideology to be policies targeted at specific groups, like welfare assistance to the poor.

Table 1.1: Perspectives on economics and politics.

Economic Ideology	Fiscal Ideology
State-centered Mercantilism <i>(1600s colonial era)</i>	Nationalism <i>(e.g., defense spending)</i>
Individual-centered Liberalism <i>(1700s revolutionary era)</i>	Universalism <i>(e.g., social security)</i>
Group-centered Marxism <i>(1800s industrial era)</i>	Particularism <i>(e.g., welfare)</i>

In terms of the global population, both nationalism and particularism are predicated on a behavioral norm of differential treatment, e.g., of countries or groups. In this dissertation, the classic social identity theory from psychology (Tajfel & Turner, 1986) serves to integrate the perspectives on scientific basis for the ingroup-favoring norms of behavior seen within, between, and across state-centered and group-centered levels and units of analysis (Ballard-Rosa, Jensen, & Scheve, 2022). This theory is the basis for a trait-centered examination of meritocracy, or the perspective rooted in classical liberalism that people should be treated equally or on the basis of their individual effort and ability rather than memberships in groups like hereditary nobilities or social identities (Garcia, Desmarais, Branscombe, & Gee, 2005).

Racial identity, through the heritability of traits like skin color, complicates the straightforward transmission of classical liberal individualism through the abolition of slavery in the United States. **Modern liberalism tends to emphasize the importance of group identity, e.g., in the removal of group-wise badges of slavery, following the Civil War and Reconstruction Amendments passed by the Radical Republican Congress (Baer, 1983).** Both classical and modern liberalism emphasize a role for the state in providing public goods, correcting market imperfections, and representing interest groups (Oatley, 2018). Neoliberalism, in contrast, minimizes the role of the state

to the mere protection of private property, reinforcing a perception that democratic, humanistic, or meritocratic considerations are subordinate to the market, which contains only errors that arise from ideologies that emphasize group interests over individual interests (Golash-Boza, 2016).

Identification of fiscal preferences in ideological terms is of interest not only to political scientists who study public opinion, but also to political theorists who study the concept of representation (e.g., Pitkin, 1967; Mansbridge, 2003). To illustrate, consider again public opinion data. Using fiscal policy spending preference data from the GSS, Americans appear to be fiscal universalists, preferring the Social Security of classical liberalism to both the defense spending of mercantilist nationalism and the welfare spending associated with group-centered Marxism.

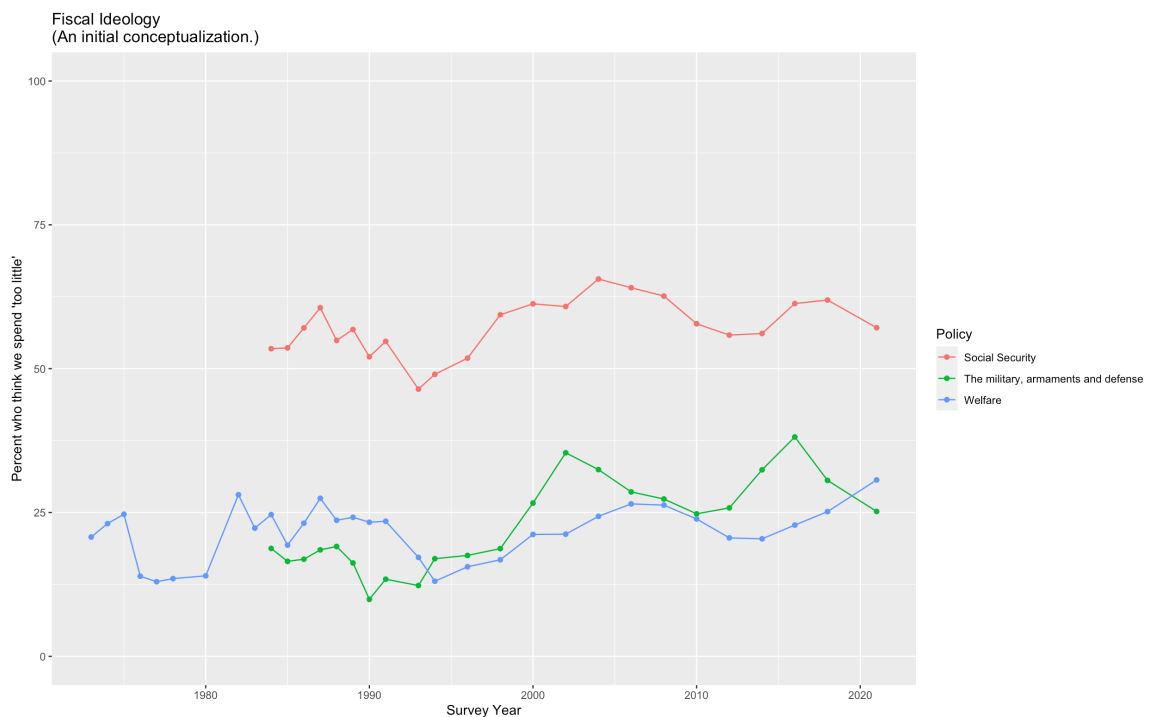


Figure 1.2: A preliminary conception of fiscal ideology.

This serves as an initial conceptualization of fiscal preferences not merely in trait terms, but tentatively in ideological terms. It is a framework to which this dissertation will return in its later chapters as it is relevant to conceptualizing the criteria by which partisans evaluate the quality and institutional performance of American democracy. An ideological framework is important because it serves to integrate theoretical and empirical perspectives on the motivations for human behavior (e.g., intentions to cooperate or defect; Abramson, Aldrich, Blais, Diamond, Diskin, Indridason, Lee, & Levine, 2010; Dickson & Scheve, 2010; Bechtel, Liesch, & Scheve, 2018; Scheve, 2014).

Extant psychological theories on conflict and cooperation in society pose ideological challenges for the study of fiscal policy preferences from an ideological and scientific perspective. On the one hand, social dominance theory (Sidanius & Pratto, 2001) explains humans as motivated by the social dominance orientation trait. This perspective explains that individuals high in social dominance create conflict in society, making the social dominance theory compatible with both mercantilist and Marxist perspectives, but not the positive-sum harmony of classical liberalism (e.g., commercial republicanism or *doux commerce*; Montesquieu, 1748; Saadia, 2016). On the other hand, social identity theory (Tajfel & Turner, 1986) explains human behavior as motivated by the universal need for humans to derive self-esteem from their individual life accomplishments and symbolic group attachments. Between social dominance theory and social identity theory, only social identity theory explains the conditions under which the positive-sum harmony of classical liberalism—the commercial republican notion that commerce facilitates peace, reinforcing the openness to trade that raises welfare—can be

expected. However, social identity theory as classically conceptualized lacks a trait-level explanation for variation in human behavior comparable to social dominance theory, reducing its utility as a scientific basis for understanding fiscal policy preferences. I depart from past scholarship by identifying trait preference for equal treatment as motivating policy preferences within a strategic social identity theory.

These perspectives converge on the concept of meritocracy (Garcia, Desmarais, Branscombe, & Gee, 2005). Meritocracy refers to the notion that equal effort ought to receive equal reward, or that people should be treated equally or on the basis of their individual ability rather than group membership. In American political development—a subfield that examines institutions from a historical perspective—this is seen in the constitutional rejection of hereditary group membership, nobility (Henretta, 2015). Fiscal policies of taxing and spending, along with other policies like affirmative action or wage laws, shape the distribution of opportunities and rewards in societies (Baer, 1983; Cascio & Aguinis, 2018; Paulsen, Scheve, & Stasavage, 2023). Departing from past research in psychology and political science (e.g., Norton & Ariely, 2011; Van der Toorn & Jost, 2014) that has focused on preferences for the distributional consequences of fiscal policies—the outcome justice of wealth accumulation—I follow recent research in political science (Scheve & Stasavage, 2023) and focus instead on preferences for the treatment criteria of fiscal policies: the process fairness of equal treatment.

Beyond a simple examination of public opinion and fiscal policy preferences, the broader scope of this project is concerned, then, with an understanding of justice and fairness perceptions and preferences in the domain of public policy (Scheve & Stasavage,

2023; Van der Toorn & Jost, 2014; Hoynes & Rothstein, 2019; Babilla, 2023). American political ideology is rooted in classical liberal notions of equal treatment on an individual basis, without hereditary privileges. How do our institutions perform, within this republican ideological framework? A focus on republican ideology is of practical importance, because in their book *How Democracies Die*, Harvard political scientists Levitsky and Ziblatt (2019) call for a reformation of the American Republican Party in response to political polarization and the decline of democratic norms in the United States. However, Levitsky and Ziblatt (2019) decline to provide guidance for what such a reformation should entail, or what by what criteria success of a republican reformation should be evaluated.

Thus, a normative and theoretical focus of this project is to contextualize American fiscal (and non-fiscal) policy preferences in, ideological terms, generally, and republican terms, specifically. I propose and validate a computational psycholinguistic method for survey-based public opinion research that I argue can integrate ideological information about effects of context, e.g., of news articles on survey responses, to control for construct irrelevant variance, e.g., in survey item wording, and allow for the identification of true-score (i.e., rational and deliberative) fiscal policy trait preferences necessary for valid inferences to be drawn, e.g., about behavior, about constructs relevant to interdisciplinary science, e.g., ideology.

Psychologists expect that rational, deliberative behavior is possible when traits related to emotional arousal are not activated or are inhibited. The response a person gives in a survey where, e.g., neither racial identity nor political identity are salient,

reflects their true-score, rational preference. In contrast, the response a person gives in a survey where, e.g., both racial identity and political identity are salient, reflects a score measured with error. This is counter to the empiricist perspectives of economics and political science, which emphasizes real-world financial and economic behavior as the objective standard for scientific analysis. Psychometrics begins to integrate these perspectives by recognizing that all observations contain error, such that the true score for any construct of interest, T , is the sum of its observed scores, O , and error, E . For the purposes of this project, $T = O + E$ may be understood as relating true-score inferences about traits and preferences to behaviors observed as responses in survey data as measured with some amount of error arising from psycholinguistic effects of item wording, issue framing, and available heuristics. With this in mind, the next section outlines the subsequent chapters of this dissertation.

Outline for Dissertation

In Chapter 2, I explain the strengths and limitations of archival data, and I examine the importance of social identity (e.g., race and racism) to understanding Americans' fiscal policy preferences. Using archival data from the General Social Survey, I demonstrate the limits of extant fiscal policy preference survey items in terms of interdisciplinary social science, e.g., to identify traits. Archival surveys, for example, tend to focus on attitudes towards existing policies, rather than risky new policies, which limits the validity of inferences that can be drawn about the physiological reactivity, ideological orientation, or risk tolerance of survey respondents (Bechtel, Jensen, McAllister, & Scheve, 2019).

I contribute a normative frame for the project, nesting the motivation for understanding American fiscal and political ideology in republican terms. An important facet of American political development is understanding the degree to which Enlightenment values are transmitted and transmuted over time. Are Americans republicans? Do their preferences reflect classic liberal or modern liberal values? I depart from the past literature, which tends to emphasize mere description of what people want or psychological explanation for why they want it (e.g., Gilens, 1999; Bartels, 2016), to contribute an integrative ideological framework for understanding the evolution in political thought over time and across contexts.

Chapter 3 advances and validates a psychometric model of public opinion, applying it to archival and experimental survey data. This model addresses concerns raised in sociology about endogeneity in the econometric modeling of social-psychological processes (Piven & Cloward, 2000) and the proliferation of trait constructs relevant to fiscal policy preferences (e.g., social dominance orientation). For example, education and income are often included as predictors of political behavior. However, both income and education influence the likelihood that a person will be targeted by political parties for mobilization, making them endogenous indicators of propensity for political behavior, and both income and education reflect behaviors that arise from the activation, inhibition, and reinforcement of traits through learning, making them endogenous indicators of trait-preferences. To address such concerns and maximize compatibility with a trait-based approach to understanding fiscal policy preferences, I draw on the theory of planned behavior (Ajzen, 1991) from organizational psychology

and management science (Cordano & Frieze, 2000). In this way, the theory of planned behavior serves to integrate interdisciplinary perspectives on political information processing.

At issue are statistical concerns (e.g., multicollinearity among demographic variables) as well as conceptual concerns (e.g., incommensurability between macro- and microeconomics). Because demographic variables like income and education, for example, may be correlated, statistical suppression or other artifacts may bias estimates for coefficients related to micro-level behaviors (Gujarati, 2021). Following the application of the theory of planned behavior as a structural and measurement model of pollution policy preferences in management (Cordano & Frieze, 2000), I argue a structural and measurement path model with latent variables drawn from the theory of planned behavior addresses such concerns by accounting for shared variance among indicators. I argue an emphasis on traits conserved over time by evolution, especially a norm of equal treatment, explains fiscal policy preferences in a parsimonious way, limiting the proliferation of trait constructs necessary to explain fiscal policy preferences.

Departing from past literature, which tends to proliferate constructs like risk propensity and altruism to explain behavior in specific social cognitive domains, I integrate psychometric theory (i.e., $T = O + E$) with the theory of planned behavior to demonstrate how a cognitive-affective theory of systems can limit the proliferation of trait constructs and integrate individual-level characteristics into a parsimonious model.

In the Chapter 4, I utilize a novel survey experiment to examine the central contention that Americans prefer universalistic fiscal policies over particularistic fiscal

policies. I articulate a strategic theory of social identity, which holds that Americans prefer universalistic fiscal policies because they perceive such policies as treating people equally, building on past fiscal policy preference research (Scheve & Stasavage, 2023).

Specifically, I hypothesize:

- H1. Respondents prefer universalistic fiscal policies to particularistic fiscal policies.
- H2. Universalistic fiscal policies are perceived as treating people more equally compared to particularistic fiscal policies.
- H3. Fiscal policy preference is driven by perception of equal treatment.
- H4. Americans will prefer universal basic incomes to other, particularistic fiscal policies, all else equal.

Equal treatment serves psychological needs: moral credit and dissonance reduction. By treating prospective fiscal policy beneficiaries equally, Americans adhere to a “colorblind” version of racial meritocracy, while allowing for the prospect that future generations may maintain, dilute, or invert any racial hierarchies in society. Results generally support the hypotheses, with some important limitations on the generalizability of the survey context to real-world political behavior.

This departs from past literature in that the theory is clearly specified in terms of fiscal policy preferences, but also generalizes to non-fiscal policy preferences in a straightforward way. Moreover, these integrative hypotheses are specified at the level of the population, i.e., what the American public wants, rather than laying out expectations for variation at the levels of individuals or groups.

Chapter 5 advances a quantitative textual method to control for variation in framing across different survey measurement contexts. I demonstrate how the hyperspace analogue to language (HAL; Lund & Burgess, 1996) can be used to not only control for construct irrelevant variance in survey item wording or framing, but also to control for construct irrelevant variance in the abundance of heuristics (e.g., news articles) produced over time. That is, a true-score preference for fiscal policy universalism can be identified by controlling for how and how often elites discuss “Welfare” or “Social Security.”

This gets at the distinction between a state, which is informed by context, and a trait, which is activated or inhibited by context. The state disposition of a person towards welfare is shaped by their repeated exposure to news about welfare, while a trait remains invariant over time.

Alternatively, Americans may truly prefer the fiscal particularism of Welfare, preferring a norm of differential treatment over the equal treatment of fiscal universalism once contextual effects of news coverage are controlled for, counter to my hypotheses. I argue a computational psycholinguistic method allows for recovery of latent fiscal policy preferences by controlling for variation in the availability of informational heuristics (e.g., news mentions of “Welfare”). Applying this method to a combined set of archival and experimental data as a control demonstrate the robustness of an apparent preference for universalism as a determinant of Americans’ public policy preferences.

This departs from previous applications of HAL to sources of data other than public opinion surveys.

Chapter 6 concludes with a summary of findings and a discussion of the practical and ideological importance of this project for how we conceptualize difference, value diversity, and deliberate about politics in American democracy. In response to the call by Harvard political scientists Levitsky and Ziblatt (2019) for greater attention to republican political theory in the American context, I examine both the theory and findings of this dissertation from the dual perspectives of neurodiversity and deontology. Neurodiversity represents an important conceptual counterpoint to the Platonic republican and social Darwinist notion of “survival of the fittest” as well as an emerging locus of interest in civilian-military relations. I discuss duties that arise under republican political ideology from this emerging scientific and theoretical perspective as it relates to the rational basis for a public preference for fiscal policy universalism predicated on a norm of equal treatment.

Thus, this dissertation provides an interdisciplinary response to its motivating question, “What do Americans want?” in terms of their fiscal spending and non-fiscal allocative policy preferences, and “Why do they want it?”

Chapter 2: American Fiscal Preferences

Extant research in public opinion (Bartels, 2016; Zaller, 1992) and on fiscal policy preferences (Ballard-Rosa, Martin, & Scheve, 2017; Scheve & Stasavage, 2023) has typically focused on descriptive inferences about what Americans want in terms of their taxation preferences (e.g., *Progressive > Regressive?*), as well as why Americans hold the preferences observed (e.g., *Equal Treatment > Differential Treatment?*). In political economy this research has centered on how a person's position in the global economy structures their interests (e.g., the specific factor or sectoral models), while in political psychology this research has centered on how a person's position in their domestic social hierarchy structures their interests (e.g., social identity or dominance theories). This chapter examines descriptive and causal inferences drawn from extant survey-based research to shed light on American fiscal preferences, while also highlighting conceptual challenges inherent to interdisciplinary survey-based research.

American fiscal preferences are complex, informed by both the history of political development and individual partisan ideologies (Bartels, 2016; Zaller, 1992; Ballard-Rosa, Martin, & Scheve, 2017; Scheve & Stasavage, 2023). Some Americans take special interest in politics, following specific bills and developing complex mental models to take positions, e.g., on particular fiscal policies (Bartels, 2016; Zaller, 1992). For those less interested in politics and less informed about legislation, fiscal policy and other political preferences are formed based on pieces of information that happen to be

available (i.e., heuristics), as well as salient life experiences an individual brings to the survey measurement context (Zaller, 1992).

American conservatives have a long-standing antipathy towards the centralization of government power, generally, and the Sixteenth Amendment that allows for a federal income tax, specifically (Mehrotra, 2018; Scheve & Stasavage, 2016). American Republicans have long advocated for a national sales tax—FairTax—to replace the federal income tax (Matthews, 2023). Interestingly, these proposals are frequently paired with universal cash grants designed to offset the cost of the tax for low-income individuals.

Survey experiments find that the perceived level of acceptable tax burden rises when respondents are able to express their preferences for government spending, raising important conceptual and methodological questions about the validity of inferences, e.g., about fiscal preferences, drawn from deliberative surveys versus real-world voting behavior (Abbiati, Antinyan, & Corazzini, 2020; Lambertson, De Neve, & Norton, 2018). In political psychology, survey experiments are thought to reveal true-score preferences, e.g., about fiscal policies, as manipulations occur outside of the control or awareness of participants (Huddy, Sears, & Levy, 2013). This research demonstrates that public opinion on spending depends on how fiscal preference questions are framed (Pedersen, 2017), with, e.g., support for spending decreasing as taxation is made salient and the deliberative context of the survey raises the salience of considerations in a way more akin to realistic political contexts.

American liberals have a long-standing antipathy towards the centralization of wealth, generally, and racial gaps in wealth that allow for stratification that persists across generations, specifically (Bartels, 2016). American Democrats have long advocated for a national wealth tax to reduce inequality (Iacurci, 2021). Interestingly, these proposals are frequently paired with fiscal spending policies designed to promote equal access to education and opportunities not linked to race (e.g., Pell Grants).

Americans, generally, appear to want wealth to be more equally distributed in the United States (Norton & Ariely, 2011). However, they underestimate the degree of inequality that exists (Norton & Ariely, 2011; Boudreau & MacKenzie, 2014; Newman, Johnston, & Lown, 2015), complicating the role of policymakers in delivering substantive political representation (e.g., Pitkin, 1967). Finally, evidence from psychology suggest that White Americans see racism as a zero-sum game they are now losing (Norton & Sommers, 2011; Jardina, 2019), suggesting that Americans perceive race as a fixed, impermeable, and particularistic basis for the allocation of fiscal benefits. Social identities like race allow for political cleavages to form, complicated the translation of public preference into public policy in liberal democratic systems (Dickson & Scheve, 2010).

To examines descriptive and causal inferences drawn from extant survey-based research to shed light on American fiscal preferences, the next section examines American political development—a subfield centered on historical analysis of institutions—as it relates race to Americans’ fiscal policy preferences. Race and racial attitudes as an important determinant of Americans’ fiscal policy preferences established

in the public opinion literature (Gilens, 1999), and social identity important to the performance of democratic institutions (Dickson & Scheve, 2010; Ballard-Rosa, Jensen, & Scheve, 2022). Americans are averse to the risk of policy innovation because they cannot predict the impacts of, e.g., new fiscal policies with certainty (Jacobs & Matthews, 2017; Bechtel, Jensen, McAllister, & Scheve, 2019). This risk is salient for policies that may disrupt existing status hierarchies, as research in psychology on redistributive policy preferences demonstrates (e.g., Garcia, Desmarais, Branscombe, & Gee, 2005).

A focus on risk and social identity motivates a discussion of how fiscal preference items from the General Social Survey (GSS) that such items can be interpreted in a multiplicity of ways. Interpretive uncertainty threatens the validity of inferences about fiscal preferences drawn from such items, motivating the development of multi-item inventories as standard practice in psychology to reduce measurement error (Raykov & Marcoulides, 2011). A psychometric approach to the measurement of fiscal policy preferences, particularly with respect to race and racism, is a focus of the next chapter.

Race and Fiscal Preferences in the American Context

The issue of race, specifically, and social identity, generally, is central to American politics and fiscal preferences (Gilens, 2009; Newman, Merolla, Shah, Lemi, Collingwood, & Ramakrishnan, 2021; Ballard-Rosa, Jensen, & Scheve, 2022; Beck, Rainey, & Traut, 1990). A long-standing premise in the study of public opinion is that Americans are averse to the risk of providing European-style social welfare because they perceive it as a threat to meritocracy and social identity (Gilens, 2009; Newman, Johnston, & Lown, 2015).

In sociology and law, race is understood as a social and legal construction rather than a biological reality (Golash-Boza, 2016). While indicators like skin color or hair texture are associated with different racial categories, these categories are constructed by humans for social and political ends. For example, although many societies practiced slavery, the American colonies were first to racialize slavery through laws linking manumission (or the ability for a slave to be freed) to skin color and geographic ancestry (e.g., the Virginian slave codes of the 1660s). In institutional terms, racism may be understood as the imbalances in power between groups that has accrued over time as a result of such laws and customs—Black Americans on average hold only 8% of the wealth White Americans hold (Golash-Boza, 2016), despite being equal in terms of ability (Jones, 1997).

To illustrate why racism matters to the study of fiscal policy preferences and practices, consider conservative opposition to expansion of Medicaid—particularistic fiscal benefits allocated to the poor and sick—under the Affordable Care Act in the American South (Dam, 2023). The South—where the institutional legacy of slavery influences political behavior today (Acharya, Blackwell, & Sen, 2016)—as a region now has high levels of medical debt and lower consumer credit scores compared with the rest of the United States (Dam, 2023), potentially reducing its resilience to exogenous shocks like the COVID Pandemic.

In political science, measures of symbolic racism (survey items that assess what economists would call ideational interests related to the sociotropic effects of race) “predicted Whites’ opposition to policies designed to help Blacks and more weakly

predicted attitudes toward social programs whose beneficiaries were racially ambiguous,” reinforcing the theory that White Americans are averse to redistributive fiscal policies that risk or threaten the status quo of American racial hierarchies (Rabinowitz, Sears, Sidanius, & Krosnick, 2009). However, the fixed and impermeable nature of racial identity—people seldom change their race—makes it challenging to disentangle construct relevant from construct irrelevant variance when examining, for example, fiscal policy preferences (e.g., Sen & Wasow, 2016). Indeed, fiscal preference data from the GSS suggest Americans slightly prefer particularistic aid to Black Americans over particularistic class-based Welfare, as is shown in Figure 2.1, even as Americans prefer the unspecific “Assistance to the poor” above both. This observation serves as part of the inductive basis for Hypothesis 1, which expects a universalistic orientation in Americans’ fiscal policy preferences and will be elaborated on in Chapter 4.



Figure 2.1: Race and fiscal policy support.

Scholarship in public opinion (e.g., Gilens, 1999) has generally focused on individual-level prejudice and institutional-level racism as determinants of fiscal policy preferences. An influential takeaway from this research is that Americans want to help the poor—but only the deserving poor, who are assumed to be White, not Black (Gilens, 1999). On the one hand, individual-level prejudice and racism make sense as and are empirically supported as determinants of fiscal policy preferences (Tesler, 2015). How one decides to allocate fiscal spending depends on many personal values and interests, and race is a visible signifier of identity and group interest. On the other hand, a singular focus on identity and group interest verges on a tautological and over-determined restatement that preferences about fiscal policies—or any policies—are merely a

restatement of racial politics in slightly different terms. As political economist Thomas Oatley (2021, p. 320-1) explains, “American scholarship has embraced a largely identity-based account of Trump’s victory rather than an explanation rooted in rising inequality and economic anxiety...[these] scholars view Brexit as a manifestation of identity politics triggered by the Syrian refugee crisis...” reinforcing a perception that conflict in society is as immutable as race itself. While Oatley was referring to scholarship within political economy, I argue his criticism aligns with existing debates within psychology over social identity, intergroup conflict, and policy preferences.

To the degree that social identity theory explains that harmonious intergroup relations are possible, as was discussed in Chapter 1, in contrast to the overly-deterministic social dominance theory that explains intergroup relations as conflictual, an approach to the conceptualization and measurement of fiscal and other policy preferences must incorporate identity-motivated, psychological determinants of policy preferences with multi-level, economic determinants of policy preferences for maximal explanatory power and scientific utility. That is, a simple interdisciplinary model of preferences and determinants is preferred over a complex model, which is a challenge given the complexities of race and racisms, the importance of social identities, and the constraints of survey-based research in the study of public opinion.

Of immediate concern are limits on the quality of archival data—not all fiscal policies are reliably inventoried over time—and mismatches in domain specificity or level of detail across disciplinary boundaries. Where psychology tends to abstract reactions individual stimuli (e.g., fiscal policies) into emotions that are universal across

domains (e.g., fear), economics tends to focus on the rationality of decision-making within the boundaries of specific domains (e.g., fiscal policy preferences). In psychology, domain hyper-specificity is common in the study of identity politics, where rationality is bounded by fixed and impermeable determinants of behavior (e.g., race or sex), limiting the utility of such survey-based fiscal policy preference and public opinion research for incorporation with perspectives rooted in classical liberalism like social identity theory.

While the GSS serves as one of the longest-running sources of archival public opinion data, making it essential for examination of the over-time invariance or stability of hypothesized traits, its items leave much to be desired as tools for drawing inferences about Americans' preferences towards actual fiscal policies. To further illustrate, I next examine American fiscal policy preferences in terms of risk tolerance and universalist versus particularistic preference to demonstrate the difficulty of interpreting survey data related to fiscal policy preferences.

Interpretations of Fiscal Preference Measures

Typically, measures of fiscal policy preference are considered as valid on their face based on the content of survey items. That is, asking Americans whether we should spend more, less, or the same on welfare is considered a valid indicator of their true-score preferences. However, several cognitive factors complicate this straightforward interpretation, limiting their utility for interdisciplinary science.

First, survey items about culturally specific topics may lack generalizability. Asking whether an American living in the United States plans to vote for Brexit, or whether a European living in the European Union plans to vote for Trump does not allow

for valid inferences about behavior if they are ineligible to vote in foreign polities. Surveys do not typically do this because survey makers know that certain behaviors are domain-specific and do not want to waste time or money on invalid, ungeneralizable items. Second, survey items about temporally specific topics may lack validity. Asking whether an American supports the creation of old-age Social Security, which already exists in the United States, or whether a European opposes the abolition of Universal Basic Income, which does not yet exist in the European Union, makes little sense. The format of the General Social Survey fiscal policy preference items cannot accommodate novel fiscal policies, for example, because it makes no sense to “spend less” on a policy like universal basic income that does not yet exist. Third, a trait must generalize across contexts and over time for compatibility with domains across science (e.g., biology) to avoid domain hyper-specificity in the study of behavioral determinants. Many animals, for example, have a sense of fairness similar to humans (e.g., refusing treats when they are unequally allocated), suggesting that genetic selection favors these behavioral norms. A general trait-based theory of fiscal policy preferences should explain how norms of fairness motivate behavior across the evolutionary junctures separating, for example, mice and humans. In this dissertation, I therefore examine fiscal policy preferences as observable indicators of the strength of a latent trait that motivates, minimally, equal treatment and fiscal universalism, maximally.

This approach draws on recent fiscal policy preference research that demonstrates that preference for equal treatment is a determinant of taxation policy across the cultural contexts of Germany, the United Kingdom, and the United States (Scheve & Stasavage,

2023). Departing from past research, I root a preference for equal treatment in evolutionary theory to explain why survey respondents are sensitive to framing effects related to norms of equal treatment as violations of intergroup and interpersonal fairness and to motivate the incorporation of domain-specific behaviors into the abstract, interdisciplinary frameworks of biology, psychology, and neuroscience.

To illustrate the importance of equal treatment versus differential treatment and sensitivity of responses to survey wording, consider attitudes towards particularistic, race-based affirmative action. Most years the American National Election Study survey asked whether the government in Washington should make every effort to improve the social and economic position of blacks. One year, it asked whether the government should do this *even if it means giving them preferential treatment*—making explicit and salient the heuristic of differential race-based treatment, changing the pattern of survey responses, lowering policy support, and threatening the validity of descriptive or causal inferences drawn from this survey data (i.e., about the nature and origins of public opinion; Kinder & Sanders, 1996).

Beyond survey wording, a complication to the incorporation of survey-based fiscal policy preference research arises from how neuroscientists conceptualize human responses to stimuli (e.g., fiscal policy preference questions on a survey). Like psychologists, neuroscientists conceptualize responses to stimuli (e.g., a snake or opinion survey) as comprised of a circumplex, or circular model of relationships among variables (Banich, 2004). Abstractly, this consists of two principal axes: the positive or negative

valence of responses to stimuli, and the level of activation or arousal a stimulus induces, as is shown in Figure 2.2.

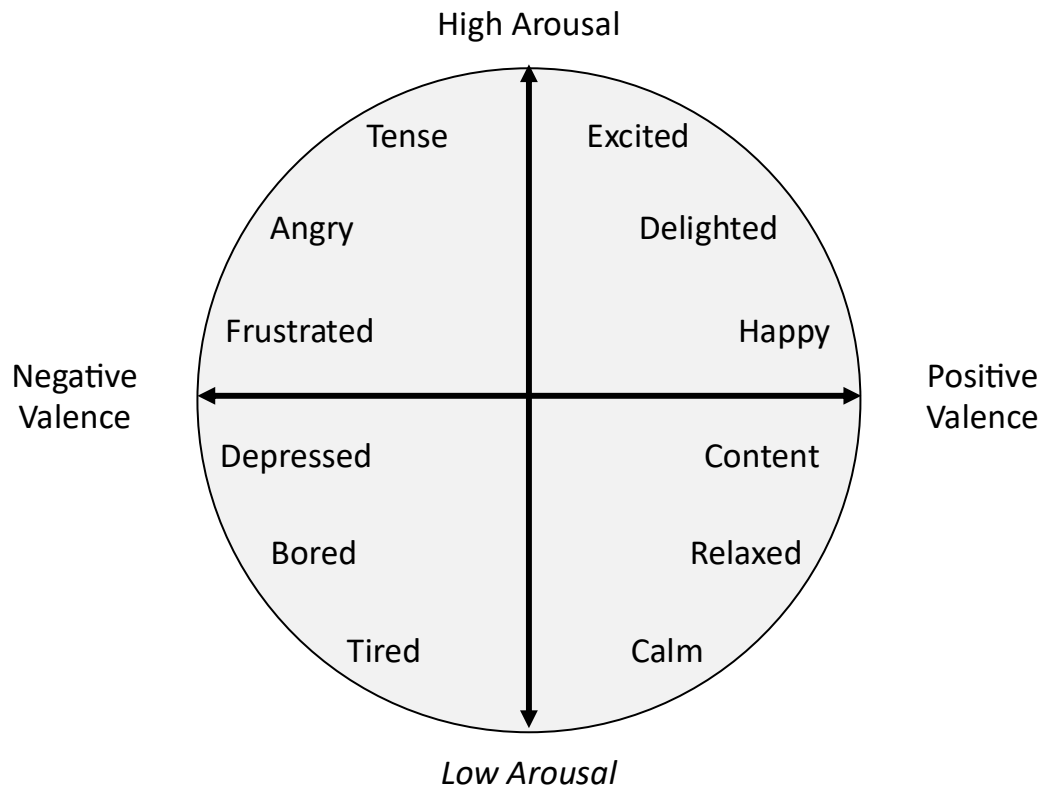


Figure 2.2: Circumplex of emotions (adapted from Liu, Xu, Guo, Mahmud, Liu, & Akkiraju, 2018).

These principal axes create a typology for the study of emotional reactions to stimuli by neuroscientists and psychologists. For example, novelty of seeing a snake in your house is likely to result in high arousal as the autonomic nervous system prepares the body to act. This experience is likely to take on a negative valence as the snake is recognized as a threat. In contrast, we tend to experience a state of low arousal that takes on a positive valence when we are in the comfort of our own home when such threats are not present. In political psychology, ideology serves as a mental model and set of heuristics that mediate between specific stimuli, emotional abstractions, and concrete

responses (Jost & Hunyady, 2003). An American might see negative depictions of Welfare on the news, feel angry, associate that anger with encountering welfare on a survey, and respond that we should “spend less” to obtain a psychological benefit from expressing their ideological preferences, regardless of the accuracy or complexity of their underlying mental model. Conceptualizing fiscal policy preferences in terms of the valence and intensity of responses to, e.g., survey stimuli, not only provides compatibility across science, but also allows for the meaningful interpretation of preferences expressed by even uninformed survey respondents.

One challenge to this approach is the tendency in existing survey research to assess preferences using one-dimensional rating scales (e.g., “Agree,” “Undecided,” “Disagree”). Responding on the midpoint could indicate either anxious ambivalence at one’s ignorance or apathy. This standard approach conflates the high arousal of mixed feelings (ignorance) with the low arousal of indifference (apathy). A related challenge is the need to conform a typology of fiscal policies to the principal axes of valence and arousal. Tying each respondent’s sentiments to a hyper-specific emotional abstraction is less useful to political scientists and political theorists than a general typology of fiscal policies. Whether specific policies elicit positive or negative emotional responses is less informative than whether a person or population prefers one type of policies to another. Here, the ideological valence of fiscal policies as universalistic or particularistic serves as one axis related to expected valence (i.e., whether a policy is evaluated as good or bad), while the policy novelty or risk serves as the second axis related to expected arousal (i.e., whether a policy departs from the status quo).

In general, one expectation for this project is that Americans will prefer universalistic policies to particularistic policies (Hypothesis 1) because they see universalistic policies as treating people equally (Hypothesis 2). Another general expectation for this project is that Americans will prefer familiar, established policies to untested, risky policies (Jacobs & Matthews, 2017; Bechtel, Jensen, McAllister, & Scheve, 2019).

To illustrate the decomposition of fiscal preferences into these principal components of ideological valence and risk, consider two fiscal policy preference questions from the General Social Survey, a nationally representative survey with standard items asked since 1972. One item asks whether we spend too little, too much, or about the right amount on Welfare, while the other item asks whether we spend too little, too much, or about the right amount on Social Security. The class-based Welfare allocates benefits on a more particularistic basis—it treats people differently on the basis of income. In contrast, the age-based Social Security allocates benefits on a more universalistic basis—most people can expect to receive benefits as they age. Thus, a net preference for Social Security over Welfare may reflect some underlying trait preference for universalism over particularism. Unfortunately, the GSS does not ask about policy-specific perceptions of equal treatment, limiting the scope of inferential claims and motivating survey experiments in subsequent chapters.

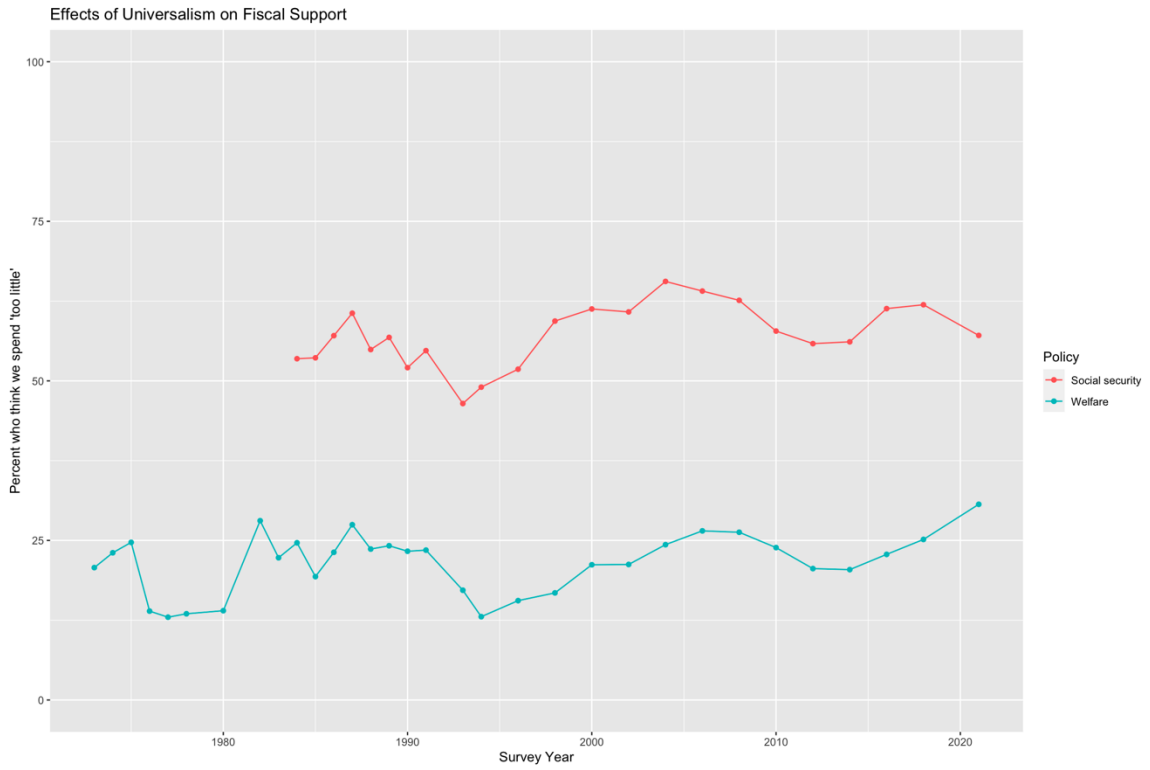


Figure 2.3: Fiscal universalism, fiscal particularism, and policy support.

A second piece of important information is contained within these exemplar survey items, risk tolerance. Across both items, responding that we spend either too little or too much suggest action should be taken. In psychological terms, preparing to take action entails higher levels of arousal and activation, while in economic terms, preparing to take action entails higher levels of risk versus maintenance of the known status quo.

A focus on the reactivity of the brain to perceived risk is important because research in political science demonstrates that risk influences policy attitudes (Jacobs & Matthews, 2017). Americans, for example, tend to oppose policy innovation because they cannot accurately predict the consequences. This suggests that at least two cognitive modes are involved in fiscal policy preferences—one low-arousal mode for established,

low-risk policies, and another high-arousal mode for untested, high-risk policies.

Moreover, the temporal context in which a preference is assessed (e.g., in a good versus bad economy) differentially activate these cognitive modes. This is important, because while decisions made under conditions of risk or uncertainty are a focus for behavioral microeconomics, the focus of this dissertation is a trait preference for fiscal universalism and equal treatment. Because risk tolerance is irrelevant to the constructs of interest, it must be identified and controlled for.

To illustrate, consider fiscal policy preference items from the General Social Survey, which ask whether our spending is “Too much”, “Too little”, or “About right” across a range of familiar fiscal policies (e.g., Welfare, Social Security, the Space Program). The least risky option, *ceteris paribus*, is to express no preference for change and to maintain the fiscal status quo (i.e., “About right”, coded as 0). Without knowledge of, e.g., the income of a specific survey respondent in a population, the safest preference for the population as a whole is to make no changes to the status quo. Riskier, all else equal, is to express a preference for change and to disrupt the fiscal status quo (i.e., “Too little” or “Too much”, coded as +1). Without knowledge of, e.g., the economic conditions of a specific time period relative to others, the safest preference for the population on average is to make no changes to the status quo. Evidence for temporally or contextually bound variation in risk tolerance suggests a need for theoretical attention to and methodological control for its effects on fiscal policy preferences to identify true-score traits. Risk tolerance as inferred from these GSS items is illustrated in Figure 2.4, which demonstrates some temporal and contextual variability. Risk tolerance is subset by census

region to further illustrate how contextual variability may complicate the straightforward interpretation of facets of fiscal policy preferences as the opinion of a single public, versus the opinions of multiple publics.

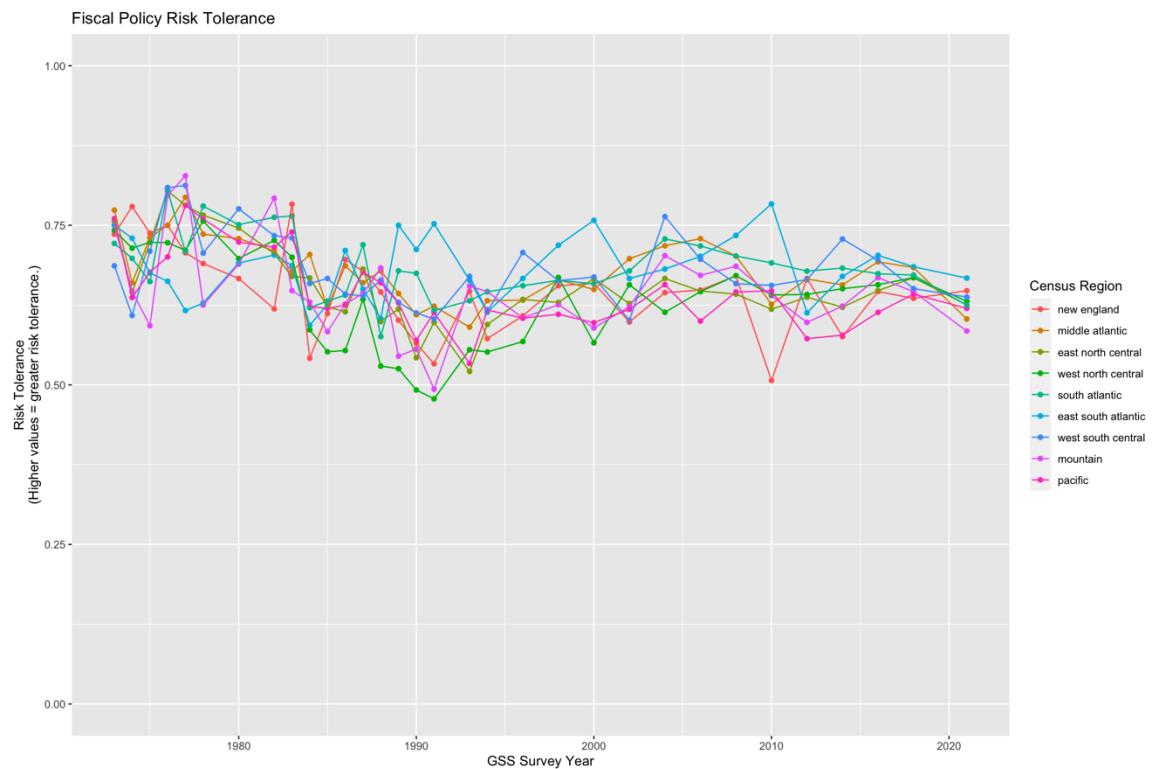


Figure 2.4: Risk tolerance as inferred from fiscal policy preference items on the General Social Survey. Higher values indicate greater tolerance for risks associated with departure from the fiscal status quo.

This is, of course, a very rough proxy for risk tolerance. No change in spending might also reflect a genuine preference, not merely a status quo bias. As is the focus of later chapters, a more rigorous conceptualization and experimental operationalization of the risks associated with policies is necessary.

Separately, information about trait orientation towards fiscal policy universalism or fiscal policy particularism may also be inferred from these GSS items. As Figure 2.5 illustrates, Americans appear to have a stable fiscal orientation towards universalism

(Social Security, coded as +1) over particularism (Welfare, coded as -1). This measure is computed by subtracting the preference for Welfare for each respondent from their preference for Social Security, and average responses for each year. For example, a respondent who prefers to “spend more” on Welfare but “spend less” on Social Security would be coded as -2, or highly particularistic in their fiscal policy preferences. In contrast, a respondent who prefers to “spend less” on Welfare but “spend more” on Social Security would be coded as +2, or highly universalistic in their fiscal policy preferences.

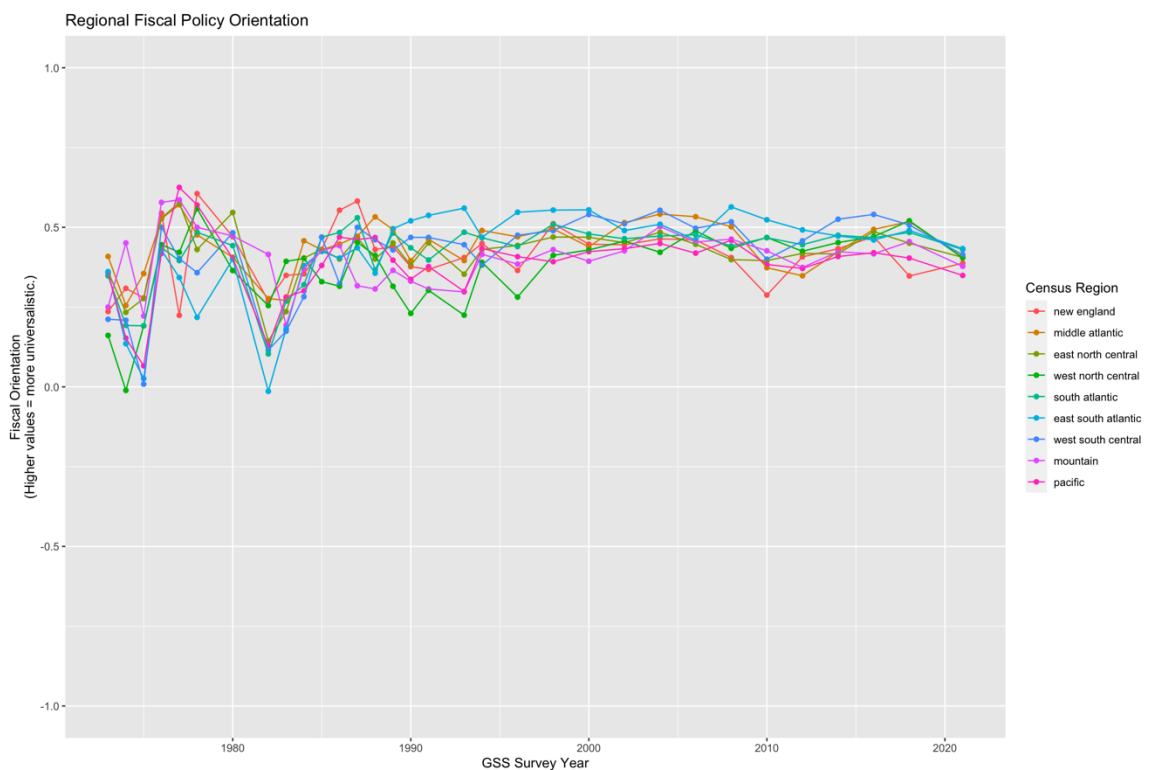


Figure 2.5: Fiscal orientation as inferred from fiscal policy preference items on the General Social Survey. Higher values indicate greater preference for fiscal policy universalism (i.e., Social Security over Welfare).

This illustrates potential utility of a trait-based approach to conceptualizing fiscal policy preferences. On their own, each item allows for descriptive inferences about

American fiscal policy preferences (i.e., what the public wants,). However, stigma towards Welfare—particularly racist associations—reduces support for this class-based fiscal policy. Americans associate Welfare with particularistic class- *and* race-based preferential treatment (Gilens, 2009).

In the language of psychology, the measure is contaminated with respect to its face validity (i.e., determining true score Welfare preferences) because attitudes towards welfare partially capture attitudes towards race. This is illustrated by Table 2.1, which regresses Fiscal Risk Tolerance and Fiscal Orientation onto a measure of individual-level racism ([GSS RACDIF1: “On the average (Negroes/Blacks/African-Americans) have worse jobs, income, and housing than white people. Do you think these differences are mainly due to discrimination?” {Yes, No}). This item was developed by the National Advisory Commission on Civil Disorders in the 1960s assess respondents’ personal beliefs in the causes of race-based economic inequality in American society and understand the determinants of urban unrest during the Civil Rights era (Schuman, 1997).

Table 2.1: Initial analysis of fiscal policy related traits.

	<i>Dependent variable:</i>	
	Fiscal Risk Tolerance (1)	Fiscal Orientation (2)
Racism	-0.0002 (0.002)	0.035*** (0.003)
Constant	0.661*** (0.002)	0.417*** (0.002)
Observations	62,918	62,918
R ²	0.00000	0.002
Residual Std. Error (df = 62916)	0.433	0.609
F Statistic (df = 1; 62916)	0.004	101.372***
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Americans who attribute intergroup differences to factors other than racial discrimination tend—i.e., those who hold more racist views—tend to be more universalistic in their fiscal policy preferences. This effect is small, however, suggesting that explanations for fiscal policy preferences that go beyond symbolic racism may be necessary for the integration of psychological and economic perspectives, as is a focus of the remainder of this project. In contrast, individual-level racism is not predictive of risk tolerance, at least in the limited way as it is operationalized here. Individual racism is much like fiscal policy preferences in that both are culturally bound, and neither can be said to reflect traits that are meaningful from the perspective of evolutionary theory—many animals have groups and hierarchies, but the social and legal construction of race is

specific to humans. Fiscal policies, like racial categories, are particular to specific polities and historical periods.

For maximal explanatory power, an ideological system must nest the dimensions of fiscal policy universalism and risk within a framework for understanding human behavior that generalizes over across contexts and over time. The perspective of social dominance theory, for example, would explain that individual racism is motivated by the social dominance orientations of people in high-status racial groups. This means that a preference for social security over welfare does not reflect a preference for universalism and equal treatment, but instead realistic group conflict in bargaining over common pool fiscal resources. In contrast, the perspective of social identity theory would explain that individual racism is motivated by the perception that the world is just, and the economy is merit-based. This means that a both individual-level racism and fiscal policy preferences reflect symbolic conflict over republican ideals of meritocracy as an essential public good.

At issue in this discussion of race, racism, and meritocracy is republican ideology. Whereas the divine rights serve to legitimize the rule of monarchs, American rejection of monarchy during the Revolutionary War has necessitated alternative bases for legitimizing the United States government in its republican form. Republican ideology links social identity theory and classical liberalism through an emphasis on merit-enhancing public policies (Garcia, Desmarais, Branscombe, & Gee, 2005).

Are Americans Republicans?

The centrality of identity politics (e.g., race and racism) to fiscal policy preferences in the American context reflects differences in preference for and perception of meritocracy in public life (Garcia, Desmarais, Branscombe, & Gee, 2005). On the one hand, most Americans believe society should be merit-based (*merit > prejudice*), where individual effort and ability is rewarded on an individual basis. On the other hand, partisans differ in the degree to which they perceive the world as achieving the republican ideals of meritocracy versus the degree to which they perceive the world as reflecting the illiberal ideals of racial supremacy.

Republican political thought has its origins in the utopian theory of Plato, who conceptualized a society led by virtuous elites holding power, e.g., over slaves (Garcia, Desmarais, Branscombe, & Gee, 2005). This perspective has evolved in the American context to legitimize the rejection of monarchy during the United States Revolutionary War in favor of the Enlightenment values of popular sovereignty, political equality, and political liberty (Dahl, 2003). American republicanism departs most significantly from that of Plato in its partial rejection of slavery during the United States Civil War.

After the Civil War, the 13th Amendment set the stage for modern liberal group particularism by authorizing the Congress to eliminate the “badges of slavery” from the new class of Black American citizens who were formerly enslaved (Baer, 1983). Although these new citizens were not compensated for their previously unpaid labor, as their former owners were, the United States began to embrace the notion of meritocracy as the franchise expanded with the passage of the Pendleton Civil Service Reform Act of

1883. Like subsequent legislation (e.g., the Uniform Guidelines on Employee Selection Procedures of 1978), this transitioned the United States from a system of political patronage and race-based employment discrimination to a meritocratic system of competitive exams and *de jure* equal opportunity—the liberal republican ideal (Kernell & McDonald, 1999).

Conceptually, this matters for the measurement of fiscal policy preferences and their determinants because it explains variation in preference for equal treatment as a determinant of fiscal policy preferences (Scheve & Stasavage, 2023). Americans who view the United States as already meritocratic, i.e., conservatives, are less likely to see a need for policies to help particular groups, preferring instead to treat everyone equally (*equal treatment = meritocratic*). In contrast, Americans who view the United States as not yet meritocratic, i.e., liberals, are more likely to see a need for policies to help particular groups, preferring to treat individuals unequally (*unequal treatment = meritocratic*). Methodologically, the importance of race, racism, and social identities suggests a need for an experimental approach to the identification of true-score policy preferences. In contrast with the non-experimental approach of the GSS, random assignment of fiscal policies allows for the identification of preferences and determinants specific to the set of policies assigned, independent of contamination by racial attitudes because experimental participants do not know the treatment categories, e.g., manipulating the salience of racial identity, to which they have been randomly assigned (Huddy, Sears, & Levy, 2013). As will be examined in the next chapter, a focus on the

facets of policies through random assignment aligns with the emphasis in this project on fiscal policy universalism and perception of equal treatment.

An experimental approach is also necessary to address concerns within political psychology that non-experimental survey-based research merely recaptures ideology, tautologically (Huddy, Sears, & Levy, 2013). That is, fiscal policy preferences and racial attitudes may lack sufficient conceptual distinction to say that they are both not motivated by and in turn motivate racism or an arbitrary number of other ideological or trait constructs. As the next chapter begins to explore, an experimental approach to identification of fiscal policy preferences not only affords valid inferences about effects of policy-centered universalism and risk, but also affords valid inferences about the degree to which a preference for equal treatment is motivated by the republican concern with meritocratic fairness versus other ideological considerations like racist beliefs.

Whether Americans are republicans matters for how debates over public policy are structured. If one accepts the arguments of Harvard political scientists Levitsky and Ziblatt (2019) that a departure of the modern Republican Party from its strategy of racial agitation in the American South is necessary for the survival of American democracy, then understanding Americans' fiscal policy preferences in terms of republican ideology is a useful tool for policymakers. Thus, a broader aim of this project is to understand what Americans want, and why they want it, in republican terms.

Conclusion

Theoretical attention to alignment between the evolutionary basis for trait development in psychology, e.g., around norms of equal treatment or racial prejudices,

and the importance of risk tolerance in economics, e.g., around the uncertainties inherent to policy change, serves as an integrative basis for the examination of fiscal policy preferences for remainder of this dissertation. Several limitations remain to be addressed.

First, the expression of fiscal preferences is the endpoint of a social-cognitive process. Traditional econometric approaches to modeling demographic predictors using multivariate regression techniques have been criticized by researchers in sociology as confounded by endogeneity (Piven & Cloward, 2000). Following research in management on policy preferences (Cordano & Frieze, 2000), I argue that a psychometric model of public opinion and policy preference formation is necessary for the integration of demographic information with a trait-based theory of fiscal policy preferences, a focus of the next chapter.

Second, a trait-based approach to conceptualizing fiscal policy preferences highlights areas of theoretical incommensurability between psychology and economics. Are fiscal preferences merely dominated by social identity, or can fiscal preferences be rooted in some rational basis? This question motivates theoretical developments in Chapter 4.

Third, archival data are quite limited with respect to the fiscal policies they ask respondents to evaluate. Novel fiscal policies (e.g., universal basic income or a national sales tax) are not consistently inventoried over time, reducing the validity of inferences about risk tolerance and ideological orientation. Moreover, an approach that is purely observational, rather than experimental, cannot identify causal effects (Huddy, Sears, & Levy, 2013:549). An experimental approach where fiscal policies are randomly assigned

to respondents for their evaluation offers both clearer evidence that types of fiscal policies cause variation in evaluation and better discrimination with respect to an ideological orientation towards universalistic or particularistic fiscal policies. This latter strength arises from random assignment of high-risk fiscal policies (e.g., universal basic income or a reparations) generally excluded from archival surveys like the GSS. A weakness is that cross-sectional survey experiments only allow for an inference at single point in time, reducing their utility for econometric studies.

Harvard political scientists Levitsky and Ziblatt (2019) have called for greater attention by American political scientists to universal basic income, specifically, as a public policy tool to reverse the perceived decline of American democracy. Beyond concerns with the death of American democracy and the need for a republican reformation, understanding fiscal policy preferences is of practical concern for American policymakers. Compared with European social democracies, the United States lags in the provision of public goods related to social welfare. Although American conservatives tend to advocate a national sales tax, paired with universal cash grants, such plans lack adequate buy-in from American liberals. As Matthews (2023) explains:

Larry Summers once noted that a VAT [value-added national sales tax] has not been adopted in the US because “liberals think it’s regressive and conservatives think it’s a money machine” that’s a little too good at raising revenue. But if conservatives realized it’s regressive and liberals realized it’s a money machine, he quipped, maybe it could happen. The popularity of the FairTax suggests conservatives understand very well that sales taxes are regressive. But their plan is extremely half-baked. Maybe if they let liberals use it as a bit of a money machine, we might get somewhere.

A trait-based approach to understanding fiscal policy preferences—starting with a psychometric model of public opinion—may allow political psychologists, political economists, and political theorists to facilitate discussions of institutional design and redistributive policies in a constructive manner.

Chapter 3: A Psychometric Model of Public Opinion

The study of behavior is complex (Huddy, Sears, & Levy, 2013). On the one hand, the interpretation of surveys is challenging, even for apparently straightforward items (Kinder & Sanders, 1996; Tourangeau, Rips, & Rasinski, 2000; Ballard-Rosa, Martin, & Scheve, 2017). This was demonstrated in the last chapter by decomposing fiscal policy preference items into components of ideological orientation and risk tolerance. On the other hand, a tension exists between the straightforward notion of behavior or action versus intention. We are motivated by values that shape how we intend to behave (e.g., *Aid to the poor* > *No aid to the poor*), but our actions seldom align perfectly with our values (e.g., *Aid to the poor* > *Welfare*).

This chapter examines the cognitive process of policy preference formation using and testing the theory of planned behavior with survey data to begin to explain an apparent preference for fiscal universalism (Hypothesis 1). As a model of learning, the theory of planned behavior (Ajzen, 1991) explains how the brain translates our many values, a preference for fiscal universalism for example, into specific behaviors based on available cognitive and affective heuristic information (Zaller, 1992; Ballard-Rosa, Martin, & Scheve, 2017). Within the constraints of political reality, i.e., what is known about other actors, survey participants must translate their latent preferences into selection of the best item response.

As the paradox of redistribution—a sociological theory explaining that universalistic fiscal policies are often more effective at reducing poverty than

particularistic fiscal policies—is focal to this dissertation as resolved by an apparent preference for equal treatment (Scheve & Stasavage, 2023), an interdisciplinary model of public opinion is necessary for maximum validity. In particular, sociologists question the validity of including standard demographic variables like income and education as predictors in regression analyses, as these variables are used to target individuals for political mobilization (Piven & Cloward, 2000). Past public opinion research has identified standard demographic variables as determinants of fiscal policy preferences, along with perceptions of policy fairness (Domonkos, 2016). This creates a conceptual problem with respect to endogeneity, and a methodological problem with respect to reliability, complicating a straightforward analysis of how latent preferences and intentions are translated by survey participants into item responses and other behaviors.

The problem of unreliability in regression estimates is made worse by the fact that standard demographic variables are conceptually and empirically non-independent. We expect income and education to be correlated in a society that rewards merit. Likewise, partisanship and ideology ought to be correlated as left- or right-wing partisans subscribe to left- or right-wing ideologies. This multicollinearity can lead to statistical suppression or unreliability in the regression estimates (Gujarati, 2021).

To begin to address these concerns, I draw on the theory of planned behavior (Ajzen, 1991). Developed in organizational psychology in part to explain voting behavior and to model learning processes (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975), this theory serves to decompose the facets of decision-making into its proximal and distal components suitable for structured regression analysis. More importantly, I argue that the

theory of planned behavior serves as a check on the proliferation of psychological constructs, like social dominance orientation, and I contribute a general framework for the integration of extant research on traits related to fiscal policy preferences into a psychometric structural and measurement model. Thus, the cognitive process model of the theory of planned behavior serves to explain how latent preferences are learned over time and model the translation of latent preferences into concrete behaviors like survey responses.

Research in public opinion draws on psychology and behavioral economics to explain how rationality is bounded in the context of political cognition (Zaller, 1992). When responding to questions on a survey or a ballot, respondents and voters draw on both rational, cognitive considerations (e.g., of economic utility) and emotional, affective heuristic considerations (e.g., of social identity) to formulate preferences and render decisions. Social psychologists have advanced social meritocracy theory (Garcia, Desmarais, Branscombe, & Gee, 2005) and social dominance theory (Sidanius & Pratto, 2001) as incompatible trait-based approaches to understanding the cognitive and affective processes that motivate redistributive preferences. Because social meritocracy theory is rooted in social identity theory, it retains ideological compatibility with classical liberalism. Social dominance theory, formulated in part as an alternative to social identity theory, merely reinforces the conflictual perspectives of mercantilism and Marxism. Moreover, while social identity theory retains broad interdisciplinary compatibility with evolutionary perspectives rooted in biological science (Mlodinow, 2013), social dominance theory does not (Turner & Reynolds, 2003), reducing its utility even if its trait

predictor social dominance orientation retains predictive power. By incorporating these theories into a psychometric model of public opinion, I resolve these apparent incompatibilities.

Research in political psychology (Huddy, Sears, & Levy, 2013), political neuroscience (Jost, Nam, Amodio, & Van Bavel, 2014), and public opinion (Zaller, 1992) has likewise painted a picture of political information processing that complicates a straightforward integration of interdisciplinary perspectives, particularly with the method of rational actor analysis in economics. Maximally, utility heuristics may be conceptualized for every facet of social, political, and economic life (e.g., a race-linked utility heuristic; Weller & Junn, 2018), risking construct proliferation, and these utility heuristics may in principle be located within the brain using neuroimaging studies (Haas, Warren, & Lauf, 2020). Pragmatically, these heuristic considerations of utility may be reduced to two categories: cognitive (or rational) considerations and affective (or emotional) considerations (Zaller, 1992; Ajzen, 1991; Mischel & Shoda, 1995).

As an important focus of later chapters is computational methods, minimizing errors that arise from unreliability is essential for accurate modeling. Although unreliability in unstructured regressions may be small, the possibility of error through multicollinearity suggests an important place for the psychometric model in structuring relationships among variables to ensure consistent estimates of focal relationships.

The purpose of this chapter is to therefore connect the theory of planned behavior to the process of fiscal policy preference formation and expression. The next section begins to do this by incorporating multiple trait-based, demographic, and theoretical

perspectives into a single cognitive process model. This model is then applied to several fiscal policy preference survey data sets to illustrate the strengths and weaknesses of the method and test Hypothesis 1, that policy universalism positively explains and predicts variation in policy support (H1, $\beta > 0$).

The Theory of Planned Behavior

The theory of planned behavior models how repeated exposure to contexts activates traits and shapes dispositions over time (Ajzen, 1991; Cordano & Frieze, 2000). In this way, it serves to integrate trait-based and cognitive process models of behavior into a unified theoretical framework. The theory is expressed formally as:

$$BI = w_A + w_{SN}SN + w_{PBC}PBC,$$

where BI is a cognitive-affective behavioral intention, A is affective attitude towards the behavior (e.g., social dominance orientation; Sidanius & Pratto, 2001), SN is subjective cognitive norms around the behavior (e.g., social meritocracy orientation; Garcia, Desmarais, Branscombe, & Gee, 2005), and PBC reflects perceived behavioral control over the behavior (w_x are empirically derived weights, e.g., of political efficacy).

The cognitive-affective behavioral intention to act reflects intention to de-abstract or reify preferences into behavior. If our latent fiscal policy preference is *Universalism > Particularism*, we must integrate what we know of our life experiences and strategic considerations to select the responses that best reflect our preferences in a survey context. Our brains continually predict what the consequences of our behaviors may be, and the uncertainty of these predictions is reduced through our observations of their accuracy. Over time, we learn the degree to which we are able to

efficaciously translate our intentions (e.g., a preference for merit over prejudice) into real-world behaviors (e.g., getting out the vote) with positive results (e.g., policy change).

The determinant of behavioral intention, BI , are assumed to reflect accumulated experiences relevant to behaviors, such that $A \propto \sum_{i=1}^n b_i e_i$, $SN \propto \sum_{i=1}^n n_i m_i$, and $PBC \propto \sum_{i=1}^n c_i p_i$, which sum each experience relative to motivation across each experience i . The strength of each distal belief is represented by b , weighted by an evaluation of outcome, e . The strength of each distal norm is represented by n , weighted by the motivation to comply with each norm m . The strength of each control or efficacy belief is represented by c , weighted by the perceived power of each control factor p .

When perceived behavioral control accurately reflects reality, both PBC and BI are used to predict intention behavior, B :

$$B = w_{BI}BI + w_{PBC}$$

The theory of planned behavior represents these relationships as a cognitive process model by which distal and proximal determinants predict behavioral decisions, as is shown in Figure 3.1. When applied to multiple, panel measurements this model includes feedback arrows to account for over-time reinforcement learning and conditioning. As most survey data available for fiscal policy preference research is cross-sectional, these feedback mechanisms are omitted from the model for its applications in this dissertation.

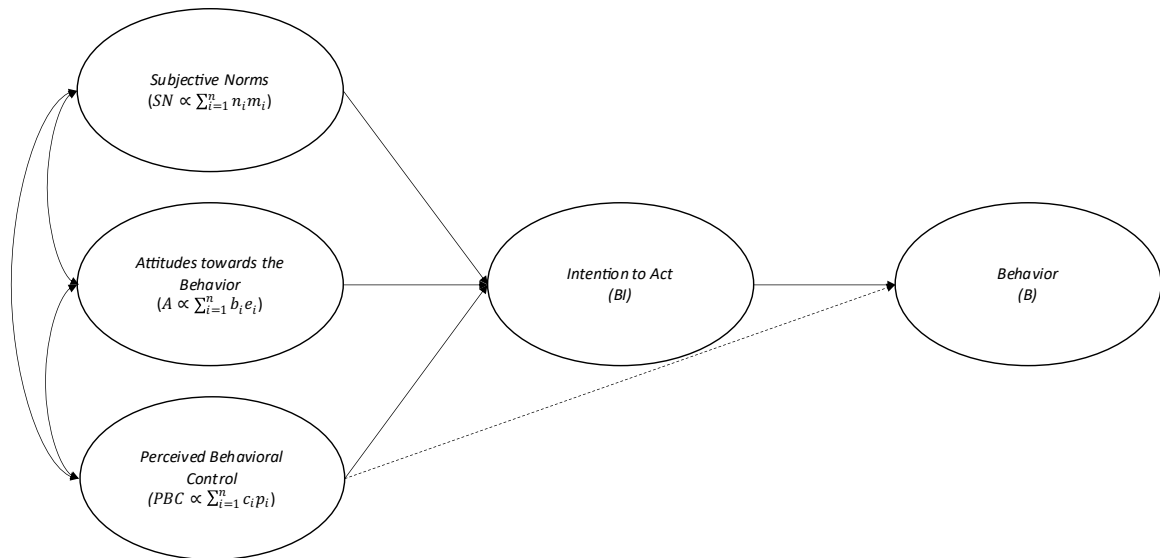


Figure 3.1: The theory of planned behavior process model, adapted from Ajzen, 1991, p. 182).

While this cognitive model illustrates the process of behavior in cross-sectional decision contexts like that of a survey, it does not yet incorporate traits specific to fiscal policy preferences or demographic variables. Because every trait- or outcome-relevant moment in a person’s life cannot be measured—each event i cannot be observed by a researcher—I draw on past work in management (Cordano & Frieze, 2000) to propose a structural and measurement model to incorporate demographic variables (e.g., income, education) and political variables (e.g., partisanship and ideology) as summary indicators of accumulated experience and distal predictors of fiscal policy preferences. Thus, I propose:

Proposition 1: If the psychometric model of public opinion converges with good fit when applied to fiscal policy preference data, then it is a plausible interpretation of the hypothesized cognitive processes underlying fiscal policy preference formation.

This proposition arises from an axiom of model-based inference, that scientific inferences can be made from data that are observational or non-experimental. Model fit reflects the degree to which the correlations observed in the data match the correlations implied by the model. In general, measures of fit relative to the null model (e.g., Comparative Fit Index, CFI, or Tucker-Lewis Index, TLI) range from zero to one, with values closer to one reflecting better fit. In contrast, measures of absolute fit (e.g., Root Mean Square Error of Approximation, RMSEA) likewise ranges from zero to one, but values closer to zero reflect better fit (i.e., $CFI/TLI > 0.90$ & $RMSEA < 0.05$; Feldman & Johnston, 2014, p. 344). To the degree that one accepts the assumptions of model-based inference, tests of fit reflect the plausibility of the model.

Alternative to the proposition, then, is limiting the set of inferences that can be made to only the set of variables that were experimentally manipulated and randomly assigned. This would rule out much research in economics that is theory-driven, model-based, and non-experimental. With this in mind, the next section elaborates on the incorporation of cognitive and affective individual-level demographic and political variables into the psychometric model of survey research before applying the model to fiscal policy preference formation.

The Psychometric Model

A cognitive-affective approach to model-based preference formation has its origins in public opinion (Zaller, 1992) and personality psychology (Mischel & Shoda, 1995), and it has been incorporated into the study of decision-making via the theory of planned behavior (Ajzen, 1991; Cordano & Frieze, 2000). Much like the sociological

model of voting (Lazarsfeld, Berelson, & McPhee, 1954) and the social-psychological funnel of causality (Campbell, Converse, Miller, & Stokes, 1960) in political science, the theory of planned behavior assumes that humans learn from experience and reason from the general to the specific when making decisions. In the model, attitudes towards a *Behavior (Affective Interests)*, subjective considerations about the *Behavior (Cognitive Norms)*, and perceived control over the *Behavior (Cognitive-affective Learning)* all serve as distal predictors of some focal behavioral outcome (e.g., evaluating a fiscal policy). These effects are partially mediated by an *Intention to Act*, which reflects the integration of various considerations.

Because the theory of planned behavior was developed as a model for the mental process by which humans choose how they act, the variables it includes are not meant to be understood as distinct constructs. It is the performance of the model as a whole—model fit—that is of interest in this dissertation. For theoretical completeness, however, I explain where constructs from social meritocracy theory, social dominance theory, and political psychology may be integrated conceptually into the proposed model.

Here, I align income and education as cognitive indicators of past goal-directed behaviors related to material interests; partisanship and ideology as affective indicators of past goal-directed behaviors related to ideational interests; and past votes as integrative cognitive-affective indicators of the control one has over political behaviors. This is shown in Figure 3.2, which serves as a conceptual process model for the mental formation and behavioral expression of fiscal policy preferences. This partial operationalization of the theory of planned behavior serves as a psychometric starting

point for how standard demographic indicators (depicted by squares as values observed directly in the data) may be included with latent conceptual variables (depicted by ovals as values inferred from regressions) to provide a path model that can be adapted for use with data from various surveys to eliminate unreliability that may arise from unstructured (or model-free) analyses of fiscal policy preferences. In the analysis of nationally representative public opinion surveys, the model must be adapted based on the variables included in the data (e.g., individual versus family income) and the traits or behaviors that are focal interest to the researcher (e.g., fiscal spending versus taxing orientation).

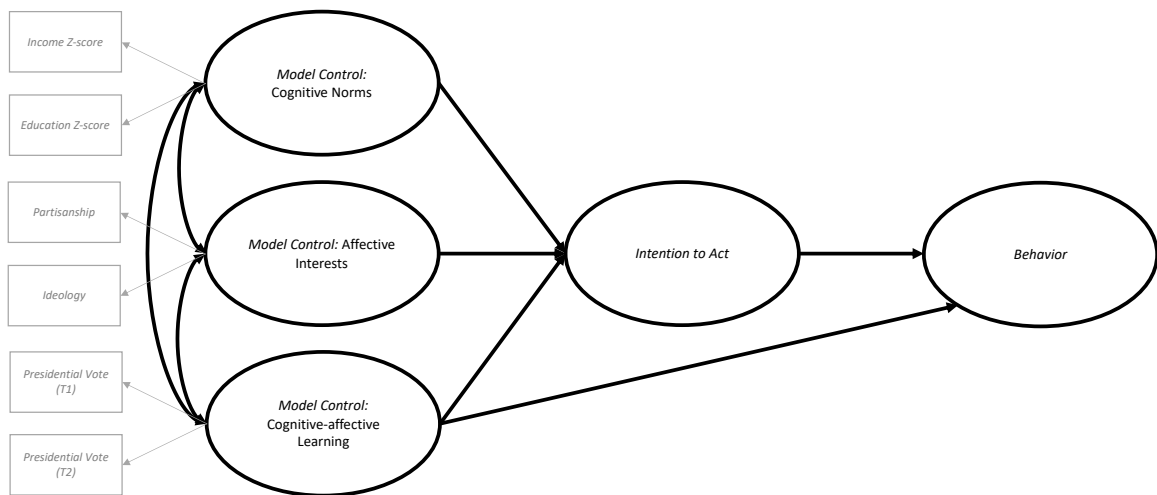


Figure 3.2: The theory of planned behavior, modified to include standard demographic indicators.

In the context of this dissertation, the focal *Behavior*, *B*, will generally be a behavior related to a fiscal spending policy. This behavior in the GSS is a survey response indicating whether our spending is too little, about right, or too much towards specific policies, allowing for descriptive inferences about fiscal preferences. A second operationalization has been the difference in support between the universalistic policy of Social Security versus the particularistic policy of Welfare, allowing for psychological

inferences about trait orientations. In general, how a particular survey or study operationalizes the measurement of behaviors related to fiscal preferences varies widely, motivating the use of computational psycholinguistic methods in later chapters.

In the field of management, the adaptation of the theory of planned behavior into a structural and measurement model has been applied, e.g., to the study of pollution reduction preferences among environmental managers in the United States (Cordano & Frieze, 2000). This research is limited, however, in that it does not incorporate individual-level demographic and political variables in a systematic way.

The theory of planned behavior explains that for *Behavior* to be intentional, researchers must distinguish between actions that are volitional—or under a person’s control—and actions that are non-volitional—like responses to experimental manipulations. According to Ajzen (1991, p. 181),

a central factor in the theory of planned behavior is the individual’s *intention* to perform a given behavior. Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behavior.

In the context of fiscal policy preference formation (a cognitive process) and expression (an observable behavior), I take *Intention to Act, BI*, to mean the evaluation of a fiscal policy with respect to its prospective effects on social groups. This is because the formation and expression fiscal policy preference is effectively an effort to alter or maintain the distribution of goods and values in society (i.e., to effect distributional consequences, in economic parlance).

Ideally, then, nationally representative surveys measuring fiscal policy preferences should contain two pieces of information: an evaluation of some policy with respect to group (the mediating *Intention to Act*), and an evaluation of some policy without other considerations (the focal *Behavior*). This effectively controls for the construct-irrelevant variance—or contamination—that social identity introduces in the study of true-score fiscal policy preferences like trait fiscal orientation. Experimental manipulation, e.g., of identity salience, allows for valid inferences to be drawn about both intentional and non-intentional facets of *Behavior* related to fiscal policy preferences.

The theory of planned behavior explains that humans learn over time which behavioral strategies are effective, and which are not, influencing both their *Intention to Act* and choice of *Behavior* over time. According to Ajzen (1991, p. 188), the *Cognitive-affective Learning (PBC)* of perceived behavioral control refers to the “ease or difficulty of performing the behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles.” In the context of political science, I take this perceived behavioral control to reflect the summative value of cognitive-affective learning from actual political participation. Following Ajzen (1991), it reflects what political scientists would consider to be external political efficacy, or the ability of a person to participate in politics and the belief that such participation is an effective path towards some goal (Campbell, Gurin, & Miller, 1954).

Ideally, then, nationally representative surveys measuring fiscal policy preferences should contain two pieces of information about political *Cognitive-affective Learning*: vote choice across two time periods or contexts. This reflects not only a

person's partisan consistency or tendency for defection, but also their belief that formal political participation matters (or does not matter!). This explains why *Cognitive-affective Learning* is modeled with a direct effect on *Behavior*, as well as an effect mediated through *Intention to Act*. A significant direct effect of *Cognitive-affective Learning*—past voting strategies—on *Behavior* suggests inferential claims about behaviors like survey responses related to fiscal policy preferences are valid indicators of some stable trait related to actual political behavior in the real world.

The incorporation of past voting behavior into the formation and expression of fiscal policy preferences is necessary because real-world political behavior captures a person's current state of knowledge about how and the degree to which their latent preferences can best be expressed. A person might prefer, for example, universal healthcare to private insurance in the United States, and learn over time to incorporate that preference into one of many reasons they vote for Democratic Party candidates. Measured in the cross-section of a survey, past voting behavior contains information that is multicollinear with but conceptually distinct from their preferences around public health policy, and as such must be modeled appropriately.

The theory of planned behavior explains that a key locus for the propagation of norms related to behavior is our social and economic systems. According to Ajzen (1991, p. 188), subjective *Cognitive Norms (SN)* refers to the “perceived social pressure to perform or not to perform the behavior.” In the context of political science, I take these subjective norms to arise from economic and educational socialization. This is most closely aligned with social meritocracy theory in social psychology (Garcia, Desmarais,

Branscombe, & Gee, 2005). This theory explains that preference for redistribution arises from past experiences in merit hierarchies, and a trait-like preference for differential treatment of persons on the basis of ability. Activity in these domains best relates past volitional, goal-directed behaviors and non-volitional, accidental experiences of socialization to *Intention to Act* towards some focal *Behavior* like expressing fiscal policy preferences in a public opinion survey.

The theory of planned behavior explains that, apart from the propagation of *Cognitive Norms*, our *Intention to Act* in relation to some *Behavior* is explained by affective, emotional attitudes. According to Ajzen (1991, p. 188), *Affective Interests (A)*, or attitudes towards some behavior, reflect the “degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question.” Because the behavior in question is expression of fiscal policy preferences, along with effecting the distributional consequences of those policies, I take attitudes towards the expression of fiscal preferences as arising from political partisanship and ideology. This is most closely aligned with social dominance theory in social psychology (Sidanius & Pratto, 2001). This theory explains that preference for redistribution arises from past experiences in dominance hierarchies, and a trait-like preference for the differential treatment of persons on the basis of group. Following political psychology and political economy, partisanship and ideology reflect ideational interests—mental models about the world that influence decision making and is aligned with internal political efficacy. *Affective Interests* arise from the incomplete mental models people hold about the world, as they rely on

heuristics like ideology as palliative tools to reduce uncertainty about the world and the effects of their *Behavior* on their material interests.

Political psychologists argue that political ideologies play a palliative role in reducing negative arousal caused by incongruities between our trait preferences and how we perceive the world to be (i.e., ideologies reduce cognitive dissonance; Jost & Hunyady, 2003).

The proposed model integrates individual-level demographic variables (e.g., income, education) and political variables (e.g., ideology, votes) as indicators for latent variables that serve as controls for and distal predictors of fiscal policy preferences. Intention to Act conceptually represents the consideration of heuristics that are proximal determinants of fiscal preferences (e.g., estimation of policy effects). This serves as a basis for the psychometric model of public opinion advanced in this dissertation, but the operationalization and survey item indicators will be specific to particular surveys, as is illustrated in this chapter.

By accounting for the variance shared among multicollinear demographic variables, this proposed structural equation and measurement path model with latent variables begins to solve the statistical problem of suppression and unreliability in estimates for regression (path) coefficients. Moreover, each latent control variable contains information about the propensity of respondents for defections from coalitions (e.g., being a liberal Republican, or voting Democrat and then Republican), making it of interest to formal theorists (e.g., Abramson, Aldrich, Blais, Diamond, Diskin, Indridason, Lee, & Levine, 2010). For physical science, the model represents the structure of

cognition, with goal-oriented cognitive processing subsumed by the left hemisphere, associative affective processing subsumed by the right hemisphere, and cognitive-affective considerations integrated to form behaviors in the prefrontal cortex.

Thus, the theory of planned behavior is fully specified as a cognitive-affective psychometric model of survey response behavior, generally, and preference formational, specifically. As an initial demonstration of the model, I apply it to archival survey data from the General Social Survey before reconceptualizing how risk is measured for an experimental analysis of Americans' fiscal policy preferences to examine whether a preference for fiscal universalism (Hypothesis 1) motivates their decisions as the paradox of sociology suggests.

Application to 1972 – 2022 GSS Data

To illustrate the approach of the psychometric model, I apply the psychometric model of public opinion to the GSS fiscal policy preference data for all available years (1972 – 2022). On the one hand, the GSS represents a unique and important source of fiscal policy preference data spanning a long time period with items worded identically and across repeated, nationally representative measures of public opinion. These make it useful for drawing valid inferential claims about traits. On the other hand, the theoretically un-rigorous approach of the GSS to measuring fiscal preferences means that attitudes towards specific policies are neither measured with respect to group, reducing the validity of inferential claims around *Intention to Act*, nor experimentally sampled from a meaningful typology, reducing the validity of inferential claims around *Behavior*. At best, inferential claims may be drawn about trait preference in fiscal orientation for

universalism versus particularism by comparison of two specific policies, Welfare and Social Security, as before.

The focal *Behavior* for the GSS, as before, is *Fiscal Orientation*. Behavior here refers to behavioral responses to survey items that may or may not generalize beyond the survey context, but that are assumed to reveal information about traits. This reflects the difference in spending preference for the universalistic Social Security (GSS: NATSOC) versus the particularistic Welfare (GSS: NATFARE). Higher values reflect a net preference for the universalism of Social Security over the class particularism of Welfare. Because other fiscal policy preference items on the GSS (e.g., “assistance to the poor” or “aid to blacks”) lack as clear a connection to real policies (e.g., Welfare or Affirmative Action), it is difficult to justify their inclusion without resort to computational psycholinguistic methods to account for construct-irrelevant variance introduced by variation in how these unspecific policies are framed, as is discussed in later chapters.

Because *Behavior* as operationalized by *Fiscal Orientation* here is a deterministically calculated value—the difference in support for Social Security versus Welfare—it is treated as an observed score rather than a latent variable, and it is depicted for analysis in this section by a rectangle rather than an oval.

The mediating *Intention to Act* for the GSS, as before, is *Risk Tolerance*. This can be thought of as the aggregation of preferences and reduction of their uncertainties. As before, risk tolerance arises from decomposition of spending preferences for Welfare and Social Security, an approach limited by the available data. Responses indicating a desire to “spend more” or “spend less” are coded as higher values that both reflect a tolerance of

risks associated with departures from the fiscal status quo, while responses indicating a desire to “spend same” are coded as zero that reflects an aversion to the risks associated with departures from the status quo. An obvious departure from the ideal case of the psychometric model of public opinion is that the GSS does not ask about risks associated with social group effects for each policy, reducing the validity of inferential claims that the model identifies true-score fiscal policy preferences or a trait fiscal orientation.

The GSS is largely a project of and for sociology, and as such it lacks space for validated psychological survey instruments like risk propensity measures. Lack of space for validated survey instruments, which typically have many individual question items, is a challenge for research on the political psychology of mass public opinion, and a topic revisited in Chapter 5. Still, the GSS is a rich source of historical fiscal policy preference data.

Because *Intention to Act* as operationalized by *Risk Tolerance* here is a deterministically calculated value—the sum in support change in Social Security and Welfare spending—it is treated as an observed score rather than a latent variable and depicted by a rectangle rather than an oval. While this operationalization of *Risk Tolerance* is far from ideal, as will be discussed in the next section, it serves to link an outcome of interest to this project—a *Fiscal Orientation* towards universalism or particularism—to the Psychometric Model. Apart from inferences about the overall model fit related to Proposition 1, it does not test hypotheses relating Risk Tolerance to Fiscal Orientation or hypotheses relevant to the larger project (e.g., a preference for equal treatment).

Following the theory of planned behavior and my psychometric model of public opinion, I take *Risk Tolerance* as the proximal predictor of *Fiscal Orientation*— preference for universalism or particularism. This is because humans seek to reduce the uncertainty and errors in the predicted consequences of their behaviors as they make decisions to act. A second obvious departure from the ideal case of the psychometric model of public opinion is that the GSS does not randomly assign policies for evaluation, so responses may capture some effort by respondents to manage the impression they give by altering their pattern of response, e.g., to perceived demands of social desirability. A final obvious departure from the ideal case of the psychometric model of public opinion is that the GSS does not ask about high-risk fiscal policies, like a reparations or universal basic income, further reducing the validity of inferential claims related to *Risk Tolerance* as a specific operationalization of *Intention to Act*.

Cognitive Norms reflects earned income and educational achievement. Income is operationalized with the GSS survey item CONRINC, which asks:

Did you earn any income from (OCCUPATION DESCRIBED IN OCC-INDUSTRY) in [the previous year]? {YES, NO}, IF YES: In which of these groups did your earnings from (OCCUPATION IN OCC) for last year--[the previous year]--fall? That is, before taxes or other deductions.

This is coded in terms of inflation-adjusted personal income and z-score transformed for comparability of magnitude with other variables.

Education is operationalized with the GSS survey item EDUC, which asks:

What is the highest grade in elementary school or high school that (you/your father/ your mother/your [husband/wife]) finished and got credit for? IF FINISHED 9th-12th GRADE OR DK*: Did (you/he/she)

ever get a high school diploma or a GED certificate? Did (you/he/she) complete one or more years of college for credit--not including schooling such as business college, technical or vocational school? IF YES: How many years did (you/he/she) complete? Do you (Does [he/she]) have any college degrees? (IF YES: What degree or degrees?).”

This is coded numerically and z-score transformed for comparability with other variables.

Affective Interests reflects partisan identification and political ideology.

Partisanship is operationalized with the GSS survey item PARTYID, which asks:

Generally speaking, do you usually think of yourself as a Republican, Democrat, Independent, or what?” Responses are coded on a 7-point Likert scale from Strong Democrat to Strong Republican. Political ideology is operationalized with the GSS survey item POLVIEWS, which asks: “We hear a lot of talk these days about liberals and conservatives. I'm going to show you a seven-point scale on which the political views that people might hold are arranged from extremely liberal--point 1--to extremely conservative-- point 7. Where would you place yourself on this scale?”

Responses are coded on a 7-point Likert scale.

Cognitive-affective Learning reflects the past real-world voting behavior. Past voting behavior is operationalized using the set of GSS items VOTE**, where ** are specific presidential election years. This item asks:

Now in **, you remember that <D Candidate> ran for President on the Democratic ticket against <R Candidate> for the Republicans, and <I candidate> as an Independent. Do you remember for sure whether or not you voted in that election? IF VOTED: Did you vote for <D Candidate>, <R Candidate>, or <I Candidate>?”

A choice for the Democrat is coded as negative one (-1), Independent or Did not vote as zero (0), and Republican as positive one (+1).

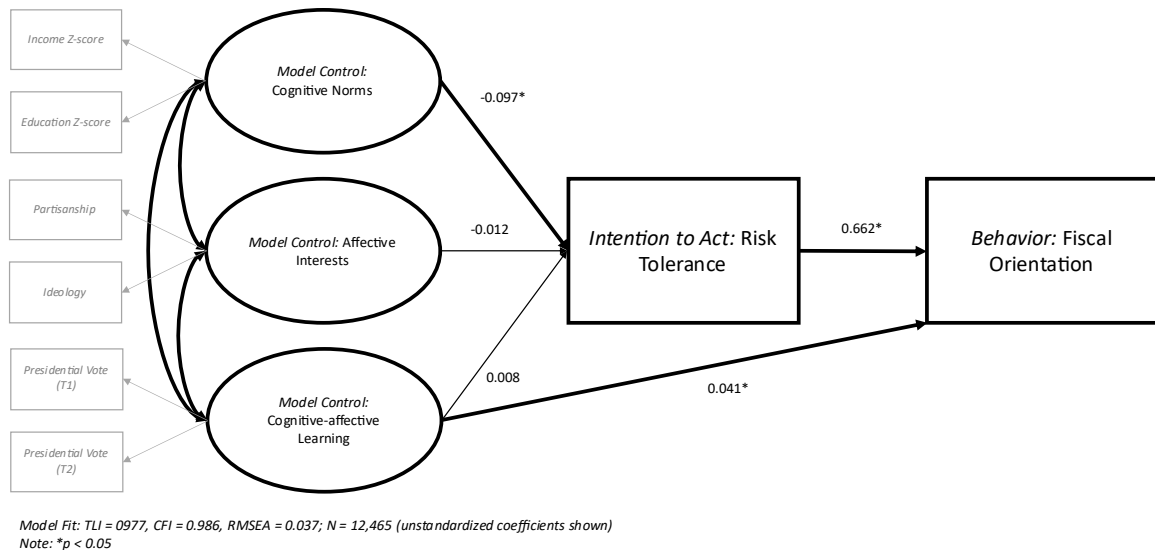


Figure 3.3: Analysis using GSS data.

These variables are tested using the structural and measurement model illustrated in Figure 3.3. The R package `lavaan` was used for all path analyses. The model converges with excellent fit ($RMSEA = 0.038$, excellent; $TLI = 0.974$ & $CFI = 0.988$, excellent), suggesting it is plausible given the observed relationships among indicators, although model fit is inflated by the deterministic relationship between risk and orientation. (A correlation matrix is provided in the online Supplemental Materials for replication purposes.) As might be expected from variables that share a common set of items, it appears that *Risk Tolerance* in *Intention to Act* is associated with *Fiscal Orientation Behavior*. Moreover, this effect is partially driven by *Cognitive Norms* in the educational and economic systems—higher levels of income and education negatively predict individual-level racial resentment. Finally, the *Cognitive-affective Learning* of actual political participation negatively predicts preference for fiscal policy universalism of Social Security over the fiscal policy particularism of Welfare—more conservative

respondents tend to prefer fiscal policy universalism. That actual political behavior contributes to variation in the focal *Behavior* strengthens the validity of inferential claims that *Fiscal Orientation* is a stable trait related to real-world behaviors beyond evaluations of fiscal preferences in public opinion surveys.

Because the structure of cognition is assumed to be invariant (i.e., our brains are not significantly evolving over the duration of the GSS), it makes sense to pool observations across years. This identifies average effects of distal and proximal predictors on the focal behavioral outcome while validating the overall relationships among variables implied by the theory of planned behavior and as operationalized by the Psychometric Model. In contrast, econometric effects could be identified by decomposing the model by year, or by including econometric variables.

An unfortunate limitation of the GSS data, and of the approach taken here, is that the wording of GSS fiscal policy preference spending items do not generalize well, especially to novel policies. Because the GSS items ask whether spending should be altered (i.e., the response set is {spend same, spend more, spend less}), the GSS items really only make sense when asking about established fiscal policies (e.g., Social Security, Welfare, defense spending, etc.). It makes much less sense to ask whether spending for a non-existent policy (e.g., Universal Basic Income) should be increased (i.e., above zero), and even less sense to ask whether spending should be decreased (i.e., below zero). Indeed, the one year the GSS asks about basic income (1987; GSS: GOVMINC “The government should provide everyone with a guaranteed basic income” uses a totally different, but contextual appropriate response set: {Strongly agree, Agree,

Neither agree nor disagree, Disagree, Strongly disagree}. This difference not only in response set wording, but also in response set levels (i.e., 3 levels versus 5) reduces the ability of public opinion scholars to make exact comparisons across these items using their text alone.

For these and other reasons, the approach to trait identification taken here is best taken as a demonstration, and will not be directly repeated or incorporated with other analyses in this dissertation. As mentioned, the use of archival data like the GSS are limited in that they tend to only ask respondents about established, low-risk policies. This reduces our ability to make inferences about risk tolerance more generally. Moreover, uncertainty in fiscal policy effects depend on group-based considerations. The next section applies the psychometric model to primary survey data to demonstrate how these facets of decision-making may be integrated with the Psychometric Model.

Reconceptualizing Risk Tolerance

An important point to consider is that risk tolerance has at least two facets: person-centered and policy-centered. Person-centered considerations of fiscal policy risk in public opinion and political psychology typically focus on how fiscal policies affect relationships between groups (Gilens, 1999). Extant research suggests Americans oppose welfare because they want to help only the deserving poor, they but cannot discern deserving individuals from among the public with accuracy (Gilens, 1999). Policy-centered considerations of fiscal policy risk in political behavior and political behavior typically focus on how uncertainty reduces support for public investments (Jacobs & Matthews, 2017). Fiscal policy preference research has called for greater theoretical and

methodological attention to the processing of information in an uncertain environment (Ballard-Rosa, Martin, & Scheve, 2017), which is a focus of this dissertation.

I depart from past approaches, which proliferate person-centered trait constructs like risk propensity or altruism, to instead provide policy-centered typological dimensions related to universalism and equal treatment. This provides a systematic framework for understanding how policies are related to and distinct from each other. On the one hand, fiscal spending policies allocate benefits to people in society. Social Security retirement may be seen as treating people equally because it allocates benefits on the basis of age. Age is a permeable social category—most people can expect to retire at some point, making Social Security universalistic. In contrast, Reparations allocates benefits on the basis of race. Race is an impermeable social category—most people have only a single racial identity that does not change over time, making Reparations particularistic. On the other hand, fiscal spending policies may differ in how much they reflect or depart from the status quo. People may be familiar with Social Security and support the policy on the basis of its familiarity alone, not its universalism or treatment criteria, but unfamiliar with Reparations, and oppose the policy on the basis of its novelty alone, not its particularism or treatment criteria.

Building on these examples, a more general starting point for conceptualizing fiscal policy preferences is illustrated in Figure 3.4, which depicts two principal axes: risk tolerance and fiscal orientation. Like the circumplex of emotions, but turned on its side, risk is associated with arousal and reactivity, while emotional valence is associated with ideological orientation and fiscal universalism. In this dissertation, I argue that surveys

that ask about untested (and therefore high-risk policies, e.g., Reparations or basic incomes) more fully sample the construct space to accurately determine fiscal policy preferences versus surveys like the GSS, which seldom ask about untested policies (or, for that matter, tested non-fiscal policies like the minimum wage). In this conceptualization, a preference for fiscal policy universalism is aligned with the equal treatment norm of classical liberalism, while a preference for fiscal policy particularism is aligned with the equal protection norm of modern liberalism.

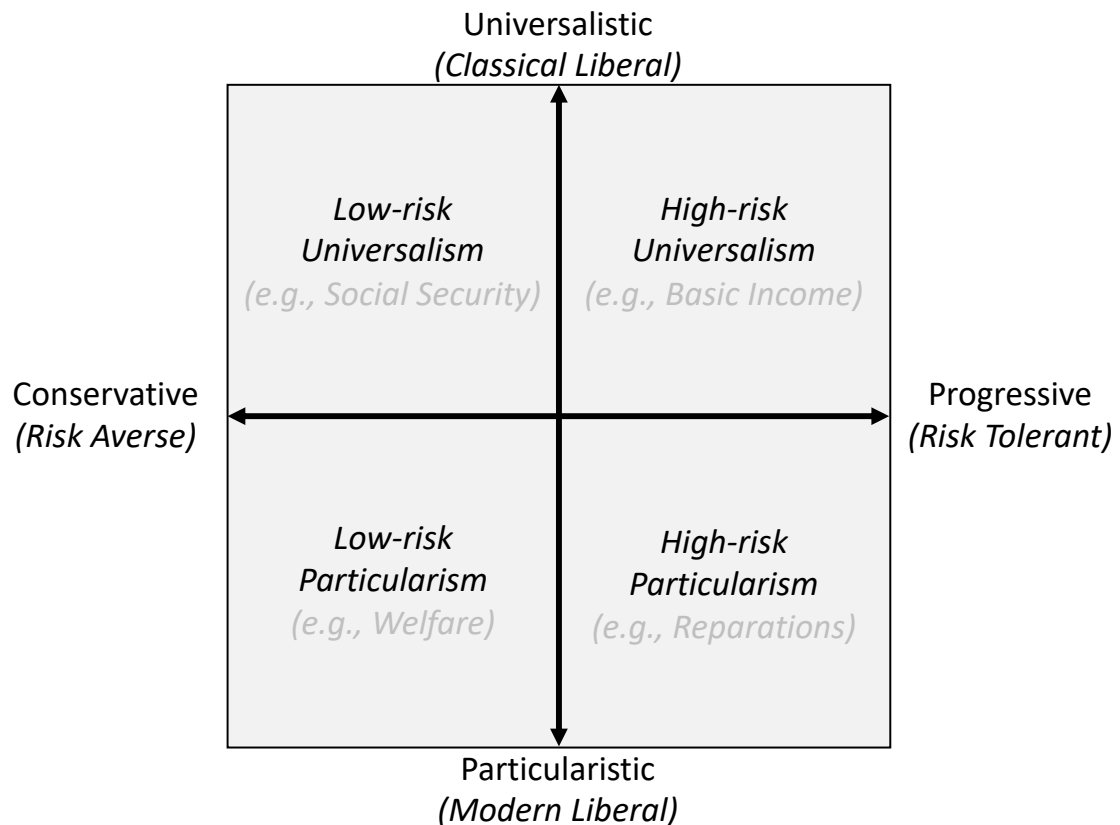


Figure 3.4: A fiscal policy typology.

Universalistic fiscal policies like Social Security and basic incomes are classically liberal in two senses. First, Thomas Paine articulated both policies in republican terms

during the era of classical liberalism (i.e., the 1700s). Second, both policies treat people equally on an individual basis. All people who reach old age can expect to benefit from Social Security, while all people would receive a fiscal disbursement (e.g., upon turning 18 or monthly) under most basic income schemes. In contrast, Welfare and Reparations single out groups of people on the basis of income and class or race and ancestry for fiscal disbursements. This fiscal particularism coheres better with the modern liberal perspective that the state should provide a safety net or that all “badges of slavery” must be erased. While both Social Security are at this point long-established, test policies, neither Universal Basic Income nor Reparations have been tested in the United States and therefore remain comparatively risky fiscal policies. California has created a legislative committee to examine the feasibility of paying reparations to descendants of slaves who live in the state.

In its strong form, economists conceptualize UBI as meeting three criteria (Hoynes & Rothstein, 2019, p. 930):

1. It provides a sufficiently generous cash benefit to live on, without other earnings.
2. It does not phase out or phases out only slowly as earnings rise.
3. It is available to a large proportion of the population, rather than being targeted to a particular subset (e.g., single mothers).

Economist Daniel Susskind (2020) conceptualizes a conditional basic income, where one can voluntarily withdraw from the workforce to receive a regular cash disbursement from their government. Recent research in economics (Babilla, 2023) suggests that some

polities may experience positive economic effects via conversion of particularistic fiscal subsidies (e.g., for fuel) into a universal basic income.

To assess true-score fiscal policy preferences, fiscal policies should be randomly sampled from the fiscal policy typology for respondents to evaluate. A survey item might, for example, ask “Do you support <policy>?” where <policy> is randomly assigned, or it could ask “Do you prefer <policy 1> or <policy 2>,” where both <policy 1> and <policy 2> are randomly assigned. If a respondent prefers Universal Basic Income to Social Security, they are risk tolerant. If a respondent prefers Universal Basic Income to Reparations, they are universalistic in their preferences.

Based on the paradox of redistribution, the GSS data, and existing fiscal policy preference research (Scheve & Stasavage, 2023), one expectation from this typology of fiscal spending policies is that Americans will be classically liberal, continuing to prefer universalistic policies like Social Security even as additional policies from the typology are sampled for random assignment to survey respondents to evaluate. Separate from the GSS, another expectation from this typology of fiscal spending policies is that Americans will be risk averse, preferring tested, established fiscal policies to untested, novel fiscal policies.

One limitation from this typological approach is that it may be difficult to validate survey responses against real-world behavior. Universal basic income, for example, allocates diffuse fiscal benefits while likely imposing concentrated fiscal costs, making for a type of politics that relies on risk-tolerant policy entrepreneurs to advocate the

policy as they run for office. Only a few American political candidates (e.g., Andrew Yang, Mike Broihier) have run on a platform that emphasizes universal basic income.

The random assignment of fiscal policies to survey respondents for evaluation brings the operationalization of risk tolerance and *Intention to Act* closer to the ideal case of the psychometric model of public opinion. Thus, while the psychometric model of public opinion represents the process of cognition that is endogenous to people and assumed to be invariant over time, random assignment of policies from the typology represents facets related to cognition that are exogenous to people and specific to their treatment in the survey. This is illustrated in Figure 3.5.

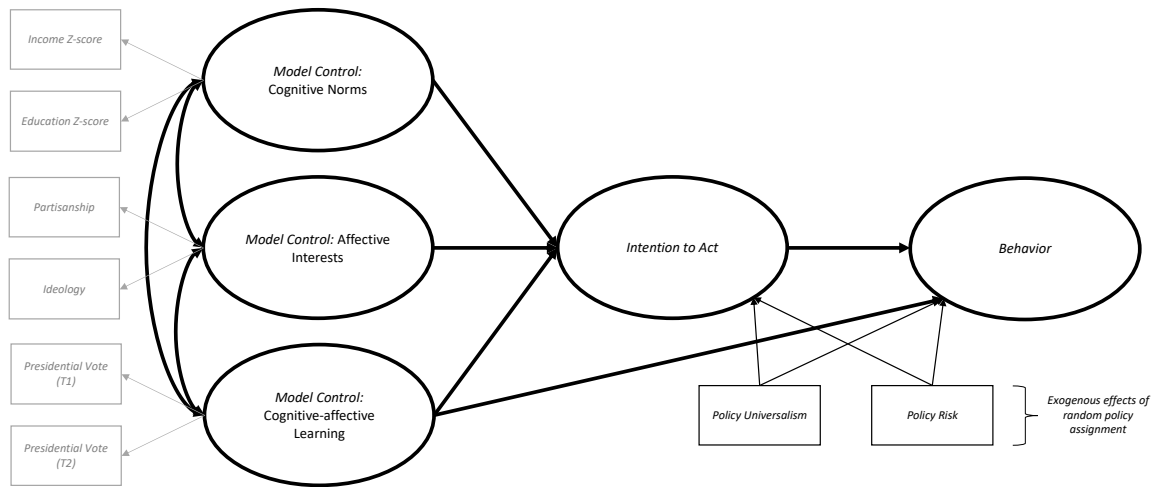


Figure 3.5: Modification of the psychometric model to include exogenous experimental effects that arise from random assignment of fiscal policies from the typology.

To test this model, conceptualization of risk, and the policy typology I present a primary survey experiment in the next section. For the study, fiscal policies are randomly sampled from the typology and assigned to survey participants for them to evaluate. This approach further validates the Psychometric Model, proposed conceptualization of risk, and proposed policy typology, and is robust to the inclusion of additional policies.

Primary Survey Experiment

To operationalize this approach, I conducted a survey experiment using the 2022 Congressional Election Study (CES), a nationally representative survey administered in part by political science faculty at UC Riverside. For this experiment, respondents were randomly assigned to evaluate policies drawn from a typology characterized by dimensions of fiscal policy universalism (Social Security, Universal Basic Income) versus fiscal policy particularism (Welfare, Reparations) and low risk (Social Security, Welfare,) versus high risk (Universal Basic Income, Reparations) fiscal policies. Random assignment appears to have been effective, with balance across policy conditions and policy dimensions.

Policy attitudes were assessed using three items designed to probe multiple facets of these fiscal policies, using a standard Likert scale:

Policy Support: I support <<policy>>.

This item is intended to assess policy support in a way that maximizes straightforward face validity. That is, the item directly and clearly asks the respondent to give their level of support for the policy they are randomly assigned to evaluate.

Policy Scope (reverse coded): <<policy>> goes too far.

This item is intended to assess perceptions that the scope of the policy is adequate in the mind of the respondent. If a policy is perceived as going too far, the level of support should be lower.

Policy Impact: The impact of <<policy>> is clear.

This item is intended to assess respondents' evaluation of their own ability to understand the policy they are evaluating. If the impact of the policy to which they are randomly assigned is clear, the level of support should be higher.

For these items, <<policy>> represents the randomly assigned fiscal policy each respondent was designated to assess. Although these items are not intended to assess a single latent construct, I report their Cronbach's alpha reliability, $\alpha = 0.74$, for completeness. Cronbach's alpha reliability ranges from zero (low reliability) to one (high reliability) and reflects the degree to which the pattern of item responses covary and cohere to reflect a single underlying psychological construct. This marginally adequate reliability reflects the small number of items (reliability increases with the number of items), as well as the fact that experimental manipulation in the wording of items reduces cohesion in the pattern of responses, making path analysis necessary.

To assess effects of policies on various social groups, three items were designed to probe multiple facets of these fiscal policies, using a standard Likert scale:

Policy Group Benefit: <<policy>> benefits <<group>>.

This item is intended to assess latent intention to act in relation to the risks associated with intergroup relations and social identities. As will be assessed later, classic social identity theory explains that fiscal policy preferences should be motivated by a preference for policies that benefit one's own social group.

Policy Group Fairness: <<policy>> makes the economy fairer for <<group>>.

This item is intended to assess how respondents link perceptions of policy fairness to groups at the meso-level and the economy at a macro-level. Perceptions of fairness are

important determinants of fiscal policy preferences in past research (Scheve & Stasavage, 2023), while group-wise evaluations of fairness and legitimacy are integral to classical social identity theory (e.g., Garcia, Desmarais, Branscombe, & Gee, 2005).

Policy Group Stability (reverse-coded): <<policy>> increases economic uncertainty for <<group>>.

This item is intended to most closely capture perceptions of risk, and risk in particular as it pertains to social groups. The perceived stability of social groups is an important determinant of institutional change in classic social identity theory (Garcia, Desmarais, Branscombe, & Gee, 2005).

To introduce variability and bias against detecting an effect, <<group>> is randomly assigned from Black people, White people, or Hispanic people. Thus, a person might be asked the degree to which they agree or disagree with the statement “I support Universal Basic Income.” or “Universal Basic Income benefits Black people.” Although these items are not intended to assess a single latent construct, I report their Cronbach’s alpha reliability, $\alpha = 0.54$, for completeness.

For the measurement of fiscal policy preferences, respondents are randomly assigned one of four policies to assess: Reparations, Welfare, Social Security, and Universal Basic Income. Risk and universalism coding are shown in Table 3.1.

Table 3.1: Policy risk and universalism coding.

	Low-risk Policies <i>(Coded -1)</i>	High-risk Policies <i>(Coded +1)</i>
Universalistic Policies <i>(Coded +1)</i>	Social Security	Universal Basic Income
Particularistic Policies <i>(Coded -1)</i>	Welfare	Reparations

The purpose of random assignment is to prevent contamination in the measurement of attitudes towards one policy by exposure to other policies. Respondents were shown the following definition of the policy to which they were assigned:

Universal Basic Income (N = 90): A universal basic income is paid by the government to every person. It replaces other social safety net payments and is high enough to cover all basic needs (food, housing etc.). With a basic income, you can still work and earn money. Everyone—including you—might get \$2,000 month from the government regardless of whether they are rich or poor, working or unemployed.

This definition is intended to present Universal Basic Income in a minimal and neutral way. Historically, basic has been conceptualized by Thomas Paine as a basic endowment one receives upon turning 18, and later by Martin Luther King, Jr., as a monthly disbursement. 2016 Democratic presidential primary candidate Andrew Yang frames Universal Basic Income positively as a “Freedom Dividend”, while Republicans tend to frame Universal Basic Income negatively as disincentivizing work.

Welfare (N = 83): Welfare is typically thought of as money for food (EBT, WIC, SNAP), housing assistance (Section 8), or other targeted programs

(FASFA). Welfare is only given to people who make less than a certain amount of money.

Welfare in the United States is funded at both the federal and state levels. In the American South, states like Mississippi repurposed federal welfare block grant funds for the construction of a volleyball facility at a university, or other unintended purposes (Gritter, 2017). Research in public opinion (Gilens, 1999) suggests that Americans hate welfare because they see it as disproportionately benefitting Black people, whom Americans on average view as the undeserving poor.

Social Security ($N = 82$): Social security is associated with reducing poverty among people who are elderly or disabled. Typically, people pay into social security as they work. Everyone typically receives benefits once they retire. The amount you get depends on your working income.

Ideally, this definition would be modified to include proposals to raise or lower the retirement age to a range of randomly assigned numeric values (e.g., 65 or 18). Although this would provide greater variability in among the universalistic fiscal policies, with Social Security approaching Universal Basic Income as the retirement age approaches zero, such an approach was not possible with the survey fielded for this study. A more negative frame might note that Republicans advocate privatizing social security.

Reparations ($N = 94$): Reparations are money given to specific groups to correct past injustices. Some countries and states are considering reparations for the descendants of slaves, or reparations for survivors of European colonialism.

Reparations have become a salient political topic in the United Kingdom and California. In the United Kingdom, descendants of slavers are researching their familial legacy of slavery and in some cases moving to make restitution privately. In California, recent legislation created a commission to examine how the state might pay reparations and to whom.

Coding of *Policy Universalism* arises from the position of the policy that is randomly assigned along the vertical axis of the fiscal policy typology. Universalistic fiscal policies (e.g., Social Security or Universal Basic Income) are coded as positive one (+1), while particularistic fiscal policies (e.g., Welfare or Reparations) are coded as negative one (-1). Coding of *Policy Risk* arises from the position of the policy that is randomly assigned along the horizontal axis of the fiscal policy typology. Established, low-risk fiscal policies (e.g., Social Security or Welfare) are coded as negative one (-1), while untested, high-risk (e.g., Universal Basic Income or Reparations) fiscal policies are coded as positive one (+1).

Thus, a particular survey respondent who is randomly assigned “Reparations” for <<policy>> and “Black people” for <<group>> might see what is shown in Table 3.2.

Table 3.2: An example survey case.

Reparations are money given to specific groups to correct past injustices. Some countries and states are considering reparations for the descendants of slaves, or reparations for survivors of European colonialism.					
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
I support Reparations.					
Reparations goes too far.					
The impact of Reparations is clear.					
Reparations benefits black people.					
Reparations makes the economy fairer for black people.					
Reparations increases economic uncertainty for Black people.					

The risk of the policy seen by the respondent would be negative one (-1, low-risk) and the universalism of the policy seen by the respondent would also be negative one (-1, particularistic). Because each respondent sees only a single policy, inferences about preference can only be made at the population level. This was a limitation of how the survey is run. Ideally, respondents would choose between two randomly assigned policies to allow for individual-level inferences, as is demonstrated in Chapter 4,

As a first pass, unstructured regression analyses are presented in Table 3.3. Per expectations ($H1, \beta > 0$), *Policy Universalism* positively explains and predicts variation in *Policy Support* and *Policy Scope* (which is reverse-coded). However, fiscal *Policy*

Universalism does not explain or predict variation in *Policy Impact*, biasing inferences drawn from its inclusion in the structural and measurement model conservatively towards null results. As expected, fiscal *Policy Risk* negatively explains and predicts variation across all three dependent variables.

Table 3.3: Unstructured regression analyses.

	<i>Dependent variable:</i>		
	Policy Support (1)	Policy Scope (Reversed) (2)	Policy Impact (3)
Policy Universalism (H1, $\beta > 0$)	0.215*** (0.070)	0.177** (0.072)	0.025 (0.065)
Policy Risk	-0.514*** (0.070)	-0.344*** (0.072)	-0.238*** (0.065)
Constant	3.414*** (0.070)	3.130*** (0.072)	3.277*** (0.065)
Observations	347	349	347
R ²	0.158	0.076	0.038
Adjusted R ²	0.153	0.071	0.032
Residual Std. Error	1.296 (df = 344)	1.351 (df = 346)	1.210 (df = 344)
F Statistic	32.164*** (df = 2; 344)	14.328*** (df = 2; 346)	6.789*** (df = 2; 344)

Note:

*p<0.1; **p<0.05; ***p<0.01

Ideally, whether a respondent is shown a definition for a fiscal policy ought to be randomly assigned to assess whether and the degree to which such information influences the pattern of responses. However, this was not possible for the CES, somewhat reducing the validity of inferential claims relative to an ideal case of the psychometric model of public opinion. A second limitation arises from how the CES asks about income. Rather than assessing individual income—which is directly related to individual socialization—the CCES asks household income. This contaminates measure of income as an indicator

of *Cognitive Norms* by confounding it with sex and gender—women are less likely than men to be the primary earners in their household. Results of the model are shown in Figure 3.6.

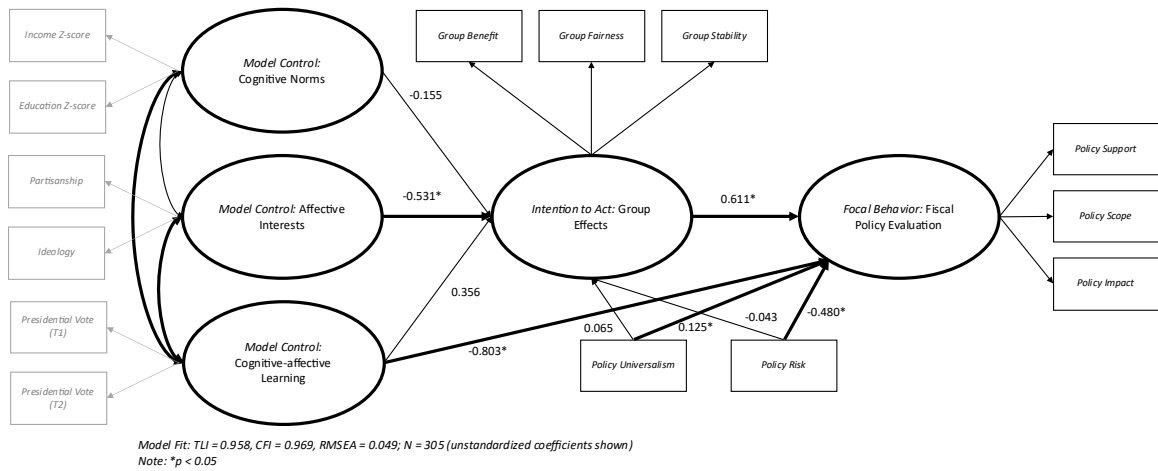


Figure 3.6: Analysis of 2018 CCES data.

The model converges with excellent fit ($RMSEA = 0.049$, marginal; $TLI = 0.958$ & $CFI = 0.969$, excellent). (A correlation matrix is provided in the online Supplemental Materials for replication purposes.) As expected, policy evaluations when *Group Effects* are salient with respect to *Intention to Act* positively explains and predicts variation in the *Behavior* related to *Fiscal Policy Evaluation* alone. As expected, the perceived behavioral control over *Cognitive-affective Learning* (past voting behavior) has a significant and negative direct effect on *Behavior*, although not on *Intention to Act*—more conservative respondents tend to prefer fiscal policy universalism. That actual political behavior contributes to variation in the focal *Behavior* strengthens the validity of inferential claims that fiscal orientation is a stable trait related to real-world behaviors beyond evaluations of fiscal preferences in public opinion surveys.

The utility of the theory of planned behavior operationalized here as a psychometric model is that it allows identification of the relevant components of cognition and learning that are active when respondents evaluate fiscal policies and express their preferences. While comparison of means would yield similar information in terms of identifying experimental effects of policy assignment, the psychometric model serves as a basis for the integration of fiscal policy preference research with neuroscience that follows the theory of planned behavior.

As expected, *Policy Universalism* positively explains and predicts variation in *Behavior*, although not in *Intention to Act*. Americans are classically liberal in their fiscal policy preferences, preferring universalistic policies like Social Security and Universal Basic Income over particularistic policies like Reparations or Welfare. As expected, *Policy Risk* negatively explains and predicts variation in both *Intention to Act* and *Behavior*. Americans are generally risk averse in their fiscal policy preferences, preferring tested, established fiscal policies like Social Security Welfare over untested, novel fiscal policies like Universal Basic Income or Reparations.

Thus, the typology of fiscal policies I propose appears to serve as a reasonable starting point for conceptualizing fiscal policies, threats to validity remain. In general, more policies should be added to and sampled from the typology to ensure that no single policy dominates the resulting effects (this is done in later sections). Of specific interest is testing the robustness of these findings to alternative trait-based explanations for fiscal policy preferences. In particular, if the effects of policy assignment are robust to the inclusion of variables related to trait racism and additional fiscal policies, and non-fiscal

policies, then it suggests the proposed typology captures some true psychological property of fiscal policies.

Tests of Robustness

Here, I demonstrate the robustness of the model and findings to the inclusion of non-fiscal policies and a trait-racism control variable. First, I demonstrate the model using a survey experiment on the 2018 Cooperative Congressional Election Study (CCES). Then I demonstrate the model using an expanded set of policies for the 2022 Congressional Election Study (CES). While there are some limitations to the Psychometric Model for the 2018 CCES data, both experiments demonstrate the robustness of the substantive finding that Americans are risk-averse universalists in their fiscal and general policy preferences, consistent with Hypothesis 1 ($H1, \beta > 0$).

Application to 2018 CCES Data

In this study, the set of policy types considered is expanded to include wage policies (e.g., Minimum Wage and Maximum Wage). All policies are categorized and coded as explained in the previous section for in the primary study. Wage policies are categorized and coded such that while both Minimum Wage and Maximum Wage are particularistic (-1), while Minimum Wage is categorized as low-risk (-1) and Maximum Wage is coded as high-risk (+1). This policy risk and universalism coding is shown in Table 3.4.

Table 3.4: Policy risk and universalism coding.

	Low-risk Policies <i>(Coded -1)</i>	High-risk Policies <i>(Coded +1)</i>
Universalistic Policies <i>(Coded +1)</i>	Social Security	Universal Basic Income
Particularistic Policies <i>(Coded -1)</i>	Welfare, Minimum Wage	Reparations, Maximum Wage

As before, respondents are shown a definition of each policy, with the definitions used for policies in the previous section staying the same. Definitions for the expanded set of policy types include:

Minimum Wage (N = 182): The minimum wage is the minimum amount of money that a company can pay its workers per hour. The federal minimum wage is \$7.25 per hour, although state and local governments sometimes set higher minimum wages. Some people in the US want to raise the minimum wage to between \$10 and \$15 an hour.

Increasing the minimum wage retains broad bipartisan support according to traditional polling methods. Lack of increase in the federal minimum wage is given by some comparative political economists as evidence that the United States is not a responsive democracy, but many states and localities have set minimum wages much higher than the federal minimum.

Maximum Wage (N = 159): A maximum wage is a limit on how much individuals can earn. A maximum wage would affect the wealthiest individuals. Limiting CEO pay to 100 times the minimum wage would mean CEOs could not earn more than \$1.5 million per year.

Although no major economy adopted a maximum wage, during World War II the American president proposed a maximum cap of \$447,760 in 2022 dollars. Switzerland voted against capping executive pay in 2013.

As an additional check on the robustness of these findings, I further include *Individual-level Racism* as control a variable. *Individual-level Racism* is typically considered as a state that has crystalized to trait-like stability over time. In the United States, relationships between black and white racial groups are of special interest, and racial resentment is used to assess intergroup attributions of motivation, ability, and work ethic. Measures of racial resentment used here include:

Racism1: White people in the U.S. have certain advantages because of the color of their skin.

Racism2: Racial problems in the U.S. are rare, isolated situations.

Racism3: Irish, Italians, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.

Racism4: Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class. (reverse coded)

Racism5: Over the past few years, blacks have gotten less than they deserve. (reverse coded)

Racism6: It's really a matter of some people not trying hard enough, if blacks would only try harder they could be just as well off as whites.

The reliability for these items is $\alpha = 0.91$. This excellent reliability reflects the large number of items, as well as the fact that no item-level experimental manipulations

are present to distort the observed pattern of responses. However, trait racism as an approach to understanding policy preferences has been criticized by political psychologists as mere tautology however, because it lacks conceptual distinction from the policies it purports to explain—racial conservatism is conservatism. According to political psychologists (Huddy, Sears, & Levy, 2013, p. 549), an experimental approach to inferences about traits is preferable because “...no independent variable is more apolitical than the random assignment to an experimental group, which also has the advantage of offering a strong causal claim.”

As before, unstructured regression analyses are given in Table 3.5. Even with an expanded set of policy types, the main substantive results remain the same. As before, *Policy Universalism* positively explains and predicts variation in support across a range of outcome variables ($H1, \beta > 0$), while *Policy Risk* negatively explains and predicts variation in support across a range of outcome variables.

Table 3.5: Unstructured regression analyses.

	Dependent variable:		
	Policy Support (1)	Policy Scope (Reversed) (2)	Policy Impact (3)
Policy Universalism (H1, $\beta > 0$)	0.199*** (0.048)	0.147*** (0.048)	-0.001 (0.041)
Policy Risk	-0.499*** (0.048)	-0.402*** (0.049)	-0.206*** (0.041)
Constant	3.283*** (0.047)	3.088*** (0.048)	3.270*** (0.041)
Observations	861	864	862
R ²	0.117	0.076	0.029
Adjusted R ²	0.115	0.074	0.027
Residual Std. Error	1.336 (df = 858)	1.359 (df = 861)	1.160 (df = 859)
F Statistic	56.674*** (df = 2; 858)	35.318*** (df = 2; 861)	12.922*** (df = 2; 859)

Note: *p<0.1; **p<0.05; ***p<0.01

With *Individual Racism* included as a control, the model converges with good fit ($RMSEA = 0.051$, marginal; $TLI = 0.945$ & $CFI = 0.955$, excellent). (A correlation matrix is provided in the online Supplemental Materials for replication purposes.) As is depicted by the structural and measurement model in Figure 3.7 (which omits indicator rectangles for visual clarity), *Individual Racism* and *Policy Risk* negatively predict attitudes towards all policies, as expected, while *Policy Universalism* has a significant positive effect controlling for these cognitive- and policy-centered effects, as expected

(H1, $\beta > 0$). (Nearly 100 people declined to state household income, decreasing the number of observations used.) A similar pattern of results is obtained: Americans are risk averse and universalistic in their preferences.

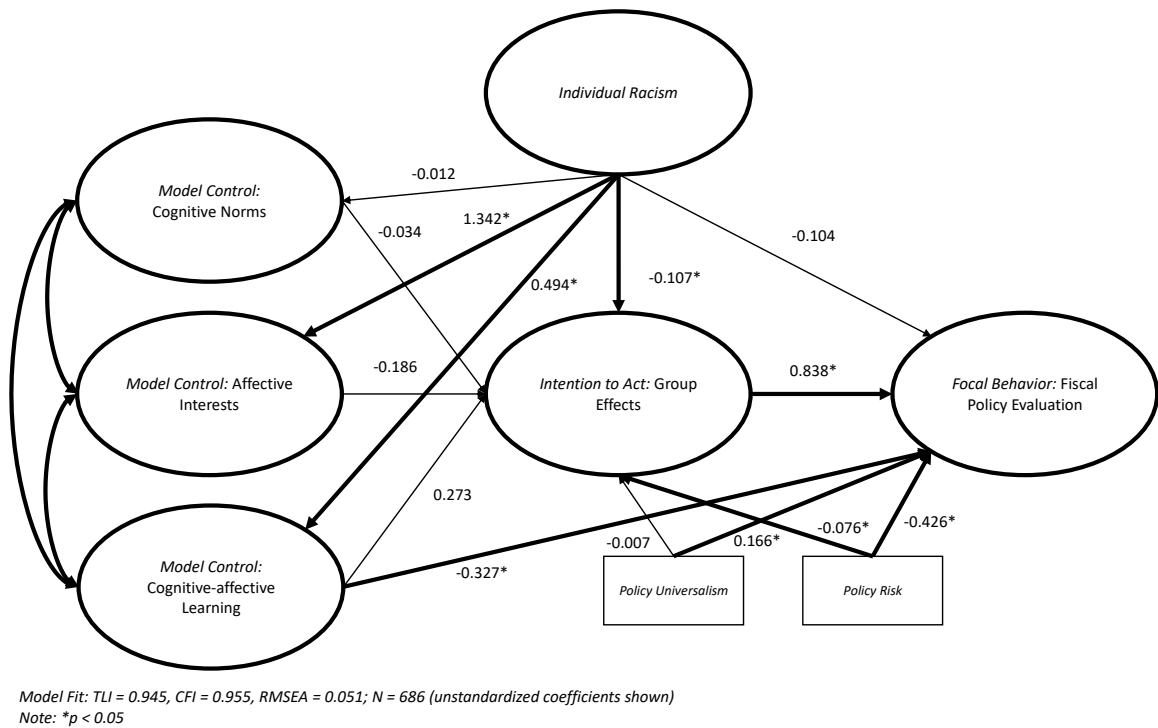


Figure 3.7: Analysis of 2018 CCES data with trait racism included.

Racism may moderate the effects of the policy treatments, but these interactive effects are not of central focus to the present study.

An important takeaway from this methodological approach is that the paradox of redistribution continues to hold true: universalistic policies like basic income may be necessary for effective wealth redistribution in the American context. Moreover, the substantive and statistical significance of risk aversion in policy preference formation suggests a need for policy preference research in order to help Americans gauge the risks of policy innovations.

Application to 2022 CES Data

To further illustrate the utility of this approach, I expand the set of policy types to non-fiscal policies for analysis of the Congressional Election Study (CES) in 2022 data. The same variables are used, with an expanded set of policies for random assignment, as is shown in Table 3.6.

Table 3.6: Policies included for analysis.

	Low-risk Policies <i>(Coded -1)</i>	High-risk Policies <i>(Coded +1)</i>
Universalistic Policies <i>(Coded +1)</i>	Social Security	Universal Basic Income, International Basic Income
Particularistic Policies <i>(Coded -1)</i>	Minimum Wage, Welfare, Earned Income Tax Credit, Child Tax Credit, Affirmative Action, Foreign Aid	Maximum Wage, Minimum Guaranteed Income, Reparations

As before, respondents are shown a definition of each policy, with the definitions used for policies in the previous section staying the same. Definitions for the expanded set of policy types include:

International Basic Income ($N = 83$): An international basic income is paid by the government to every person, regardless of citizenship. It replaces other welfare and foreign aid payments. With a basic income, people can still work and earn money. Everyone-including you-might get \$2,000 month from the government regardless of whether they are rich or poor, working or unemployed, citizen or non-citizen.

This item was included because fear that basic income may attract undocumented immigrants has been observed in studies of European attitudes towards basic income

(Jaspers, 2016). In the next chapter, the concept of a basic income granted to both citizens and non-citizens serves as a strict test of the proposed strategic social identity theory.

Political theorists sometimes advocate a global basic income.

Minimum Guaranteed Income ($N = 86$): A minimum guaranteed income is paid by the government to every person who makes below some amount of money. If the minimum income was \$10,000 a year, someone who makes \$9,000 a year would receive \$1,000. Likewise, a person who makes \$7,000 a year would receive \$3,000.

Earned Income Tax Credit ($N = 90$): The Earned Income Tax Credit (EITC) is a system where people with incomes below a certain level receive a refund when they file taxes. People must file taxes to receive their tax credit. The EITC is sometimes called a negative income tax.

Child Tax Credit ($N = 85$): The Child Tax Credit is a system where families with children receive a check each month from the government. Most families received \$250 per kid ages 6 to 17 or \$300 for each child age 5 and under. This program was tested during the COVID Pandemic.

Affirmative Action ($N = 74$): Affirmative action is the practice or policy of favoring individuals belonging to groups known to have been discriminated against previously. A company or university may seek to include women or minorities for opportunities where they are underrepresented.

Foreign Aid (N = 78): Foreign aid is money given to people in other countries for economic development or military protection. It is often given to specific governments, who use it for the benefit of their citizens.

Foreign Aid is included here as a particularistic counterpart to the concept of International Basic Income.

As before, unstructured regressions are presented for the main dependent variables in Table 3.7. As before, *Policy Universalism* positively explains and predicts variation in support across a range of outcome variables ($H1, \beta > 0$), while *Policy Risk* negatively explains and predicts variation in support across a range of outcome variables.

Table 3.7: Unstructured regression analyses

	<i>Dependent variable:</i>		
	Policy Support (1)	Policy Scope (Reversed) (2)	Policy Impact (3)
Policy Universalism (H1, $\beta > 0$)	0.280*** (0.050)	0.161*** (0.051)	0.100** (0.044)
Policy Risk	-0.325*** (0.044)	-0.225*** (0.045)	-0.088** (0.039)
Constant	3.316*** (0.048)	3.100*** (0.048)	3.188*** (0.043)
Observations	995	998	995
R ²	0.063	0.028	0.008
Adjusted R ²	0.061	0.026	0.006
Residual Std. Error	1.323 (df = 992)	1.335 (df = 995)	1.168 (df = 992)
F Statistic	33.417*** (df = 2; 992)	14.351*** (df = 2; 995)	3.958** (df = 2; 992)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

The structural and measurement model is shown in Figure 3.8, which omits indicator rectangles for visual clarity.

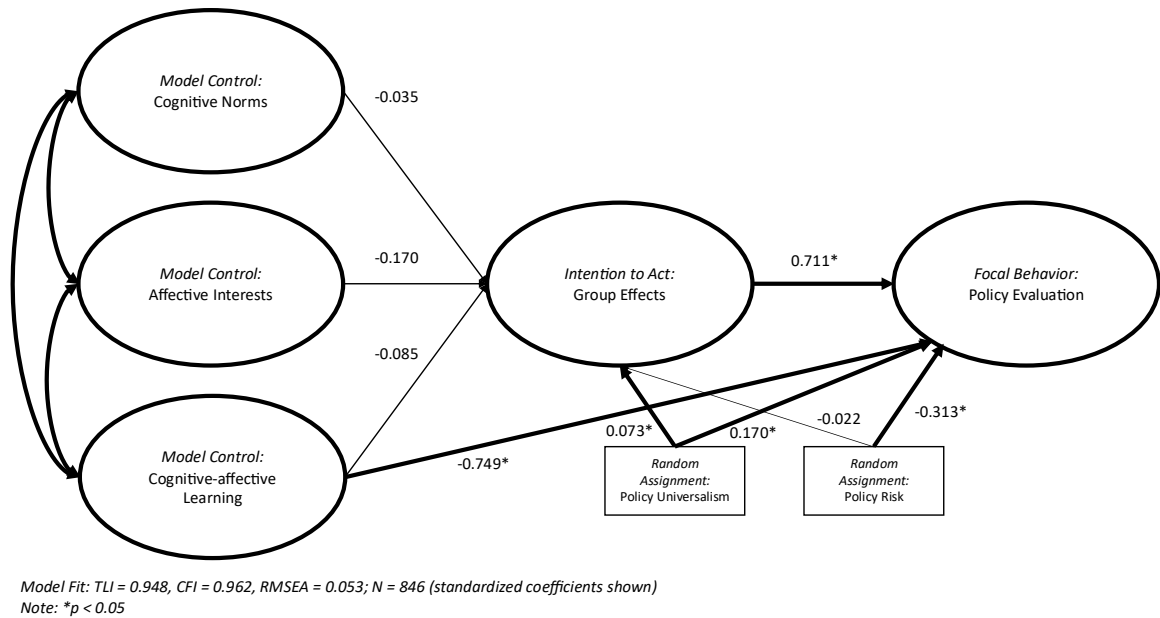


Figure 3.8: Analysis of 2022 CES data.

The model converges with excellent fit ($RMSEA = 0.053$, marginal; $TLI = 0.953$ & $CFI = 0.962$, excellent). (A correlation matrix is provided in the online Supplemental Materials for replication purposes.) As expected, policy evaluations when *Group Effects* are salient with respect to *Intention to Act* positively explains and predicts variation in the *Behavior* related to *Policy Evaluation* alone. As expected, the perceived behavioral control over *Cognitive-affective Learning* (past voting behavior) has a significant and negative direct effect on *Behavior*, although not on *Intention to Act*—more conservative respondents tend to prefer policy universalism. That actual political behavior contributes to variation in the focal *Behavior* strengthens the validity of inferential claims that orientation is a stable trait related to real-world behaviors beyond evaluations of policy preferences in public opinion surveys.

As expected, *Policy Universalism* positively explains and predicts variation in *Behavior*, as well as in *Intention to Act*. Americans are classically liberal in their policy preferences, preferring universalistic policies like Social Security, International Basic Income, and Universal Basic Income over particularistic policies like Maximum Wage, Welfare, or Minimum Wage. As expected, *Policy Risk* negatively explains and predicts variation in *Behavior*, but not *Intention to Act*. Americans are generally risk averse in their policy preferences, preferring tested, established policies like Social Security, Minimum Wage, and Welfare over untested, novel policies like Universal Basic Income, International Basic Income, or Maximum Wage.

This suggests that past political experience is the most relevant determinant of policy support. Respondents who vote politically conservative are less supportive of policies, generally, while respondents who are vote politically liberal are more supportive of policies, generally. Because *Cognitive-affective Learning*—perceived behavioral control as indicated by past voting behavior—is significant in the model, Figure 3.9 plots the relationship between policy ideology or orientation and risk tolerance by presidential vote choice as a sanity check on this approach to policy preference measurement.

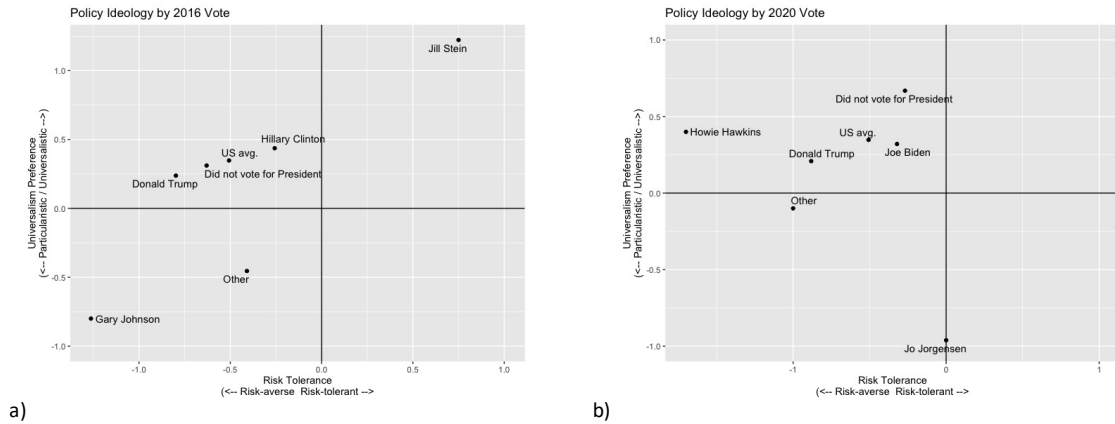


Figure 3.9: Means for each group along each axis.

As Figure 3.9 demonstrates, those who voted for Hillary Clinton in 2016 or Joe Biden in 2020 are more risk-tolerant than those who voted for Donald Trump either year, while the population average for the United States appears constant. Interestingly, non-voters appear to have become more universalistic and more risk-tolerant in their policy preferences.

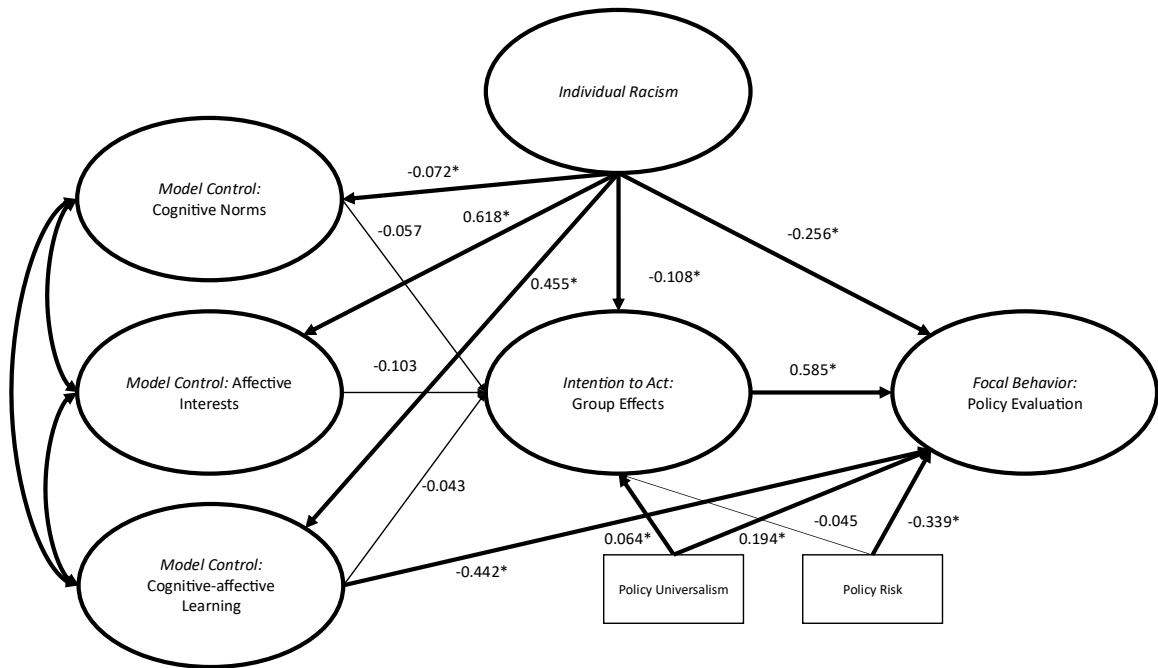
As before, I include the trait-like *Individual Racism* as a control for comparison to the base model. Only two of the racism items were asked of all respondents in the 2022 CES, reducing its comparability with the 2018 CCES. *Individual Racism* is operationalized using:

Racism1: Irish, Italians, Jewish and many other minorities overcame prejudice and worked their way up. Blacks should do the same without any special favors.

Racism2: Generations of slavery and discrimination have created conditions that make it difficult for blacks to work their way out of the lower class. (reverse coded)

The results of this model are shown in Figure 3.10, again omitting indicator rectangles for visual clarity. The model converges with excellent fit ($RMSEA = 0.058$,

marginal; $TLI = 0.944$ & $CFI = 0.959$, excellent). Substantive effects are similar to the base model, and *Individual Racism* negatively explains and predicts variation in policy support regardless of policy assignment.



Model Fit: $TLI = 0.944$, $CFI = 0.959$, $RMSEA = 0.058$; $N = 727$ (standardized coefficients shown)
 Note: * $p < 0.05$

Figure 3.10: Analysis of 2022 CES data with trait racism.

Even controlling for the trait-like, individual-level racial resentment of survey respondents, policy universalism positively predicts policy evaluation.

Conclusion

The psychometric opinion model appears to be a valid and useful starting point for an integrative and interdisciplinary approach to the measurement and modeling of public opinion, generally, and a trait-based approach to conceptualizing fiscal policy preferences, specifically, with initial evidence supporting Hypothesis 1, that Americans

prefer universalistic fiscal policies to particularistic fiscal policies. Proposition 1 appears plausible, with an important caveat that how education is measured may affect the convergence of the psychometric model of public opinion. While beyond the scope of this dissertation, future research should provide convergent evidence of validity using neuroimaging studies.

While the psychometric model of public opinion serves as a useful starting point, important limitations to the conceptualization and measurement of public opinion and a trait-based conceptualization of fiscal policy preferences remain. Of general concern, and the focus of the next chapter, is an elaboration of the proposed cognitive and evolutionary basis for a trait-like preference for fiscal policy universalism rooted in a norm of equal treatment. Why ought a rational public prefer fiscal policy universalism or norm of equal treatment, and what evolutionary advantages could such preferences confer?

I argue such a preference emerges on one level as a strategic means of ensuring group survival, on one level, and on another level as a natural means of ensuring biodiversity. Of narrower concern is limitations inherent to the use of survey data. Can surveys that ask questions in dissimilar ways be objectively compared to maximize inferential power? For this, a computational psycholinguistic model of survey research is required, and is a focus of Chapter 5.

Appendix

This appendix contains sample descriptive statistics for the GSS, CCES 2018, and CES 2022. It also contains the Average Treatment Effect (ATE) for experimental CES and CCES studies. The ATE is the effect that arises from random assignment. In this

study, the effect of random assignment to a universalistic policy versus a particularistic policy can be thought of as the treatment (universalistic policy) versus control (particularistic policy).

GSS Data

Descriptive statistics for the GSS data are given in Table 3.8.

Table 3.8: Descriptive statistics for GSS sample.

Statistic	N	Mean	St. Dev.	Min	Max
Income	39,163	32,873.420	33,511.510	336.000	434,612.400
Education	68,603	12.979	3.187	0	20
Party ID	68,396	-0.326	1.972	-3	3
Ideology	59,292	0.092	1.394	-3	3
T1 Presidential Vote	67,448	-0.023	0.778	-1	1
T2 Presidential Vote	26,259	-0.035	0.765	-1	1
Risk Tolerance	62,918	0.661	0.433	0.000	1.000
Fiscal Orientation	62,918	0.420	0.610	-1.000	1.000

CCES 2018 Data

Descriptive statistics for the 2018 CCES data are given in Table 3.9.

Table 3.9: Descriptive statistics for CCES 2018 sample.

Statistic	N	Mean	St. Dev.	Min	Max
Policy Support	861	3.360	1.420	1	5
Policy Scope	864	3.152	1.412	1	5
Policy Impact	862	3.318	1.176	1	5
Group Benefit	864	2.941	1.206	1	5
Group Stability	861	3.408	1.137	1	5
Group Fairness	860	2.630	1.134	1	5
Policy Universalism	864	-0.206	0.979	-1	1
Policy Risk	864	-0.234	0.973	-1	1
Racism1	864	2.616	1.461	1	5
Racism2	838	2.115	1.233	1	5
Racism3	862	3.289	1.449	1	5
Racism4	861	2.879	1.506	1	5
Racism5	859	3.044	1.390	1	5
Racism6	862	2.783	1.410	1	5
Family Income	905	6.603	6.163	0	50
Party ID	851	3.588	2.217	1	7
Ideology	916	3.015	1.217	1	5
2016 Vote	999	-0.061	0.818	-1	1
2018 Primary Vote	983	-0.055	0.685	-1	1

Balance tests (Type III MANOVA: Pillai test statistic) find no significant relationship between random assignment of policies and individual-level demographic or political variables. This suggests that random assignment was successful.

With the treatment coded as positive one (+1) and the control coded as zero (0), the ATE for the 2018 CCES is 0.198, as is shown in

Table 3.10. However, this study focused on non-fiscal policies (i.e., wage policies).

Table 3.10: Average Treatment Effect, CCES 2018.

<i>Dependent variable:</i>	
Policy Support	
ATE	0.198** (0.099)
Constant	3.281*** (0.062)
Observations	861
R ²	0.005
Adjusted R ²	0.004
Residual Std. Error	1.418 (df = 859)
F Statistic	4.031** (df = 1; 859)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

CES 2022 Data

Sample descriptive statistics are given in Table 3.11.

Table 3.11: Descriptive statistics for CES 2022 sample.

Statistic	N	Mean	St. Dev.	Min	Max
Policy Support	995	3.223	1.366	1	5
Policy Scope	998	3.051	1.353	1	5
Policy Impact	995	3.151	1.171	1	5
Group Benefit	997	3.017	1.159	1	5
Group Stability	993	3.359	1.099	1	5
Group Fairness	994	2.819	1.142	1	5
Policy Universalism	1,000	-0.490	0.872	-1	1
Policy Risk	1,000	-0.136	0.991	-1	1
Racism1	849	3.163	1.466	1	5
Racism2	848	2.823	1.496	1	5
Family Income	925	65.124	36.210	10	160
Education	1,000	13.544	3.609	0	18
Party ID	985	-0.382	2.237	-3	3
Ideology	933	-0.066	1.204	-2	2
2016 Presidential Vote	1,000	-0.021	0.821	-1	1
2020 Presidential Vote	1,000	-0.127	0.898	-1	1

With the treatment coded as positive one (+1) and the control coded as zero (0), the ATE for the 2022 CES is 0.347, as is shown in Table 3.12.

Table 3.12: Average Treatment Effect, CES 2022.

	<i>Dependent variable:</i>
	Policy Support
ATE	0.347*** (0.099)
Constant	3.135*** (0.050)
Observations	995
R ²	0.012
Adjusted R ²	0.011
Residual Std. Error	1.358 (df = 993)
F Statistic	12.347*** (df = 1; 993)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

Ideally, respondents should be randomly assigned to be shown a policy definition or not shown a policy definition to control for effects of policy framing and prior knowledge, but this was not possible on the CCES or CES. Thus, observational methods (e.g., regression) are most appropriate for analysis and are used throughout this project.

Balance tests (Type III MANOVA: Pillai test statistic) find no significant relationship between random assignment of policies and individual-level demographic or political variables. This suggests that random assignment was successful.

The correlation matrix and sample descriptive statistics for the main dependent variables are given in Table 3.13.

Table 3.13: Means, standard deviations, and correlations with confidence intervals. * indicates $p < .05$. and ** indicates $p < .01$.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Policy Support	3.22	1.37				
2. Policy Scope	3.05	1.35	.58** [.54, .62]			
3. Policy Impact	3.15	1.17	.42** [.37, .47]	.27** [.22, .33]		
4. Policy Universalism	-0.49	0.87	.11** [.05, .17]	.06 [-.01, .12]	.05 [-.01, .11]	
5. Policy Risk	-0.14	0.99	-.18** [-.24, -.12]	-.13** [-.20, -.07]	-.05 [-.11, .01]	.29** [.23, .35]

Note that *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation.

Chapter 4: A Strategic Theory of Social Identity

Thus far, partial support for Hypothesis 1 has been found—Americans appear to prefer universalistic fiscal policies to particularistic fiscal policies. This effect holds when non-fiscal policies are included in analyses and across surveys. A focus of this chapter is to examine the determinants of this preference for universalistic policies (Hypothesis 2 – 3) as well as the implicit ranking of policies by the American public (Hypothesis 4). This chapter lays out the theoretical justification—a strategic extension of classic social identity theory—for these hypotheses in greater detail, tests these hypotheses using several survey experiments, and demonstrates support for the strategic social identity theory proposed.

A central tension between political economy and political psychology is the assumption that humans are rational maximizers of individual utility. On the one hand, application of the rational actor method of analysis explains the origins of political disagreement in modern society (e.g., the factor and sector models; Oatley, 2018). On the other hand, application of experimental methods yields a body of evidence that humans are motivated by sociotropic effects of group identity privilege ideational interests above material interests (e.g., social identity theory; Mlodinow, 2013; Shayo, 2020). Following recent research that emphasizes a cross-cultural norm of equal treatment as a determinant of fiscal policy preferences (Scheve & Stasavage, 2023), I argue an interdisciplinary perspective rooted in evolutionary psychology helps to resolve such tensions, while potentially explaining Americans' fiscal policy preferences.

Animals, for example, will protest when unequal rewards are given for equal tasks, redistribute rewards more equally, or find more cooperative partners (Brosnan & de Waal, 2014). Classical social identity theory (Tajfel & Turner, 1986) and social categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) examines allocative decision-making in humans, given our advanced ability to form complex social groups (Mlodinow, 2013).

Classical social identity theory (Tajfel & Turner, 1986) explains that humans are motivated to maintain the positive distinctiveness of their social group to enhance their self-esteem. Experimental evidence suggests humans prioritize intergroup distinction when making allocative decisions, even at the cost of maximum profit (Mlodinow, 2013; Turner, Brown, & Tajfel, 1979). In the context of policy preferences, ingroup favoritism remains an important determinant of non-fiscal policy attitudes (e.g., gender-based affirmative action; Garcia, Desmarais, Branscombe, & Gee, 2005). The next section examines theories of social identity and its application to the study of phenomena in political science in greater detail.

Theories of Social Identity

Social identity theory as classically conceived and tested posits that human decision-making and perception is influenced by the categories to which we belong, when those categories are salient (Tajfel & Turner, 1986). In a divide-the-dollar experiment (Turner, Brown, & Tajfel, 1979), psychologists randomly assigned participants into groups and had participants allocate points that could be redeemed for actual money. Participants could allocate points according to several strategies identified

by experimenters: maximum ingroup profit, maximum difference, fairness, or maximum joint profit.

The point allocation system was not a zero-sum game—certain strategies offered to participants offered greater overall rewards than merely dividing a fixed number of points. If people are rational maximizers of utility, participants should adopt the strategies of maximum ingroup profit or maximum joint profit. Likewise, if people are motivated by norms of fairness as fiscal policy preference research suggests (Scheve & Stasavage, 2023), participants should award points equally. However, participants awarded points equally only when allocating points among members of their own group. In general, as physicist Leonard Mlodinow (2013, p. 174, emphasis in original) explains in his review of the social identity theory literature, participants adopted a strategy “that maximized the *difference* between the rewards they gave to the two group members, *even if that action resulted in a lesser reward for their own group member!*” Despite this provocative finding, or perhaps because of it, the translation of classic social identity theory to the study of policy preferences in domains other than psychology has not been straightforward, but research in economics continues to reinforce the importance of identity as a determinant of allocative decisions (e.g., preference for redistribution; Klor & Shayo, 2010) or when applied to political economy more generally (Shayo, 2009).

On the one hand, public policies are more than exercises in divide-the-dollar politics. Ideally, public policies are selected because they balance private interests with the provision of public goods (Scheve, 2010). This positive-sum aspect of public policies suggests the experimental paradigm of ingroup favoritism on which social identity theory

is based, where point allocations are not zero-sum games, should be a good model of public policy preference formation with fidelity to the real world of politics (Klor & Shayo, 2010). On the other hand, research in political science tends to misconstrue social identity theory by conceptualizing it as distinct from the realistic group conflict theory that preceded it (Stewart, McCarty, & Bryson, 2020). Hartman, Newman, and Scott Bell (2014), for example, pit realistic and symbolic threats against each other in their study of prejudice against Hispanic immigrants. Correctly conceived, classic social identity theory explains the process by which intergroup conflict emerges across a range of contexts and dimensions of comparison (e.g., comparisons on the basis of wealth or skin color; Garcia, Desmarais, Branscombe, & Gee, 2005). In economic terms, realistic group conflict emerges with the dimensions of intergroup comparison reflect some share of common poor resources (e.g., gold mined per group), while symbolic conflict emerges with the dimensions of intergroup comparison reflect some share of non-finite resources (e.g., citations per academic discipline).

Despite the apparent appropriateness of classic social identity theory for public policy preference research, experimental treatments in the 2022 Congressional Election Study (CES; discussed in Chapter 3) demonstrate little evidence to support facets of classic social identity theory. As is shown in Table 4.1, effects of random assignment of recipient race (in items that indirectly measure policy support; e.g., “<<policy>> benefits <<group>>.”) do not appear to significantly influence the direct measure of policy support (“I support <<policy>>.”). There is some evidence to suggest that White respondents express lower levels of support for policies, while Black respondents express

higher levels of support for policies, consistent with expectations about the importance of group interest in allocative decision-making. However, the effect of *Co-racial Ingroup Favoritism*, when recipient and respondent are of the same racial group, is not statistically significant and in the wrong direction, posing problems for the straightforward application of classic social identity theory to the study of fiscal policy preferences.

Table 4.1: Effects of random assignment of recipient race, respondent race, and ingroup favoritism.

	<i>Dependent variable:</i>						
	Policy Support						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Recipient White	-0.078 (0.092)						
Recipient Black		0.055 (0.092)					
Recipient Hispanic			0.023 (0.092)				
Respondent White				-0.164* (0.094)			
Respondent Black					0.390*** (0.130)		
Respondent Hispanic						0.068 (0.143)	
Co-racial Ingroup Favoritism							-0.086 (0.057)
Constant	3.249*** (0.053)	3.205*** (0.053)	3.215*** (0.053)	3.337*** (0.078)	3.174*** (0.046)	3.216*** (0.046)	3.227*** (0.043)
Observations	995	995	995	995	995	995	995
R ²	0.001	0.0004	0.0001	0.003	0.009	0.0002	0.002
Adjusted R ²	-0.0003	-0.001	-0.001	0.002	0.008	-0.001	0.001
Residual Std. Error (df = 993)	1.366	1.366	1.367	1.364	1.360	1.366	1.365
F Statistic (df = 1; 993)	0.719	0.358	0.061	3.057*	9.031***	0.228	2.277

Note: *p<0.1; **p<0.05; ***p<0.01

Lack of support for classic social identity suggests that social dominance theory—discussed in Chapter 3—may accurately explain Americans’ fiscal policy preferences. This theory, developed in part as an alternative to classic social identity theory, explains human behavior as motivated by a trait to maintain a hierarchical ranking of social groups. Unfortunately, social dominance theory has been criticized as incompatible with evolutionary perspectives and as overly deterministic when it comes to explaining human behavior (Turner & Reynolds, 2003). On the one hand, social dominance theory explains that natural selection takes place at the individual level—only the strongest individuals survive to dominate—ignoring the importance of genetic variability to population survival. On the other hand, social dominance theory does not explain when intergroup relations can be harmonious—unlike classic social identity theory, social dominance theory is not compatible with classical liberalism. Thus, for both interdisciplinary compatibility with evolutionary science and liberal theory, I articulate a strategic social identity theory of fiscal policy preferences, specifically, and public policy preferences, generally, in the next section.

A Strategic Social Identity Theory

Consider a population, P , with members $\{a, b\}$ visibly distinguishable into two groups, Group A and Group B, such that $\{A, B\} \in P$, and $\{a_i\} \in A$ and $\{b_j\} \in B$, where i and j denote the i th and j th member of each group, respectively. Economic exchanges occur when members of the population interact, but members of each group can choose to treat other players equally or to discriminate on the basis of group identity.

Princeton political scientist Nolan McCarty has led an interdisciplinary team in computational modeling of economic behavior that suggests a risk-averse, ingroup favoring strategy is rational when economic actors are allowed to take on meaningful social identities and face rising inequality or macroeconomic decline (Stewart, McCarty, & Bryson, 2020; see also, Ballard-Rosa, Jensen, & Scheve, 2022). That is, members of *A* preferentially interact with other members of *A*, discriminating against members of *B*, while members of *B* likewise violate the norm of equal treatment. As during a pandemic or other exogenous shock, for example, introverted risk aversion may confer survival benefits on some small part of the population, allowing for survival of the species as a whole. The capacity for this sort of discrimination on the basis of identity arises from our ability to automatically categorize people and things, a cognitive strength explained by evolutionary pressures—it allows people to navigate complex social and physical environments (Mlodinow, 2013). We could not have specialized roles like “dentist” and “physicist” or “teacher” and “mentor” if our only social category was “family.”

In a heterogenous population, *P*, (with at least two groups, e.g., *A* and *B*), I argue an allocative preference rooted in equal treatment and universalism makes evolutionary sense. Absent the invention of the modern state as an institution for the coordination and enforcement of behavioral norms, e.g., through licensure or public education, early humans who were first expanding their social circles beyond the members of their family, e.g., *A*, to include the abstract category of “stranger,” e.g., *B*, faced considerable cognitive and behavioral challenges. Cognitively, early humans had to develop simplified mental models for strangers compared to the variegated and complex way they saw

family members, a_i . Learning and remembering the preferences of every stranger, b_j , as though every stranger was a family member ($b_j \in A$) was an inefficient cognitive strategy, as $j \gg i$, so evaluations of strangers came to rely on heuristics (Mlodinow, 2013). To the degree that the strangers, b_j , an individual i encountered or heard of acted in a trustworthy or untrustworthy way, all strangers, B , were expected to behave similarly. Concomitant with this information reduction adaptation, I argue, was the emergence of a behavioral norm of equal treatment, first of strangers, then of symbolic groups.

Consider the interests of low- and high-status group members (e.g., black Americans and white Americans). In evolutionary terms, equal treatment (i.e., nondiscrimination) is a winning strategy because it allows the relative status of each group to vary over time in response to selection pressures. Much like the principal of market liberalism, allowing such variation in group status over time ensures that the best traits can emerge as dominant when necessary for population survival. In human terms, equal treatment (e.g., employment nondiscrimination; Baer, 1983; Cascio & Aguinis, 2018) preserves meritocracy by selecting for high and low status on the basis of ability, which may alter group hierarchies over time.

Because group members cannot predict future selection pressures, and because the status of each group may vary over time, I further argue it is rational for individuals to prefer allocative practices that are universalistic. Universalistic allocation of resources provides survival insurance for individuals who with current group privilege (e.g., white Americans) in the event group status relations change. That is, even if a currently low-

status group (e.g., black Americans) becomes dominant, universalistic allocation of resources provides a basis for the subsistence of future generations. I finally argue such a preference is rational from an evolutionary perspective for current low-status group members, because preservation of diversity aids the adaptability and survivability of the population as a whole. This strategic theory of social identity departs from eugenics, which holds that high-status group members ought to control the frequency of traits through selective breeding (Golash-Boza, 2016). This strategic theory of social identity likewise departs from classical social identity theory, which does not predict an ideological valence for allocative fiscal policy preferences (Garcia, Desmarais, Branscombe, & Gee, 2005). Thus, I hypothesize:

H1. Respondents prefer universalistic fiscal policies to particularistic fiscal policies.

H2. Universalistic fiscal policies are perceived as treating people more equally compared to particularistic fiscal policies.

H3. Fiscal policy preference is driven by perception of equal treatment.

H4. Americans will prefer universal basic incomes to other, particularistic fiscal policies, all else equal.

Hypothesis 1 reflects the expectation that group norms will converge on universalistic fiscal policies as a means to hedge against changes in group status across generational cohorts. The broader a fiscal policy is in the benefits it allocates, the more likely it is that, for example, children of current high-status group members may be protected in the event their group becomes low-status at some point in the future. Fiscal universalism preserves any genetic diversity that may be present in and unique to both

high- and low-status groups by ensuring the survival of both. This preservation of diversity allows the population to better adapt to changing selection pressures.

Alternative to this hypothesis is a preference for particularistic fiscal policies over universalistic fiscal policies. Such a preference might emerge if Americans are modern liberals, motivated by norms of class- and race-based equity. Americans may also demonstrate no preference for fiscal universalism or particularism if they are insensitive to these pieces of information or rely on other (e.g., partisan) heuristics while making evaluative decisions.

Hypothesis 2 connects the typology of fiscal policies proposed in Chapter 3 to subjective perceptions related to how those policies allocate fiscal benefits. Implicit in the notion of fiscal universalism is a norm of equal treatment—if more people are eligible to receive benefits from a policy, the policy treats people more similarly on average. The expectation here is that Americans will perceive universalistic fiscal policies (e.g., Social Security, Universal Basic Income) as treating people more equally, and perceive particularistic fiscal policies (e.g., Welfare) as treating people less equally. Importantly, equal treatment is conceptually related to procedural fairness, not to outcome justice; a Reparations, for example, may be necessary for a just economic system, but its race particularism is likely to be perceived as less fair than the equal treatment of basic incomes.

Alternative to this hypothesis is an association of universalistic fiscal policies with differential or unequal treatment. This perception could arise if Americans attend more to outcome justice considerations than process fairness considerations. For

example, they might perceive universal basic income as treating people unequally because it mainly benefits people who are poor, even though the policy allocates fiscal benefits equally.

Hypothesis 3 is most closely related to the proposed norm of equal treatment expected to arise as a stable trait related to cognition. In the absence of specific information about an individual or a group (e.g., general mental ability), equal treatment serves as a simple heuristic to guide behavioral interactions, reducing informational processing demands. Equal treatment on an individual basis, rather than group basis, is most closely associated with the ideology of classical liberalism, which emphasizes equality. This contrasts with the group-centered perspectives that arose in the United States after the Civil War that emphasize equal protection under law, rather than equal treatment, often to erase past injustices due, e.g., to slavery.

Alternative to this hypothesis is a preference for differential treatment over equal treatment. This could occur if Americans are motivated by a heuristic of strict ingroup favoritism, giving their own group preferential treatment, or outgroup altruism, giving other groups preferential treatment.

Hypothesis 4 goes beyond the universalism-particularism framework of the paradox of redistribution in political sociology to create policy-specific expectations. All else equal, and controlling for policy risk, I expect that Americans will prefer basic incomes (i.e., unconditional cash grants) to other fiscal policies that allocate fiscal benefits on other terms.

Alternative to this hypothesis is the possibility that a preference for equal treatment and fiscal universalism does not counter considerations beyond risk that motivate fiscal policy preferences. For example, White Americans could see universal basic income as conferring an advantage to poor, non-white groups, while seeing social security as conferring an advantage to hard-working, retirement-age groups.

This is a theory of strategic behavior in several senses. First, the theory explains that humans give some consideration to the expected behaviors of others when forming their policy preferences. Although each group and member may have incentive to adopt ingroup favoring norms, rules governing the provision of public goods in democracies tend to reflect repeated games where ideologies serve as strategic heuristics. Second, it allows for alternative preferences to emerge, such as a preference for differential treatment on the basis of ability to preserve meritocracy when information about ability is known. In hiring for work at a nuclear plant, one could rationally give preference to candidates with degrees in nuclear engineering, for example, rather than treating all candidates equally. Third, the theory allows for strategic behavior in the amount of effort people invest in discerning ability. Americans, as demonstrated in Chapter 1, want to help the poor, but they face challenges in discerning who among the poor are deserving of aid (e.g., Gilens, 1999). Thus, for a given context the strategic behavior of a person vis-à-vis the level of effort they invest in discerning merit could be assessed, although such assessments are beyond the scope of the current project and hypotheses.

One limitation of the strategic social identity theory I propose is that it does not explain the content of modern political ideologies. While classic social identity theory,

for example, explains the capacity of people to categorize others on the basis of race, it does not explain the specific content of racist beliefs (e.g., Nazism) that arise from the process of social categorization. Similarly, specific political ideologies may serve to inhibit a trait preference for equal treatment in contexts where political identity is salient (e.g., elections).

To test these hypotheses, I draw on data collected for the 2022 CES survey experiment used in Chapter 3. This survey experiment randomly assigns fiscal policies to survey respondents for a range of evaluations. Importantly, this survey experiment also asks respondents their subjective perception of the degree to which the policy they are randomly assigned to evaluate treats people equally. I follow this with a novel survey experiment using data from Amazon’s Mechanical Turk to examine the robustness of my findings.

Primary Survey Experiment

Using a nationally representative sample from the 2022 Congressional Election Study (CES), fiscal policies are randomly assigned from typology of fiscal policies as is shown in Table 4.5. As described in Chapter 3, respondents are asked a range of questions about these policies. New to this analysis is a key item that asks respondents whether the fiscal policy they are randomly assigned to evaluate treats people equally: “<<policy>> treats people equally.”

Table 4.2: Policy typology as operationalized.

	Low-risk Policies <i>(Coded -1)</i>	High-risk Policies <i>(Coded +1)</i>
Universalistic Policies <i>(Coded +1)</i>	Social Security	Universal Basic Income
Particularistic Policies <i>(Coded -1)</i>	Welfare	Reparations

As before, <<policy>> is the fiscal policy to which the respondent is randomly assigned. Thus, a particular respondent assigned to evaluate Welfare would see “Welfare treats people equally.” The response set is a 5-item Likert scale: {Strongly Disagree, Neither Agree nor Disagree, Somewhat Agree, Strongly Agree}.

With respect to effects of fiscal *Policy Risk* and fiscal *Policy Universalism*, a pattern of results similar to those described in Chapter 3 is obtained. For simplicity, unstructured regression is used as a starting point for the analysis of hypothesis in this chapter, as is shown in Table 4.3. *Policy Support* is used as a single-item indicator of preference with respect to the randomly assigned fiscal policy: I support <<policy>>. The response set is a 5-item Likert scale: {Strongly Disagree, Neither Agree nor Disagree, Somewhat Agree, Strongly Agree}.

Table 4.3: Unstructured regression analysis.

	<i>Dependent variable:</i>		
	Policy Support (1)	Equal Treatment Perception (2)	Policy Support (3)
Equal Treatment Perception (H3, $\beta > 0$)			0.579*** (0.046)
Policy Risk	-0.514*** (0.070)	0.014 (0.067)	-0.522*** (0.058)
Policy Universalism (H1 & H2, $\beta > 0$)	0.215*** (0.070)	0.305*** (0.067)	0.044 (0.060)
Constant	3.414*** (0.070)	2.829*** (0.067)	1.777*** (0.144)
Observations	347	348	346
R ²	0.158	0.056	0.420
Adjusted R ²	0.153	0.051	0.415
Residual Std. Error	1.296 (df = 344)	1.256 (df = 345)	1.078 (df = 342)
F Statistic	32.164*** (df = 2; 344)	10.255*** (df = 2; 345)	82.641*** (df = 3; 342)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01		

As before, Americans prefer established, low-risk fiscal policies to untested, high-risk fiscal policies. As before, Americans prefer universalistic fiscal policies to particularistic fiscal policies, supporting Hypothesis 1 ($\beta > 0$), although this effect is attenuated when *Equal Treatment Perception* is included. The substantive size of this effect on policy preference is small, as is illustrated by Figure 4.1.

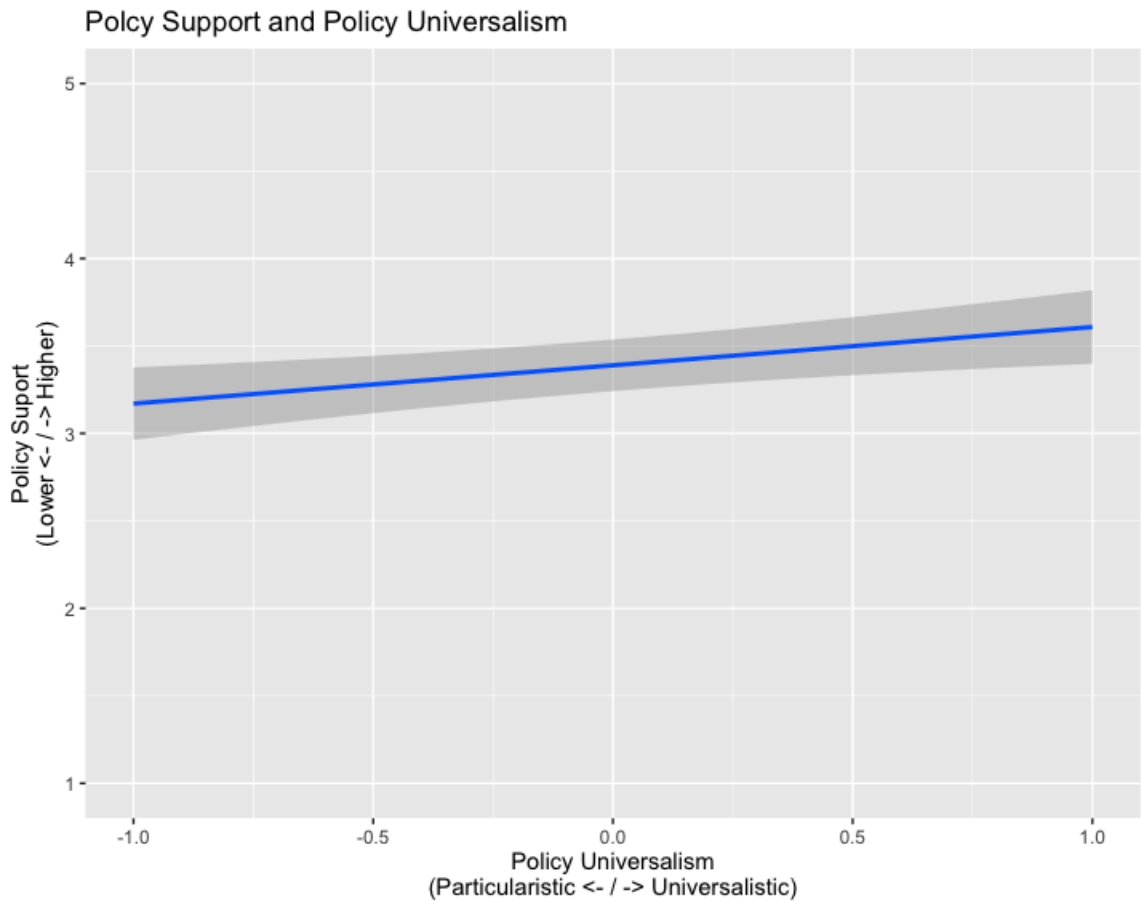


Figure 4.1: Policy Support and Policy Universalism

New to this analysis is an examination of fiscal policy *Equal Treatment* perception. Fiscal *Policy Universalism* positively explains and predicts variation in respondents' evaluations of the degree to which the fiscal policy to which they are assigned treats people equally, supporting Hypothesis 2 ($\beta > 0$). This effect is somewhat larger, as is illustrated by Figure 4.2.

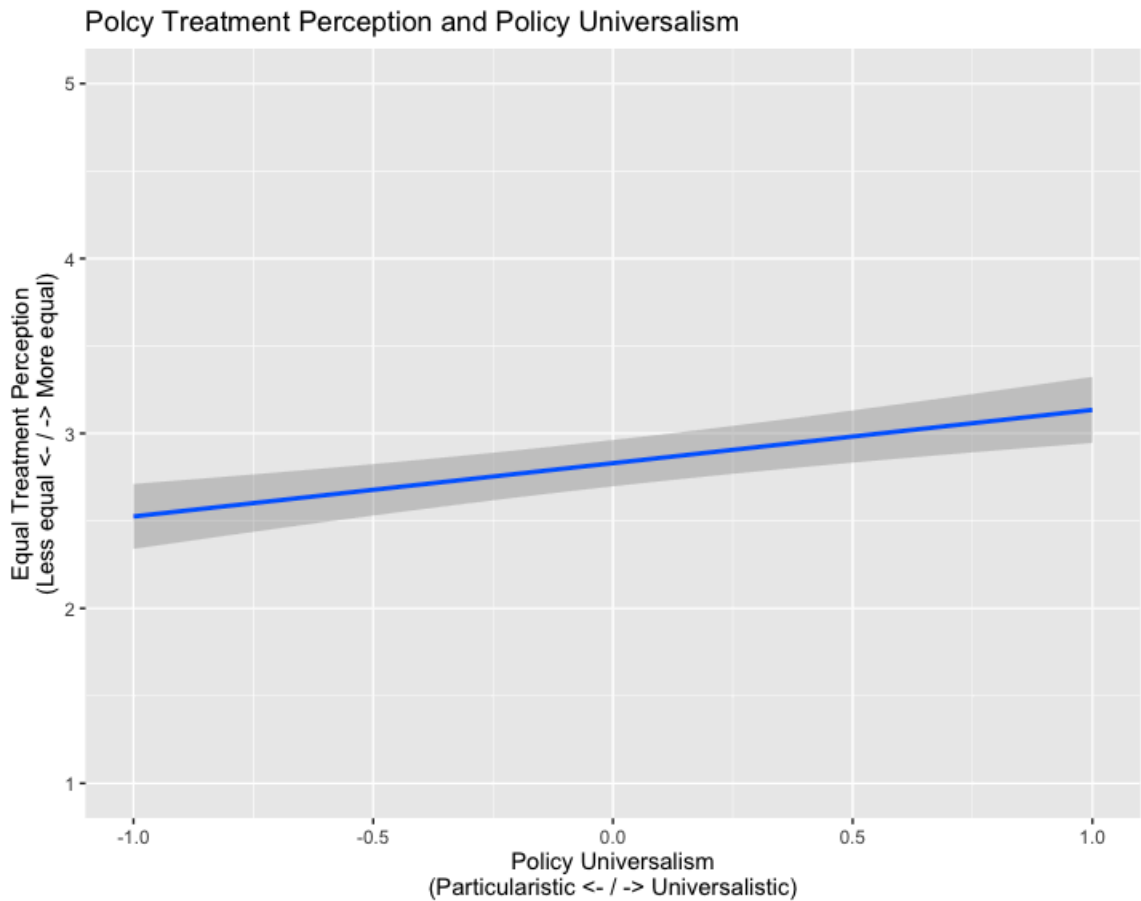


Figure 4.2: *Equal Treatment Perception and Policy Universalism.*

Further adding to this analysis, fiscal policy *Equal Treatment* perception is included as a predictor of *Policy Support*. Perception of *Equal Treatment* by the fiscal policy positively explains and predicts variation in the level of *Policy Support*, supporting Hypothesis 3 ($\beta > 0$). This effect is large, as is illustrated by Figure 4.3.

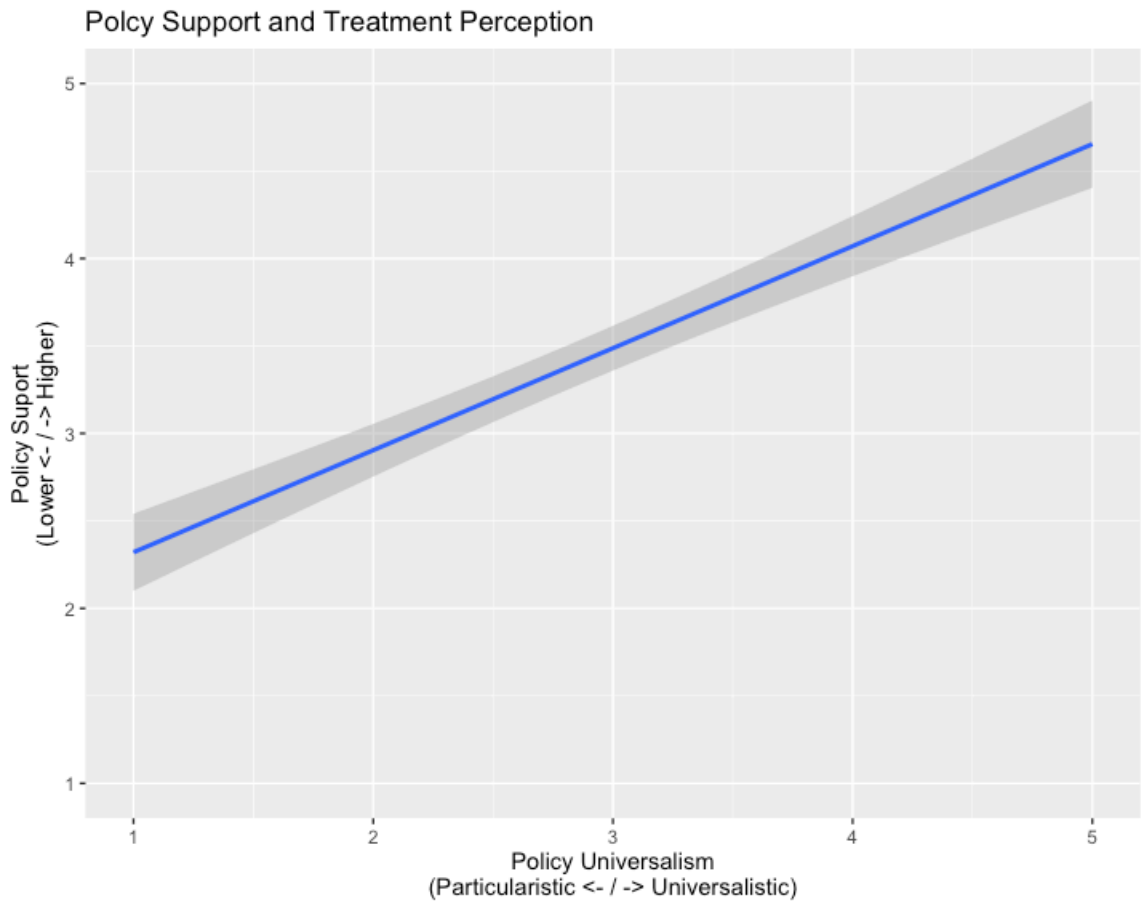


Figure 4.3: Policy Support and Equal Treatment Perception.

To check the robustness of these findings, and to provide an accessible illustration of the results, path analysis is used to determine support for hypotheses when all relationships are simultaneously modeled. The R package `lavaan` was used for all path analyses. This is shown in Figure 4.6.

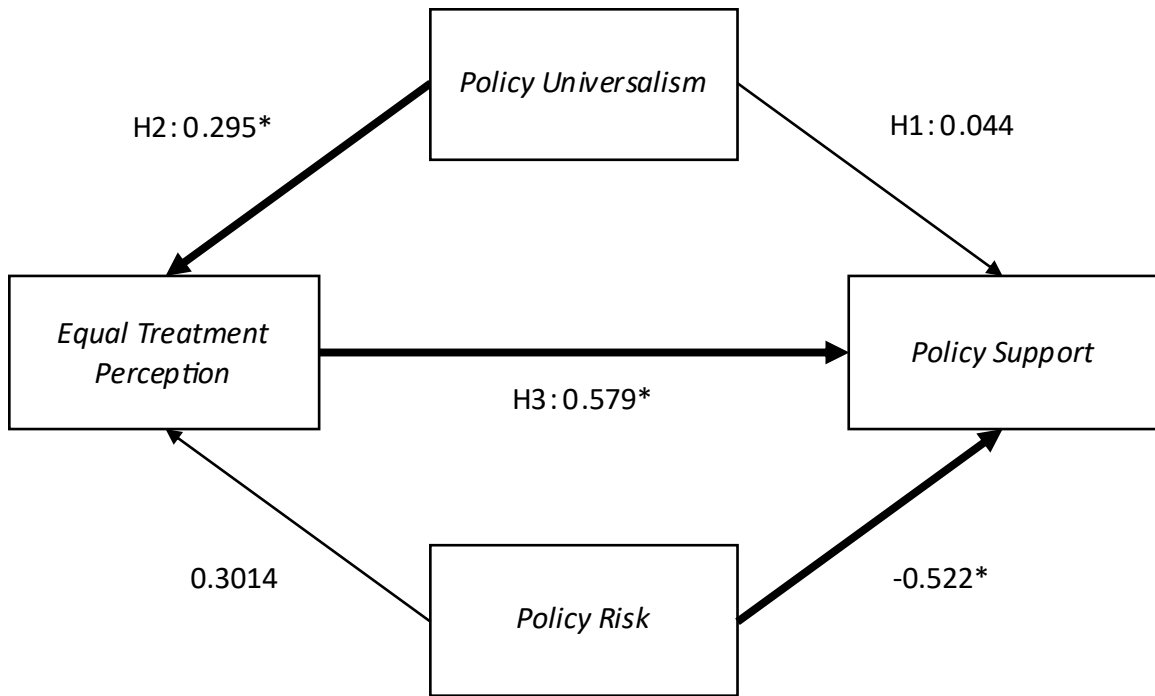


Figure 4.4: Mediation analysis.

The effects are in the expected direction for all hypotheses and statistically significant for hypotheses 2 – 3. This supports the Strategic Social Identity Theory, and the notion that fiscal preferences are primarily driven by a norm of equal treatment.

To test Hypothesis 4, that all else equal Americans will prefer basic incomes to particularistic fiscal policies, a simple predictive model is used to estimate fiscal policy support when the risk associated with all policies is set to zero. This model is shown in Table 4.4. Although the survey experiment is not nationally representative at the level of individual random policy assignments, it provides a rough indicator of the true-score relative policy preferences of the American public if policy risk did not influence their policy preferences.

Table 4.4: Unstructured predictive model.

	<i>Dependent variable:</i>
	Policy Support
Policy Risk	-0.522*** (0.058)
Policy Universalism	0.044 (0.060)
Equal Treatment Perception	0.579*** (0.046)
Constant	1.777*** (0.144)
Observations	346
R ²	0.420
Adjusted R ²	0.415
Residual Std. Error	1.078 (df = 342)
F Statistic	82.641*** (df = 3; 342)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

The predicted level of support for each fiscal policy, with risk set to zero, is shown in Figure 4.5. Consistent with expectations, Americans appear to prefer universalistic fiscal policies like Social Security and Universal Basic Income over particularistic fiscal policies like class-based Welfare or race-based Reparations. However, even with *Policy Risk* set to zero for all policies, Americans appear to prefer Social Security over Universal Basic Income, leading to a rejection of Hypothesis 4.

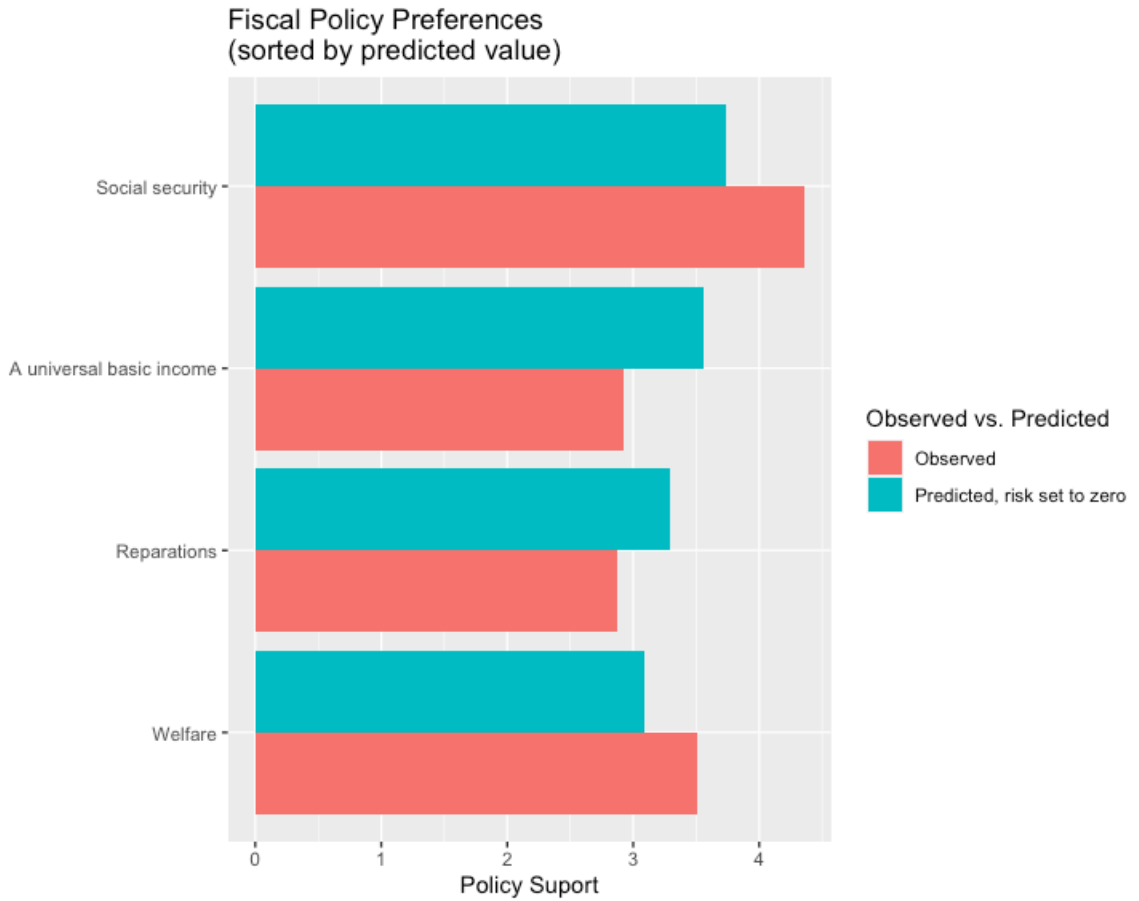


Figure 4.5: Predicted fiscal policy preferences versus observed levels of policy support.

Thus, this CES 2022 survey experiment demonstrates partial support for the strategic social identity theory as an explanation and set of expectations for Americans fiscal policy preferences. Hypothesis 1, that Americans will prefer universalistic fiscal policies to particularistic fiscal policies is partially supported. If humans are only partially universalistic in their allocative preferences, ideology may play an important role in reinforcing allocative universalism to preserve the genetic diversity and evolutionary fitness of the population. The concluding chapter briefly discusses the emerging science and ideology of neurodiversity as such a mechanism across both republics and monarchies. Hypothesis 2, that Americans will perceive universalistic fiscal policies as

treating people more equally compared to particularistic fiscal policies is fully supported. Hypothesis 3, that fiscal policy preference is driven by a perception of equal treatment is fully supported. Hypothesis 4, that all else equal Americans will prefer universal basic incomes to particularistic fiscal policies is partially rejected, although this inference is limited by the available data.

As in Chapter 3, I next conduct a check of the robustness of these results—and of the generalizability of the strategic social identity theory—to the inclusion of additional fiscal and non-fiscal public policies.

Tests of Robustness

As with Chapter 3, this section contains tests of robustness of the findings. First, an expanded set of policies is used with the CES 2022 survey experiment. Next, a survey experiment using Amazon’s Mechanical Turk services—which is not nationally representative but can be used to test the hypothesized psychological mechanisms expected to generalize to all samples—is used to test the robustness of the findings. In general, the results are similar to what was found looking at only fiscal policy preferences in the CES 2022 data.

Application to 2022 CES

Using the same nationally representative sample from the 2022 Congressional Election Study (CES), policies are randomly assigned from typology of policies with an expanded set of policies as is shown in Table 4.5. This includes wage policies, as was described in Chapter 3, along with International Basic Income.

The inclusion of International Basic Income, discussed in Chapter 3, reflects a strict test for theories of social identity. This is because International Basic Income as defined by respondents is more universal than Universal Basic Income because it is disbursed to both citizens and non-citizens. Further, by explaining International Basic Income to respondents as conferring benefits to non-citizens, the salience of American citizenship is raised and policy support should be reduced because it does not favor the ingroup of United States citizens.

Table 4.5: Policy typology as operationalized.

	Low-risk Policies <i>(Coded -1)</i>	High-risk Policies <i>(Coded +1)</i>
Universalistic Policies <i>(Coded +1)</i>	Social Security	Universal Basic Income, International Basic Income
Particularistic Policies <i>(Coded -1)</i>	Minimum Wage, Welfare, Earned Income Tax Credit, Child Tax Credit, Affirmative Action, Foreign Aid	Maximum Wage, Minimum Guaranteed Income, Reparations

As before, the effects of policy universalism, risk, and perception of equal treatment are examined, as is shown in Table 4.6. The results largely mirror the findings from the previous section.

Table 4.6: Regression analyses.

	<i>Dependent variable:</i>		
	Policy Support (1)	Equal Treatment Perception (2)	Policy Support (3)
Equal Treatment Perception (H3, $\beta > 0$)			0.605*** (0.028)
Policy Risk	-0.325*** (0.044)	-0.026 (0.042)	-0.311*** (0.037)
Policy Universalism (H1 & H2, $\beta > 0$)	0.280*** (0.050)	0.194*** (0.047)	0.163*** (0.042)
Constant	3.316*** (0.048)	2.949*** (0.045)	1.530*** (0.092)
Observations	995	996	991
R ²	0.063	0.017	0.365
Adjusted R ²	0.061	0.015	0.363
Residual Std. Error	1.323 (df = 992)	1.244 (df = 993)	1.090 (df = 987)
F Statistic	33.417*** (df = 2; 992)	8.614*** (df = 2; 993)	189.366*** (df = 3; 987)

Note: *p<0.1; **p<0.05; ***p<0.01

As before, Americans prefer established, low-risk policies to untested, high-risk policies. As before, Americans prefer universalistic policies to particularistic policies, supporting Hypothesis 1.

New to this analysis is an examination of fiscal policy *Equal Treatment* perception. *Policy Universalism* positively explains and predicts variation in respondents'

evaluations of the degree to which the policy to which they are assigned treats people equally, supporting Hypothesis 2.

Further adding to this analysis, policy *Equal Treatment* perception is included as a predictor of *Policy Support*. Perception of *Equal Treatment* by the policy positively explains and predicts variation in the level of *Policy Support*, supporting Hypothesis 3.

To check the robustness of these findings, and to provide an accessible illustration of the results, path analysis is used to determine support for hypotheses when all relationships are simultaneously modeled. This is shown in Figure 4.6.

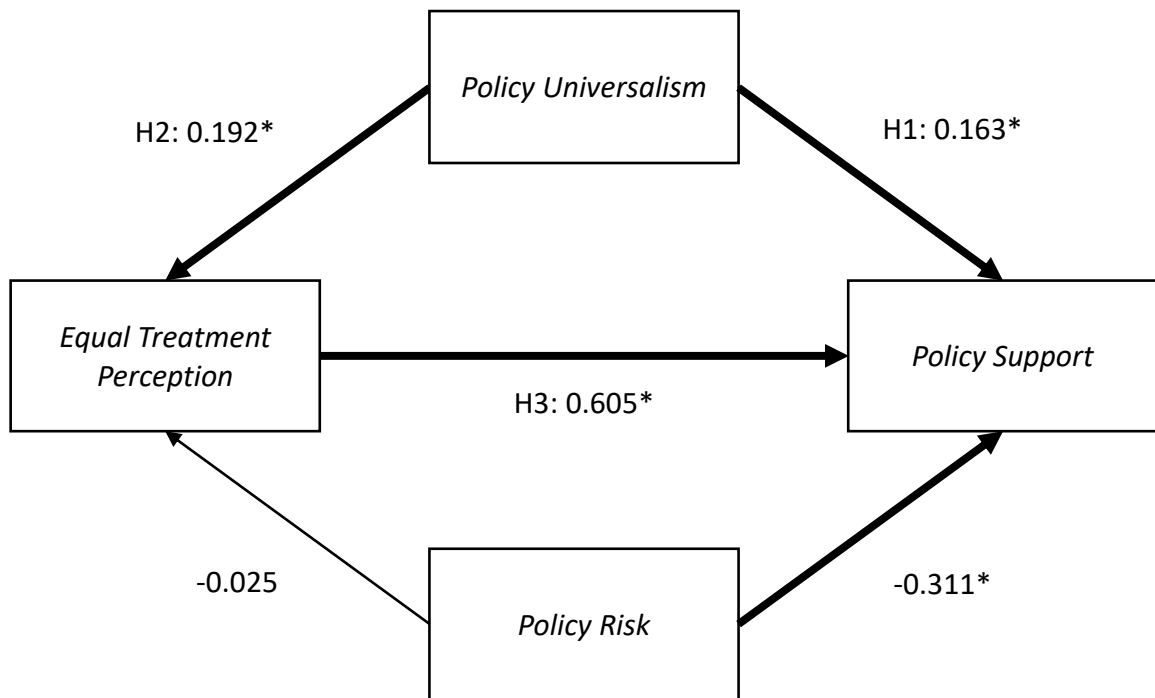


Figure 4.6: Mediation analysis.

The effects are in the expected direction and statistically significant for all hypotheses. This supports the Strategic Social Identity Theory, and the notion that preferences are primarily driven by a norm of equal treatment.

Adapting the psychometric model of public opinion from Chapter 3 allows for a more robust analysis, controlling for demographic factors and the effects of trait-like *Individual Racism*. This is shown in Figure 4.7.

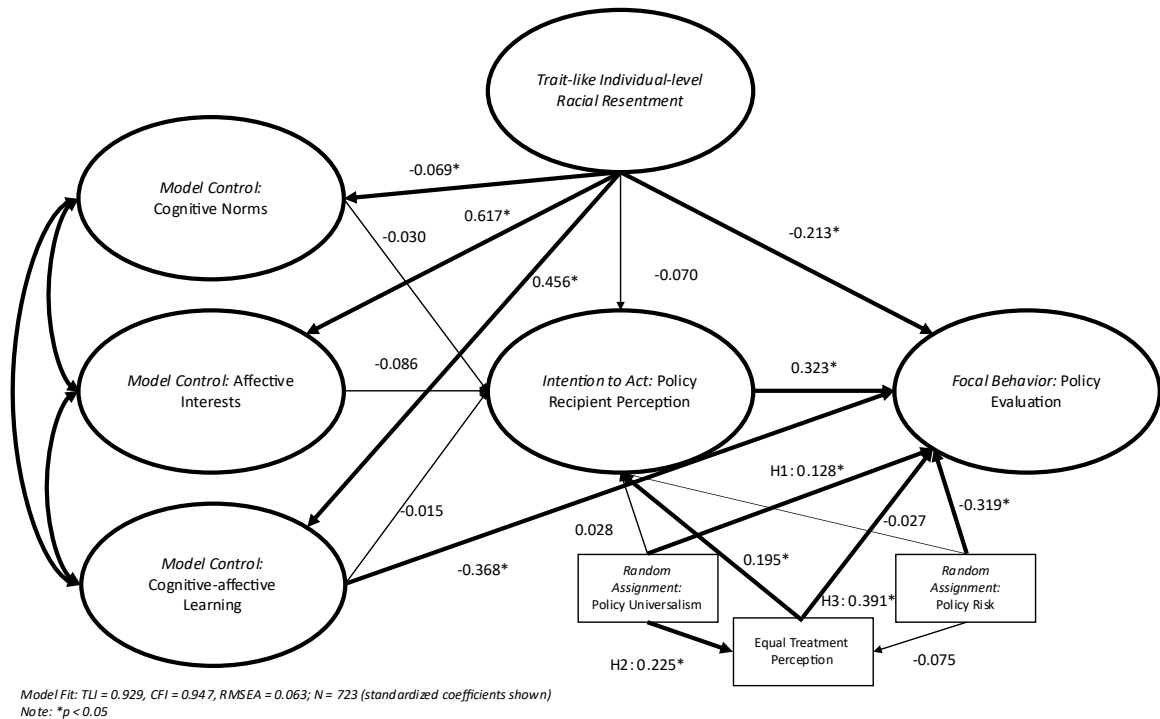


Figure 4.7: Psychometric analysis.

As Figure 4.7 demonstrates, the norm of *Equal Treatment* is predictive of both policy recipient evaluation (*Intention to Act*) and policy evaluation (*Behavior*).

Even controlling for a heuristic that is highly motivating when crystallized into a trait-like state, individual-level racial resentment, the norm of equal treatment accounts for variance in a theoretically meaningful way. This suggests at minimum that a preference for equal treatment exists on par with a trait-like ideology of racial resentment or individual racism. Unlike racism, which is an ideological practice bound to particular times and contexts where racial stratification occurs, the proposed evolutionary basis for

a norm of equal treatment strongly suggests a trait preference for equal treatment arose to maximize population survival through preservation of biodiversity and been evolutionarily conserved to the present day.

Finally, examination of how model controls predict perception of equal treatment suggests that perceptions of equal treatment are influenced by cognitive norms related to income and education, as is shown in Figure 4.8. Specifically, higher levels of income and education are associated with lower levels of perceiving policies as treating people equally. This suggests lower income, lower education Americans—those likeliest to be cognitive misers—rely on the norm of equal treatment when evaluating policies.

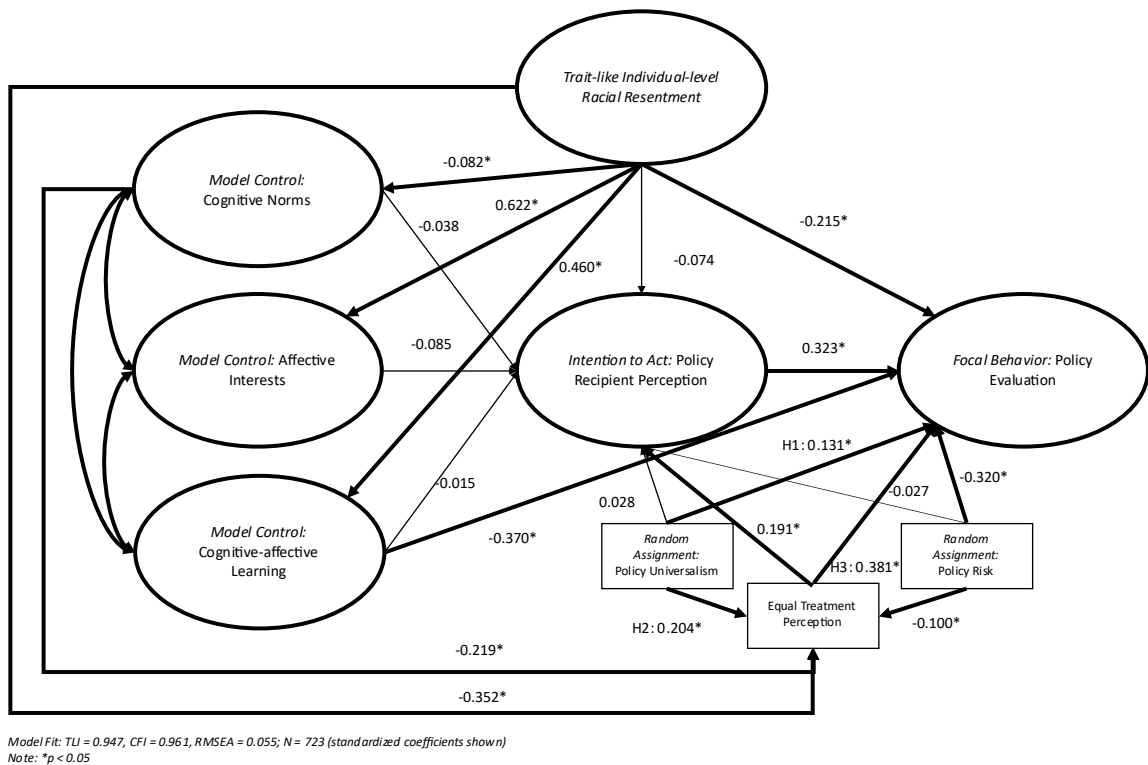


Figure 4.8: Exploratory path analysis.

These analyses suggest strong support for hypotheses 1 – 3. Hypothesis 4 is more descriptive in nature, about *what* Americans want rather than *why* they want it, as it sets an expectation ranking the level of support for basic incomes relative to other policies. The next section examines these descriptive expectations related to Hypothesis 4 in detail.

To examine the mechanics of policy presences in the CES survey experiment, this section breaks down policy perceptions and evaluations beyond policy type (i.e., universalism and risk) to specific policies. Because the CES is not nationally representative at the level of specific policy assignments, the descriptive inferences here should be taken as suggestive rather than definite.

First, average ratings of the degree to which each policy is perceived as treating people equally are given in Table 4.7. Examining at the level of individual policies, Americans appear to perceive Social Security as treating people most equally, whereas they perceive Welfare as treating people least equally. Interestingly, International Basic Income falls right below Social Security in the average perception that it treats people equally, bolstering support for Hypothesis 2, and Universal Basic Income is in the top half of the ranking.

Table 4.7: Equal treatment perception (observed scores).

Policy	N	Equal Treatment Perception	SD	SE	CI
Social Security	81	3.296	1.145	0.127	0.253
International Basic Income	83	3.133	1.386	0.152	0.303
Minimum Wage	75	3.120	1.365	0.158	0.314
Child Tax Credit	85	3.059	1.116	0.121	0.241
Universal Basic Income	90	2.989	1.442	0.152	0.302
Earned Income Tax Credit	90	2.922	1.073	0.113	0.225
Minimum Guaranteed Income	86	2.895	1.320	0.142	0.283
Maximum Wage	79	2.722	1.260	0.142	0.282
Affirmative Action	73	2.712	1.230	0.144	0.287
Reparations	94	2.691	1.270	0.131	0.260
Foreign Aid	77	2.390	0.948	0.108	0.215
Welfare	83	2.337	1.074	0.118	0.234

In terms of the research question, “What do Americans want?”, it is difficult to say with certainty because *Policy Risk* influences policy support. As is shown in Table 4.8, the observed level of *Policy Support* is highest for existing, low-risk policies like Social Security and Welfare, with the order of preference consistent with past data. Americans appear least supportive of high-risk, particularistic policies like Reparations and the Maximum wage. Interestingly, Americans appear more supportive of an International Basic Income compared to a Universal Basic Income (recall that the respondents are shown a definition of the policy to which they are randomly assigned).

Table 4.8: Policy support (observed scores).

Policy	N	Observed Policy Support	SD	SE	CI
Social security	82	4.354	0.921	0.102	0.202
Welfare	83	3.506	1.130	0.124	0.247
The minimum wage	76	3.395	1.406	0.161	0.321
The Earned Income Tax Credit	90	3.389	1.158	0.122	0.243
The Child Tax Credit	84	3.310	1.289	0.141	0.280
an international basic income	82	3.220	1.397	0.154	0.307
Foreign aid	77	3.117	1.158	0.132	0.263
Affirmative action	74	2.959	1.287	0.150	0.298
A universal basic income	89	2.921	1.561	0.165	0.329
Reparations	93	2.871	1.385	0.144	0.285
A minimum guaranteed income	86	2.837	1.502	0.162	0.322
The maximum wage	79	2.835	1.363	0.153	0.305

Because policy risk is predictive of policy support, I use a simple regression analysis to make descriptive inferences about the ranking of each policy in terms of its level of support, as is shown in Table 4.9. As before, regression analysis confirms that *Policy Risk* is a significant and negative predictor of *Policy Support*, complicating straightforward descriptive inferences about the relative ranking of policies in terms of their level of support.

Table 4.9: Regression analysis.

	<i>Dependent variable:</i>
	Policy Support
Policy Risk	-0.337*** (0.038)
Policy Universalism	0.182*** (0.043)
Equal Treatment	0.538*** (0.030)
Racism1	-0.249*** (0.025)
Constant	2.543*** (0.138)
Observations	841
R ²	0.445
Adjusted R ²	0.443
Residual Std. Error	1.032 (df = 836)
F Statistic	167.860*** (df = 4; 836)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

To get a better sense of the ranking of policies in terms of their level of support, predicted values of *Policy Support* for the regression with *Policy Risk* set to zero are shown in Table 4.10. In principle, this reveals policy preferences independent of policy risk, providing inferential leverage on the which policies Americans prefer, all else equal. Social Security remains the most popular policy, while international and universal basic incomes become the next most popular policies, respectively. The relative order of preference with respect to basic incomes remains, as Americans appear to slightly prefer International Basic Income to Universal Basic Income. Interestingly, Americans are far

more supportive of an International Basic Income as compared with Foreign Aid, which is the policy with the lowest level of support controlling for *Policy Risk*.

Table 4.10: Policy support (predicted scores).

Policy	N	Predicted Policy Support	SD	SD	CI
Social security	75	3.690	0.681	0.079	0.157
An international basic income	67	3.652	0.963	0.118	0.235
A universal basic income	78	3.552	1.064	0.120	0.240
The minimum wage	64	3.225	0.702	0.088	0.175
The Child Tax Credit	71	3.223	0.834	0.099	0.197
The Earned Income Tax Credit	77	3.126	0.741	0.084	0.168
A minimum guaranteed income	68	3.088	0.961	0.117	0.233
Affirmative action	64	3.043	0.890	0.111	0.222
The maximum wage	72	3.034	0.863	0.102	0.203
Reparations	74	2.980	0.912	0.106	0.211
Welfare	72	2.851	0.681	0.080	0.160
Foreign aid	63	2.771	0.647	0.081	0.163

To illustrate the implicit ranking of policies by Americans based on random assignment, the level of support for each policy is shown in Figure 4.9, which is sorted by predicted values of support controlling for *Policy Risk*. This is the best illustration of true-score policy preferences for the available data, at least in terms of a trait-like orientation towards universalism versus particularism.

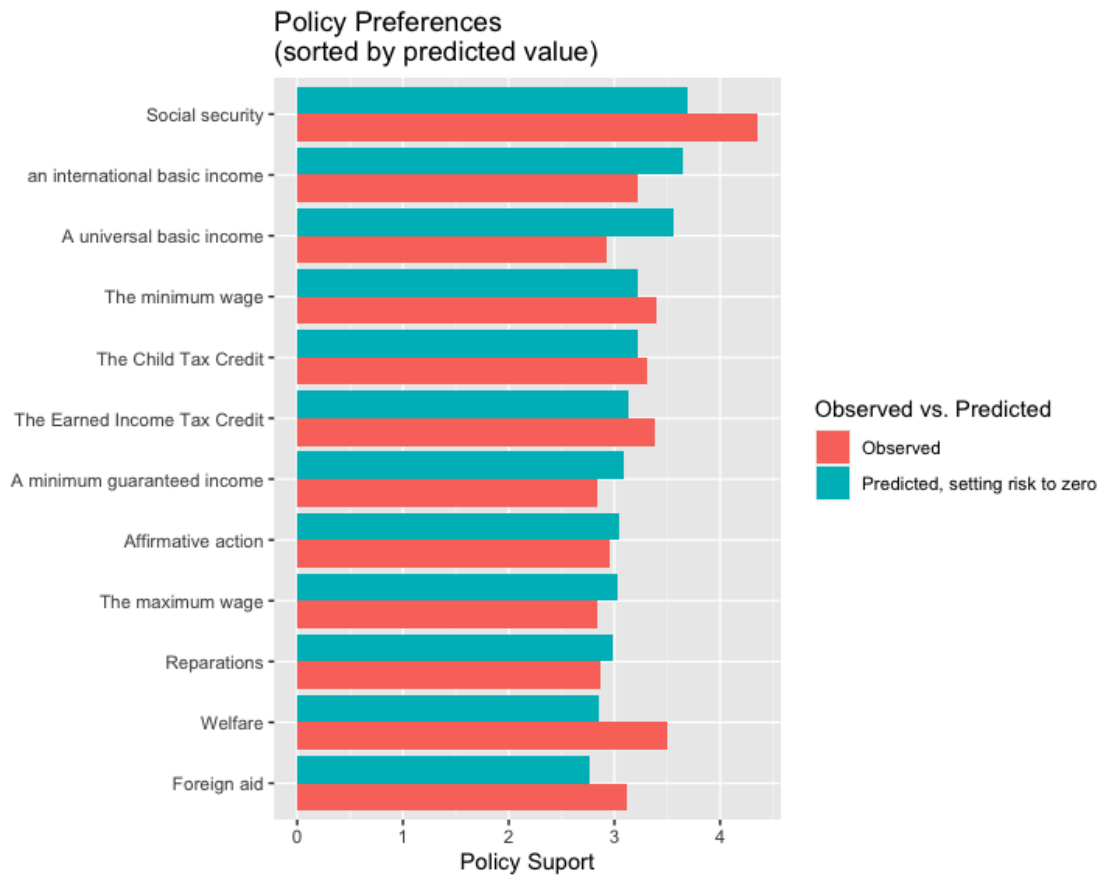


Figure 4.9: Observed versus predicted levels of support.

Thus, Hypothesis 4 seems partially supported. Americans prefer universalistic basic incomes to other particularistic policies, all else equal and with risk set to zero across all policies but prefer Social Security above all other policies, with risk set to zero or not. Again, the descriptive inferences made here about what Americans want should be understood in tentative terms, as the CES is not nationally representative at the level of individual random policy assignment groups.

As a test for alternatives, I also break policy preferences down by respondent race. If there is no trait preference for equal treatment and universalism, group interest should explain preferences—poor groups (e.g., Black Americans) should support

particularistic policies (e.g., Welfare, Affirmative Action, or Reparations) designed to help poor people. Consistent with the strategic social identity theory I propose, however, Black Americans appear to categorically prefer universalistic basic incomes over other policies, as is shown in Figure 4.10.

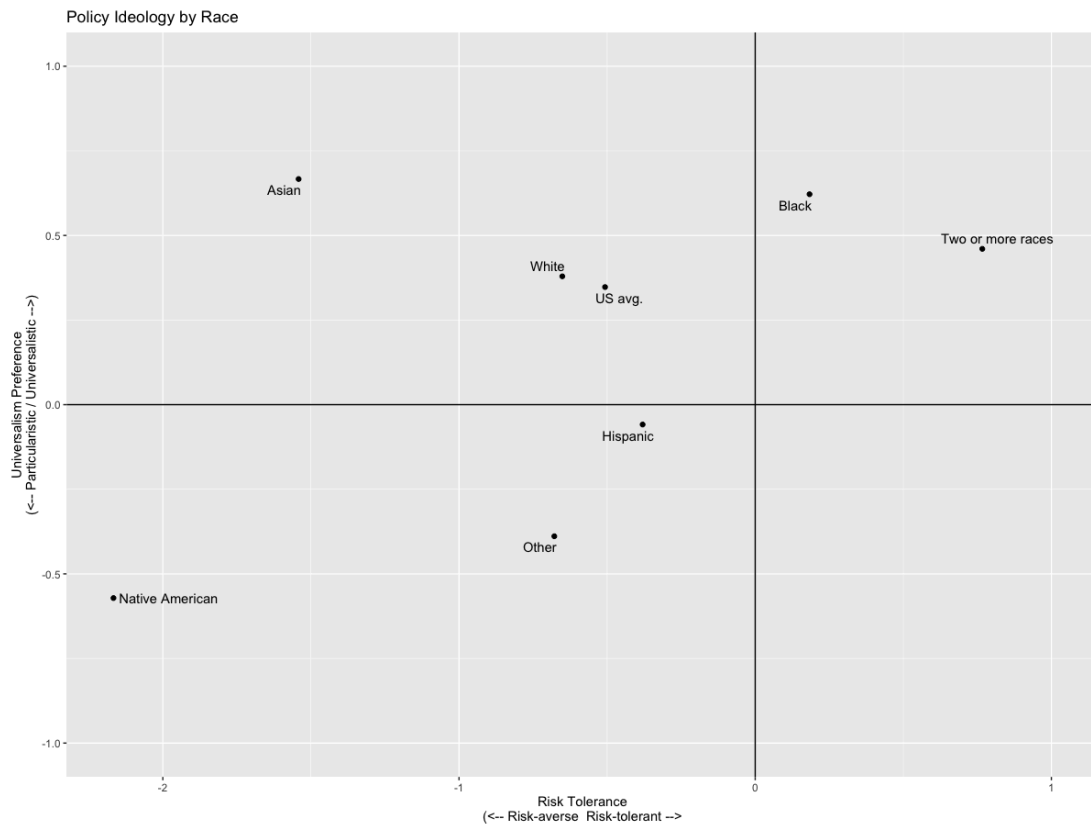


Figure 4.10: Policy Ideology by recipient race.

Indeed, Black Americans prefer Universal Basic Income above even Social Security, in contrast to the sample of all Americans, as is shown in Figure 4.17. Of course, this survey experiment is not nationally representative of all racial groups' policy preferences, so these results should be taken as suggestive rather than definitive.

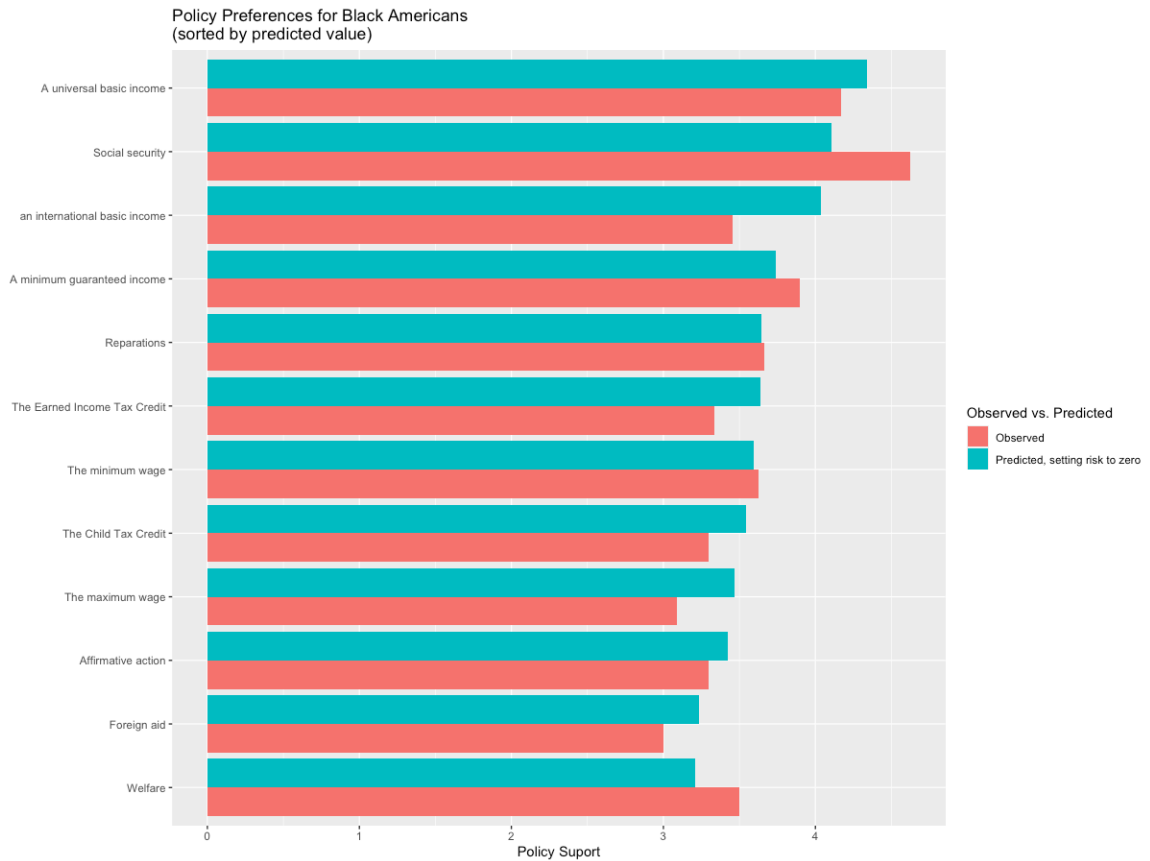


Figure 4.11: Policy preferences of Black Americans.

For comparison, I include a similar analysis for the 2018 CCES data, as is shown in Table 4.11. These data are significantly limited in that they include fewer individual policies, reducing the robustness of inferences, and the CCES lacks the important item that measures respondents' perceptions of the degree to which policies treat people equally, reducing the accuracy of predictions. Both share a measure of individual racism in common, however, and a similar pattern of results is obtained: *Policy Universalism* positively explains and predicts variation in *Policy Support*, while *Policy Risk* negatively explains and predicts variation in *Policy Support*.

Table 4.11: Regression analysis.

	<i>Dependent variable:</i>
	Policy Support
Policy Universalism	0.196*** (0.045)
Policy Risk	-0.519*** (0.045)
Racism1	-0.293*** (0.030)
Constant	4.045*** (0.089)
Observations	861
R ²	0.208
Adjusted R ²	0.205
Residual Std. Error	1.266 (df = 857)
F Statistic	74.806*** (df = 3; 857)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01

For completeness, an illustration of policy preferences is included for the 2018 CCES data, with observed values and values predicted from the model, as is shown in Figure 4.12. A pattern of results similar to those from the 2022 CES data are again obtained, with preference for universalistic policies higher when compared with particularistic policies and controlling for whether policies are low or high risk. Thus, Hypothesis 4 receives further support.

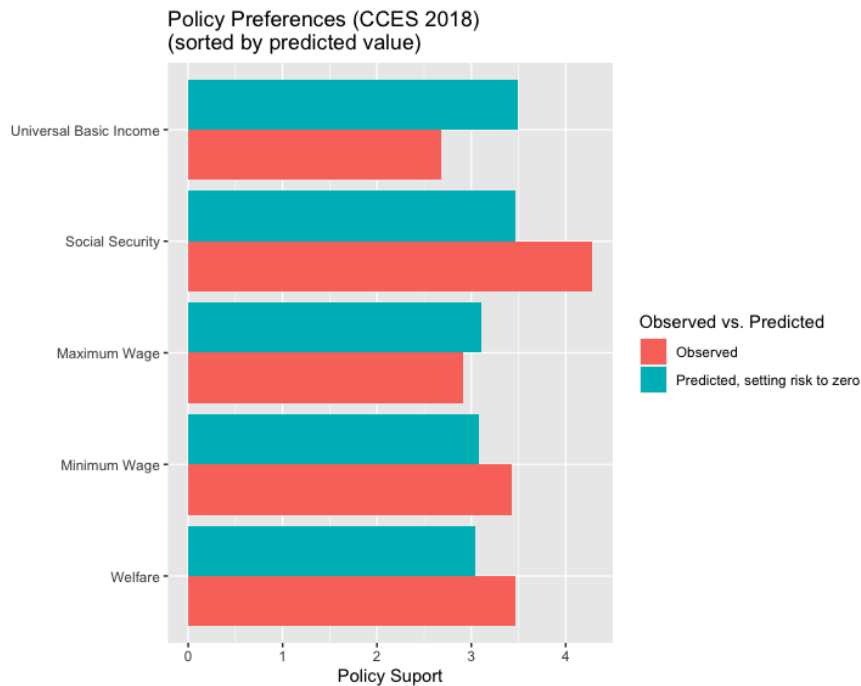


Figure 4.12: Observed versus predicted levels of support.

A related limitation of this approach is that it randomly assigns only a single policy, however, and does not force a choice between policies. Thus, support for hypotheses about the Americans’ preferences is found in the latent differences between groups, rather than in explicit choices forced between policies within subjects. To address this limitation, and to examine the robustness of the foregoing findings, I conduct a second set of analyses using data from Amazon’s Mechanical Turk (MTurk) service.

Application to 2023 Mturk

To examine the robustness of the findings from the 2022 CES, I conduct a novel survey experiment using a sample drawn from Amazon’s Mechanical Turk (Mturk) services. A limitation of this approach is that the sample is not nationally representative, and therefore descriptive inferences about public opinion—what the public wants—are

quite limited. However, the psychological mechanisms proposed in hypotheses 1 – 3 ought to hold regardless of the sample.

As before, I randomly assign policies to respondents for assessment. Departing from the previous study, policies are randomly assigned in pairs, drawn from the typology of policies shown in Table 4.12. (Social Security is omitted both because it has been demonstrated to be the policy Americans prefer, and because I forgot it!) This forces respondents to choose between policies, as well as evaluate each policy on its own.

Table 4.12: Policy typology as operationalized for 2023 Mturk.

	Low-risk Policies <i>(Coded -1)</i>	High-risk Policies <i>(Coded +1)</i>
Universalistic Policies <i>(Coded +1)</i>	[omitted]	Universal Basic Income, International Basic Income
Particularistic Policies <i>(Coded -1)</i>	Minimum Wage, Welfare, Earned Income Tax Credit, Child Tax Credit, Affirmative Action, Foreign Aid	Maximum Wage, Minimum Guaranteed Income, Reparations

Policies are coded according to whether they are universalistic (Universal Basic Income, International Basic Income) versus particularistic (Affirmative Action, Maximum Wage, Minimum Wage, Foreign Aid, Reparations, Welfare), and policies are coded according to whether they are low-risk, established policies (Affirmative Action, Minimum Wage, Foreign Aid, Welfare) versus high-risk, untested policies (Universal Basic Income, International Basic Income, Maximum Wage, Reparations). In the event that a respondent was randomly assigned two of the same policies to evaluate, one of the policies is assigned to be Private Charity.

Respondents are randomly assigned to be shown or not shown the following definitions policies to which they have been assigned:

Maximum Wage: A maximum wage is a limit on how much individuals can earn. A maximum wage would affect the wealthiest individuals. Limiting CEO pay to 100 times the minimum wage would mean CEOs could not earn more than \$1.5 million per year.

Universal Basic Income: A universal basic income is paid by the government to every person. It replaces other social safety net payments and is high enough to cover all basic needs (food, housing etc.). With a basic income, you can still work and earn money. Everyone-including you-might get \$2,000 month from the government regardless of whether they are rich or poor, working or unemployed.

Affirmative Action: Affirmative action is the practice or policy of favoring individuals belonging to groups known to have been discriminated against previously. A company or university may seek to include women or minorities for opportunities where they are underrepresented.

International Basic Income: An international basic income is paid by the government to every person regardless of citizenship. It replaces other welfare and foreign aid payments and is high enough to cover all basic needs (food, housing etc.). With a basic income, people can still work and earn money. Everyone-including you-might get \$2,000 month from the government regardless of whether they are rich or poor, working or unemployed, citizen or non-citizen.

Foreign Aid: Foreign aid is money given to people in other countries for economic development. It is often given to specific governments, who use it for the benefit of their citizens.

Reparations: Reparations are money given to specific groups to correct past injustices. Some countries and states are considering reparations for the descendants of slaves, or reparations for survivors of European colonialism.

Minimum Wage: The minimum wage is the minimum amount of money that a company can pay its workers per hour. The federal minimum wage is \$7.25 per hour, although state and local governments sometimes set higher minimum wages. Some people in the US want to raise the minimum wage to between \$10 and \$15 an hour.

Welfare: Welfare is typically thought of as money for food (EBT, WIC, SNAP), housing assistance (Section 8), or other targeted programs (FASFA). Welfare is only given to people who make less than a certain amount of money.

Private Charity (collision control): A private charity is a non-governmental organization set up to provide help and raise money for those in need (e.g., churches or food pantries). Nonprofit charities typically rely on voluntary donations, government grants, or a mixture of both.

To assess explicit policy preferences (Hypothesis 4), respondents are asked to choose between the policies to which they are randomly assigned: “If you had to choose,

do you prefer <<policy 1>> or <<policy 2>>?” The response set is Likert-style, with the text values for the randomly assigned policies piped in: {I strongly prefer <<policy 1>>, I prefer <<policy 1>>, I do not have a preference, I prefer <<policy 2>>, I strongly prefer <<policy 2>>}. For analysis, preferences for Policy 2 are coded with higher values, while preferences for Policy 1 are coded with lower values. Thus, a respondent assigned to evaluate Universal Basic Income and International Basic Income would see: “If you had to choose, do you prefer Universal Basic Income or International Basic Income?”

Table 4.13: Policy treatment (random assignment) cell counts.

Policy	Number Assigned as Policy 1	Number Assigned as Policy 2
Affirmative Action	30	30
Foreign Aid	18	22
International Basic Income	24	22
Maximum Wage	23	23
Minimum Wage	26	27
Reparations	22	23
Universal Basic Income	30	30
Private Charity	8	10

As a robustness check on Hypothesis 1, I examine the degree to which *Policy Universalism* explains and predicts variation in *Forced Choice* between randomly assigned policies. Because the focal DV, is a *Forced Choice* between two randomly assigned policies, and because the IV is a *Policy Universalism* for each policy, the coding of equal treatment perception for analysis is the *difference* in universalism between Policy 2 and Policy 1.

If, for example, a respondent was randomly assigned to evaluate Policy 2 = Universal Basic Income (universalism = +1) and Policy 1 = Welfare (universalism -1), then the difference in *Policy Universalism* between the two policies would be (+1) –

$(-1) = +2$. Several examples are shown in Table 4.14. A similar approach is used to code *Policy Risk* as the difference in risk between the two randomly assigned policies.

Table 4.14: Policy pair coding examples.

Policy 2	Policy 2 Coding	Policy 1	Policy 1 Coding	<i>Policy Universalism</i>
Universal Basic Income	(+1)	Welfare	(-1)	$(+1) - (-1)$ $= +2$
Welfare	(-1)	Universal Basic Income	(+1)	$(-1) - (+1)$ $= -2$
Universal Basic Income	(+1)	Maximum Wage	(-1)	$(+1) - (-1)$ $= +2$

Consistent with Hypothesis 1, *Policy Universalism* significantly predicts policy choice.

This is shown in Table 4.15. When policy pairs are randomly assigned, respondents prefer universalistic policies to particularistic policies, even controlling for *Policy Risk*.

Table 4.15: Regression analyses.

	<i>Dependent variable:</i>		
	(1)	Forced Choice	
		(2)	(3)
Policy Universalism (difference)	0.247*** (0.086)	0.321*** (0.103)	0.309*** (0.106)
Policy Risk (difference)		-0.120 (0.093)	-0.127 (0.094)
Universalism x Risk			0.037 (0.068)
Constant	2.575*** (0.108)	2.583*** (0.108)	2.549*** (0.126)
Observations	137	137	137
R ²	0.057	0.069	0.071
Adjusted R ²	0.050	0.055	0.050
Residual Std. Error	1.264 (df = 135)	1.261 (df = 134)	1.265 (df = 133)
F Statistic	8.212*** (df = 1; 135)	4.957*** (df = 2; 134)	3.384** (df = 3; 133)

Note: *p<0.1; **p<0.05; ***p<0.01

To illustrate this graphically, Figure 4.13 depicts how when Policy 2 is more universalistic compared to Policy 1, respondents tend to prefer Policy 2 over Policy 1. In contrast, when Policy 2 is more particularistic compared to Policy 1, respondents tend to prefer Policy 1 over Policy 2.

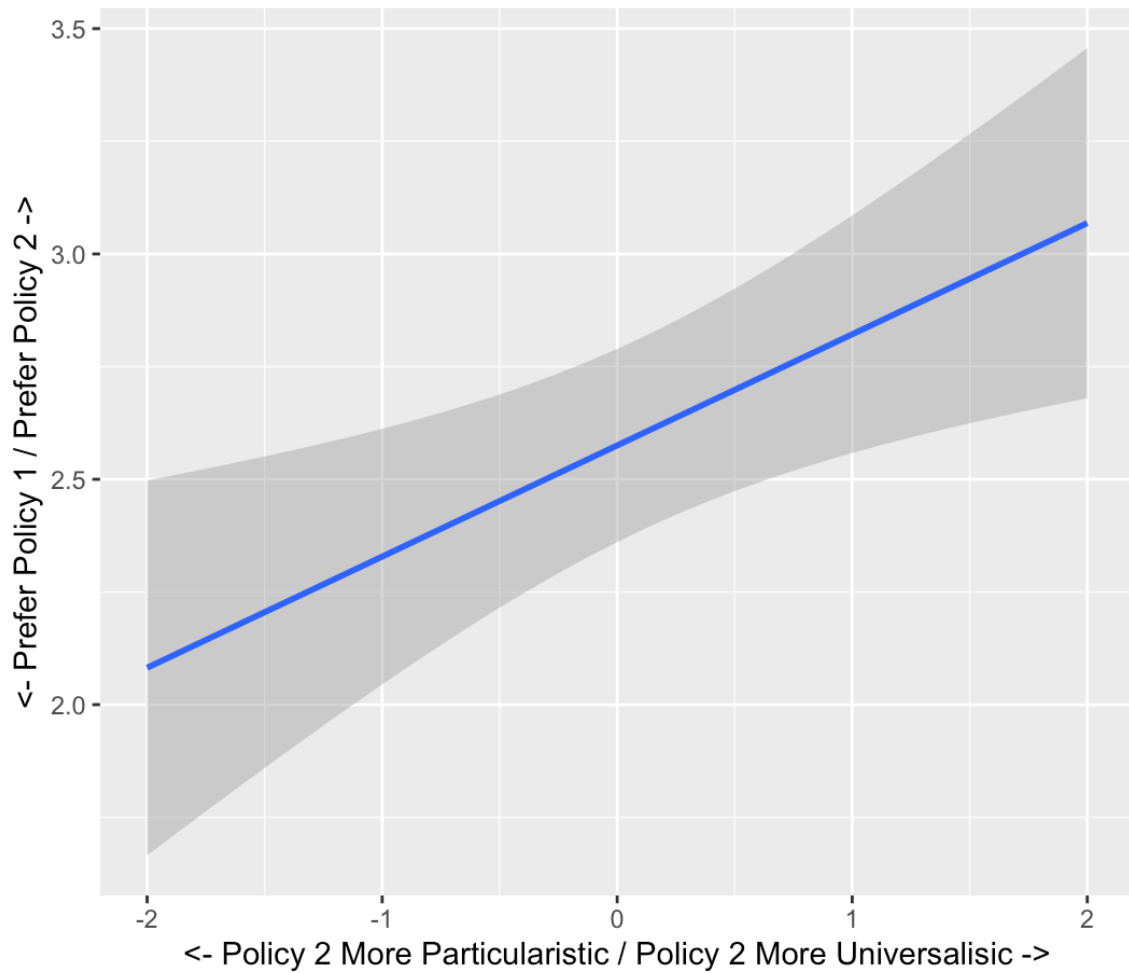


Figure 4.13: Policy preferences.

To test Hypothesis 2, that perception of equal treatment by a policy is driven by policy universalism, perception of equal treatment for each policy was assessed. Two items, one for each policy in the randomly assigned pair, are used to assess the perception that each policy treats people equally: “<<<policy 1/2>> teats people equally or the same.” Because the focal DV, is a forced choice between two randomly assigned policies, and because the IV is a perception of equal treatment for each policy, the coding of equal

treatment perception for analysis is the *difference* in equal treatment perception between Policy 1 and Policy 2.

As Table 4.16 demonstrates, Hypothesis 2 is supported. When a policy is more universalistic, as coded according to the previous criteria, respondents evaluate the policy as treating people more equally.

Table 4.16: Regression analyses.

	<i>Dependent variable:</i>		
	Equal Treatment Perception (difference)		
	(1)	(2)	(3)
Policy Universalism (difference)	-0.256*** (0.082)	-0.214** (0.098)	-0.198* (0.101)
Policy Risk (difference)		-0.067 (0.088)	-0.057 (0.089)
Universalism x Risk			-0.051 (0.065)
Constant	0.345*** (0.103)	0.350*** (0.103)	0.397*** (0.120)
Observations	137	137	137
R ²	0.068	0.072	0.076
Adjusted R ²	0.061	0.058	0.055
Residual Std. Error	1.198 (df = 135)	1.200 (df = 134)	1.202 (df = 133)
F Statistic	9.830*** (df = 1; 135)	5.187*** (df = 2; 134)	3.653** (df = 3; 133)

Note:

*p<0.1; **p<0.05; ***p<0.01

To illustrate this, Figure 4.14 depicts how when Policy 2 is randomly assigned as a more universalistic policy than Policy 1, respondents perceive Policy 2 as treating people more equally compared to Policy 1. Likewise, when Policy 2 is randomly

assigned as a more particularistic policy than Policy 1, respondents perceive Policy 1 as treating people more equally compared to Policy 2.

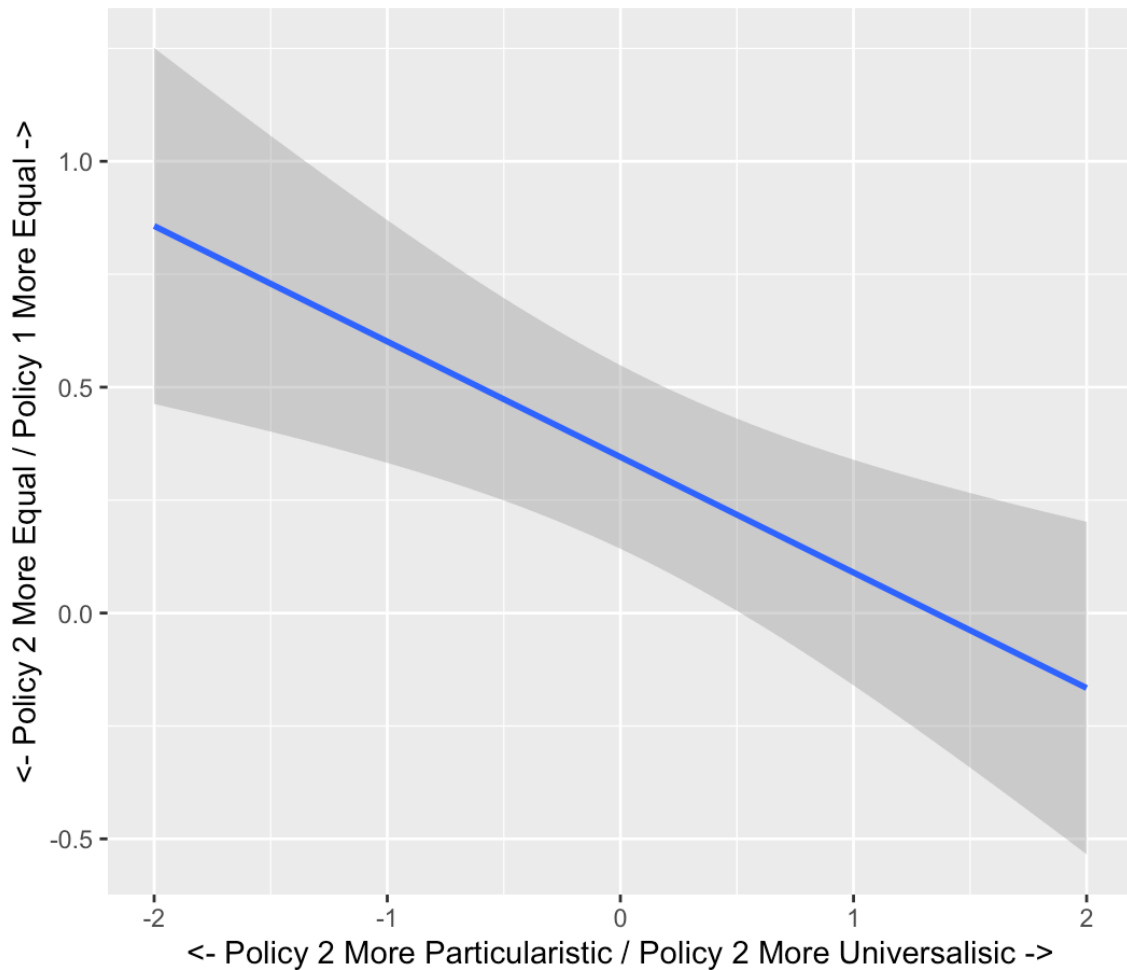


Figure 4.14: Equal treatment perceptions.

Finally, to test Hypothesis 3, that forced policy choice is driven by equal treatment perception, regression analysis is used in Table 4.17. Hypothesis 3 is supported, suggesting that American policy preference is driven by a perception of (and preference for) equal treatment.

Table 4.17: Regression analyses.

	<i>Dependent variable:</i>		
	Forced Policy Choice		
	(1)	(2)	(3)
Equal Treatment Perception (difference)	-0.334*** (0.086)	-0.297*** (0.087)	-0.295*** (0.088)
Policy Universalism (difference)		0.257** (0.101)	0.250** (0.104)
Policy Risk (difference)		-0.140 (0.090)	-0.144 (0.091)
Universalism x Risk			0.022 (0.066)
Constant	2.706*** (0.109)	2.687*** (0.109)	2.666*** (0.126)
Observations	137	137	137
R ²	0.101	0.143	0.144
Adjusted R ²	0.094	0.124	0.118
Residual Std. Error	1.235 (df = 135)	1.215 (df = 133)	1.219 (df = 132)
F Statistic	15.172*** (df = 1; 135)	7.396*** (df = 3; 133)	5.538*** (df = 4; 132)

Note: *p<0.1; **p<0.05; ***p<0.01

To illustrate this, Figure 4.15 depicts the relationship between the perception that Policy 1 treats people more equally versus Policy 2 treats people more equally, along with forced policy choice. As expected, when respondents perceived the randomly assigned Policy 2 as treating people more equally compared to the randomly assigned Policy 1, respondents prefer Policy 2. Likewise, when respondents perceive the randomly

assigned Policy 1 as treating people more equally compared to the randomly assigned Policy 2, respondents prefer Policy 1.

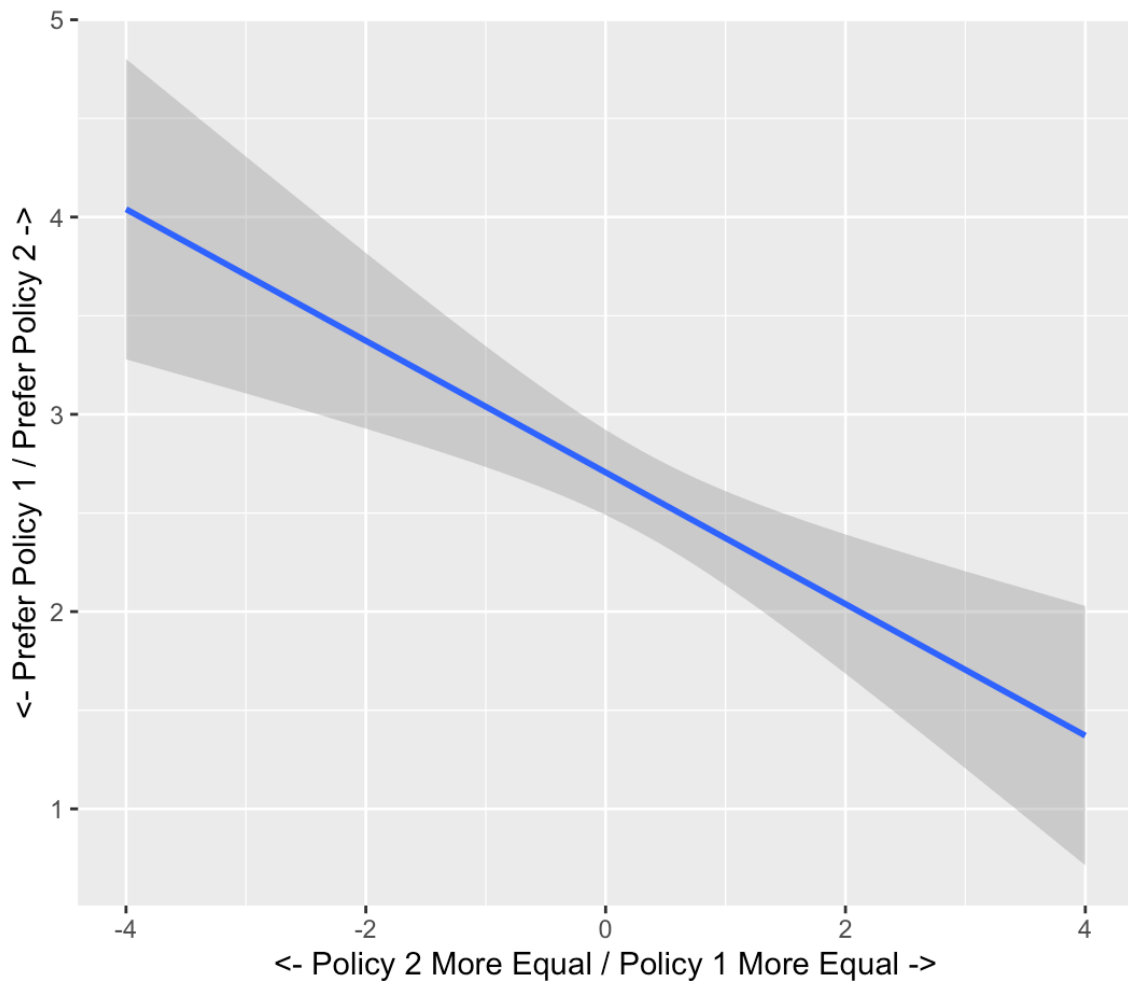


Figure 4.15: Policy preferences as a function of equal treatment perceptions.

Thus, hypotheses 1-3 are supported, suggesting Americans prefer universalistic policies to particularistic policies, and that this preference is driven by a desire to treat people equally. These relationships are tested simultaneously using path analysis, as is shown in Figure 4.16—note that the coding ranges from -2, 0, +2.

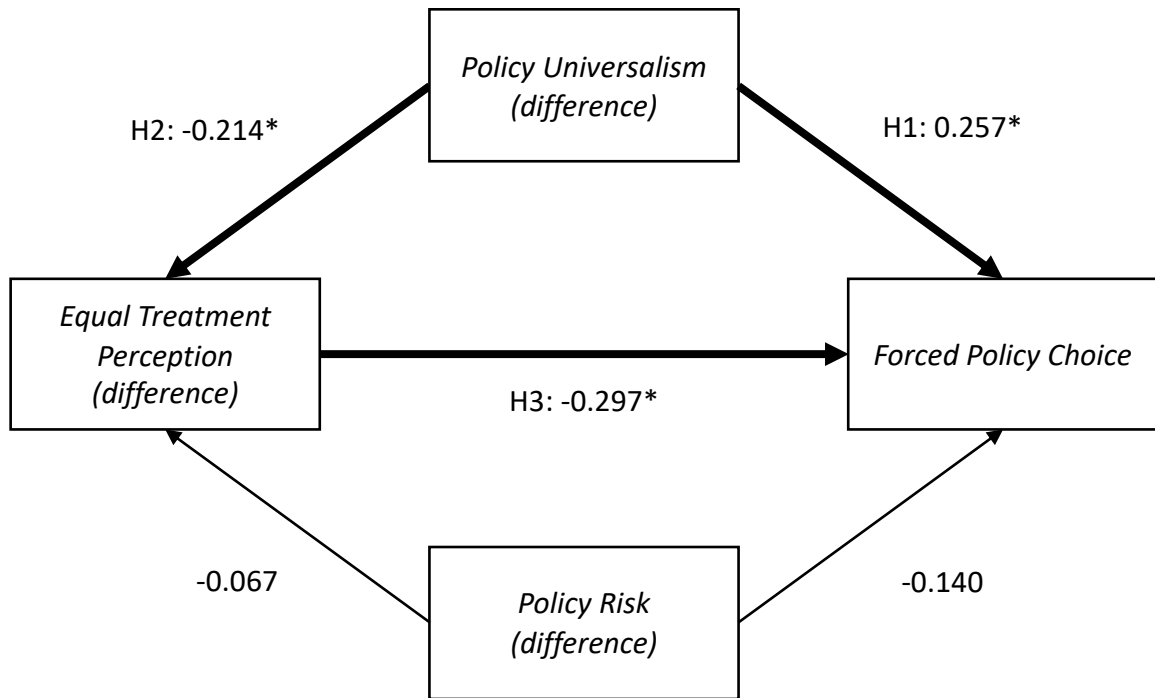


Figure 4.16: Mediation analysis.

Consistent with the Strategic Social Identity Theory advanced as an evolutionary basis for universalism and equal treatment, this suggests that Americans may consider that intergroup status relations are not permanent, and Americans hedge their bets against changes to the social hierarchy by adhering to norms that preserve biodiversity and meritocracy. That is, because Americans cannot predict whether they or their descendants will be in a high- or low-status groups, preserving all groups and discriminating as little as possible seems a safe bet.

Future research should examine psycholinguistic effects in greater detail (e.g., support for *universal* health care versus *universal* basic income), as well as substantive effects of policy delivery (e.g., conditional basic *incomes* versus universal basic *services*).

Exploratory Analyses

In their agent-based computational model of classic social identity, Stewart, McCarty, and Bryson (2020) demonstrate how a risk-averse, ingroup-favoring behavior can arise as a locally beneficial strategy for survival that contributes to political polarization. Their model, like the strategic social identity theory I present, arises from the application of evolutionary game theory to group dynamics in populations (e.g., a population comprise of male and female sex groups, or black and white race groups). Unlike extant work on social identity in political science (e.g., Lupu & Pontusson, 2011; Shayo, 2009; Bishin, 2009) and economics (Shayo, 2020) that examines specific social identities like race, nationality, or class, Stewart, McCarty, and Bryson (2020) examine how the more fundamental process of social categorization—a necessary precondition for the construction of specific social identities—affects political and economic behavior. Their model, while theoretically general, lacks a basic element of actual human population dynamics: reproduction.

Reproduction is conceptually important for the analysis of policy preferences because it introduces an endogenous source of social identity, age. This is relevant for a universalistic policy like Social Security retirement, which uses age as a criterion by which funds are allocated. The policy makes age-related social identity salient.

The impact of age on policy preferences can be seen in Figure 4.17. Age appears to positively explain and predict variation in support for Social Security—older people support Social Security more than young people—while age appears to negatively

explain and predict variation in support for Universal Basic Income—younger people support Universal Basic Income at more than old people.

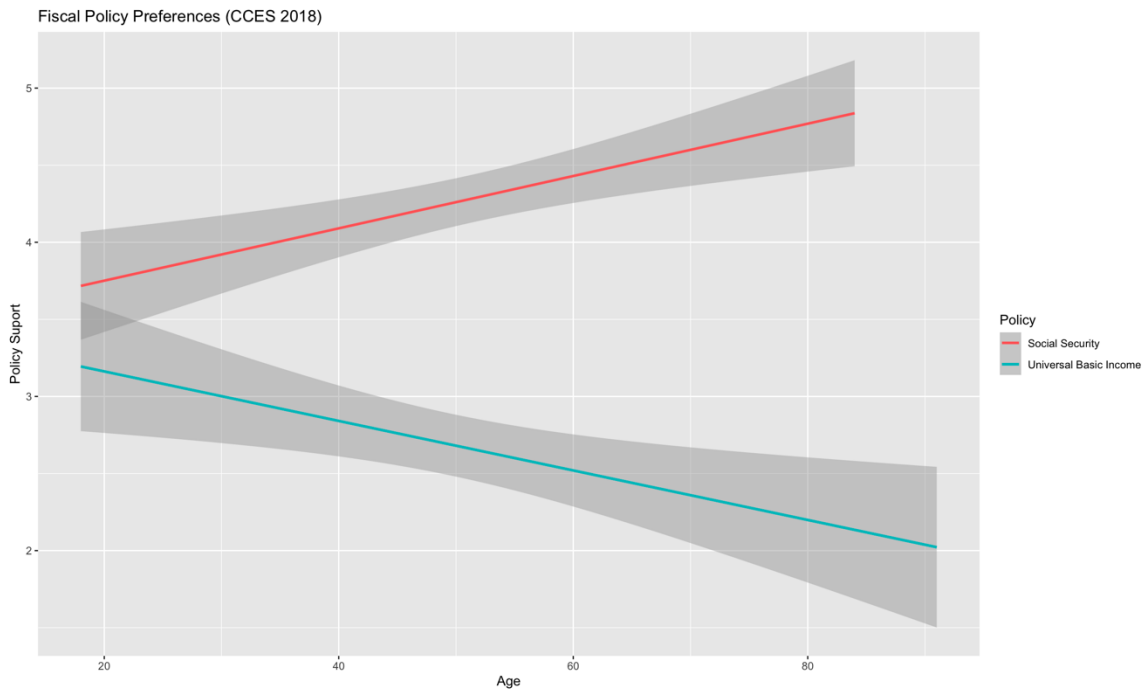


Figure 4.17: Fiscal policy preferences by age.

A limitation of the operationalization of classic social identity theory proposed by Stewart, McCarty, and Bryson (2020) is its inability to differentially explain and predict these fiscal policy preferences on the basis of age. On the one hand, a preference for Social Security among the elderly could reflect self-interest—one is getting paid by the policy, or they will soon. On the other hand, a preference for Social Security among the elderly could reflect group-interest—one is motivated to exclude members of the generational outgroup from getting paid.

Exploratory examination of these factors in the 2022 CES data suggest a solidaristic increase in support among young people for both Social Security and Universal Basic Income, as is shown in Figure 4.18. A similar pattern is not observed

among the elderly, who appear to slightly prefer International Basic Income over Universal Basic Income. Again, neither survey should be taken as nationally representative at the level of individual policies, further limiting the validity of these already exploratory inferential observations.

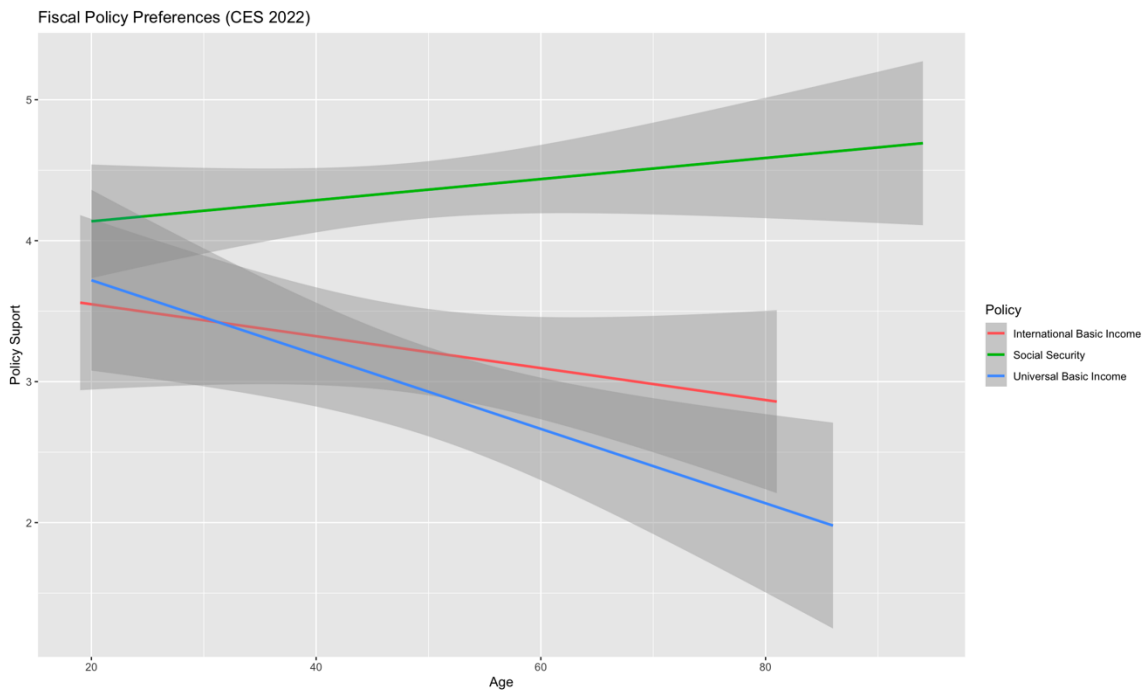


Figure 4.18: Fiscal policy preferences by age.

In addition to age, sex is likely to emerge as an endogenous source of social identity when reproduction is included in agent-based models of political economy and psychology. Age or cohort and sex or gender may likewise interact to explain and predict variation fiscal policy preferences or level of support. Exploratory effects are shown in Figure 4.19.

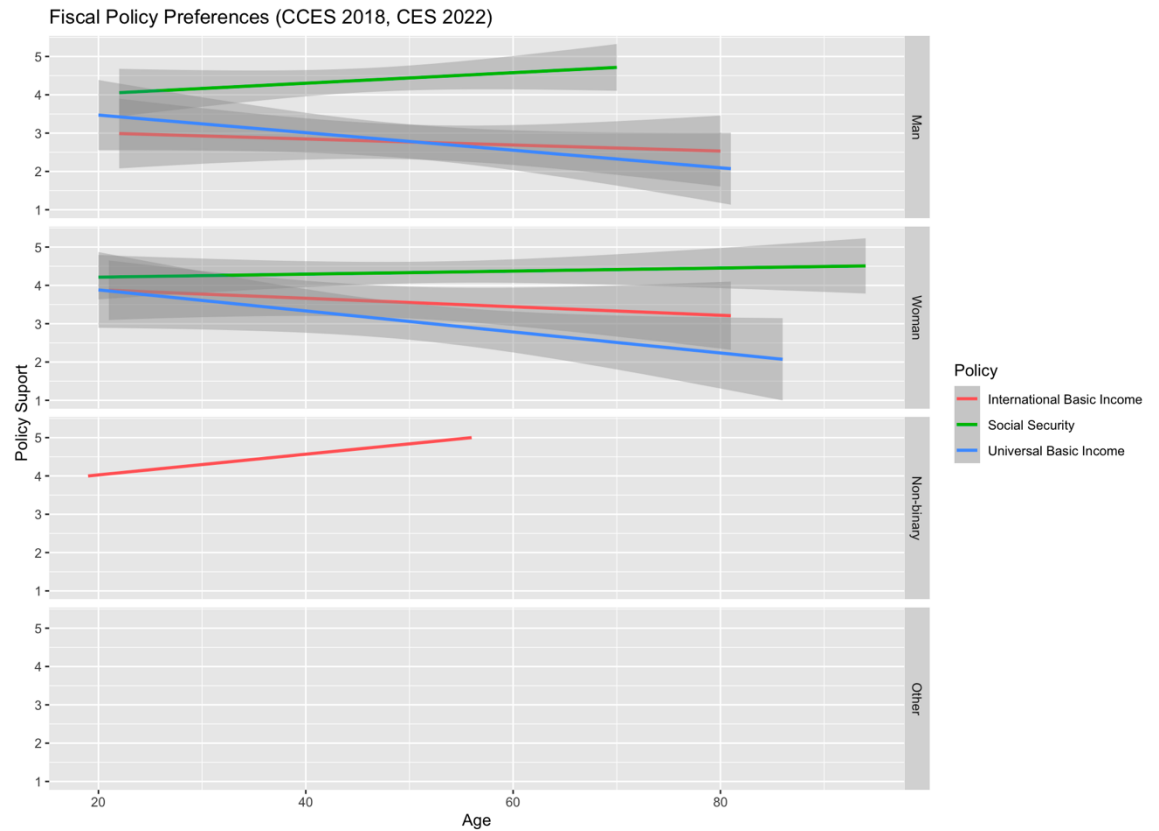


Figure 4.19: Fiscal policy preferences by age and sex.

One might expect that if reproduction is considered the number of children a respondent has may influence the degree to which their time horizon for societal investment extends into the future. However, the number of children a respondent has negatively explains and predicts variation in the level of policy support and does not appear to moderate the effects of policy universalism or policy risk. This is shown in Table 4.18.

Table 4.18: Effects of number of children on policy support.

	<i>Dependent variable:</i>	
	Policy Support	
	(1)	(2)
Number of Children	-0.095*** (0.031)	0.034 (0.065)
Policy Risk		-0.344*** (0.056)
Policy Universalism		0.194*** (0.063)
Equal Treatment Perception		0.665*** (0.043)
Children:Risk		0.014 (0.026)
Children:Universalism		-0.011 (0.030)
Children:Equal Treatment		-0.034* (0.020)
Constant	3.388*** (0.067)	1.481*** (0.141)
Observations	843	839
R ²	0.011	0.391
Adjusted R ²	0.009	0.386
Residual Std. Error	1.375 (df = 841)	1.084 (df = 831)
F Statistic	9.039*** (df = 1; 841)	76.110*** (df = 7; 831)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

Likewise, when the entire lifecycle of population members is considered, the salience of mortality may influence policy preferences. The number of deaths due to

COVID that a person experienced appears to positively explain and predict variation in the level of support for policy preferences—those who lost more people to COVID are more supportive of the policies assessed. Although the number of COVID deaths does not appear to moderate effects of policy universalism or risk, evidence suggests the number of COVID deaths a respondent experienced does moderate their perception of equal treatment, as is shown in Table 4.19.

Table 4.19: Effects of COVID deaths on fiscal policy support.

	<i>Dependent variable:</i>	
	Policy Support	
	(1)	(2)
Covid Deaths	0.266** (0.133)	0.846*** (0.295)
Policy Risk		-0.328*** (0.054)
Policy Universalism		0.200*** (0.061)
Equal Treatment Perception		0.650*** (0.042)
Deaths:Risk		0.018 (0.114)
Deaths:Universalism		0.068 (0.132)
Deaths:Equal Treatment		-0.214** (0.087)
Constant	3.196*** (0.064)	1.422*** (0.136)
Observations	686	682
R ²	0.006	0.364
Adjusted R ²	0.004	0.357
Residual Std. Error	1.367 (df = 684)	1.099 (df = 674)
F Statistic	3.966** (df = 1; 684)	55.009*** (df = 7; 674)
<i>Note:</i>	*p<0.1; **p<0.05; ***p<0.01	

That the salience of mortality apparently changes the level of support for overall fiscal spending coheres with past research demonstrating changes in the level of support

for fiscal policies, e.g., when the estate tax is framed as a “death tax” and mortality salience is primed (Bartels, 2016), or, e.g., how mass mobilization for the realistic group conflict of war increases support for taxing inheritances (Scheve & Stasavage, 2012).

Future research should therefore treat reproduction more rigorously in the context of the strategic social identity theory proposed in this dissertation and model of classic social identity theory proposed by Stewart, McCarty, and Bryson (2020) to better explain and predict Americans’ fiscal policy preferences. Attention should also be given to the heritability of characteristics relevant to politics, like partisanship, income, or education. Likewise, a formal analytical model of feminist political economy is likely to arise from the application of real-world group dynamics to a treatment of reproduction in agent-based modeling of population dynamics—provided a common definition of sex and gender can be identified.

A final consideration is the prospective effect of measurement context on inferences made about fiscal policy preferences—do survey measures of policy preferences get at “real world” behaviors? In the MTurk study, random assignment of three measurement contexts sheds light on this question of external validity and generalizability (the survey is available in the Supplemental Materials online). To assess policy preferences, respondents were randomly assigned to make comparable evaluations of public policies across: a deliberative survey, a recipient survey, and a voting survey. In the deliberative survey, race was not made salient. In the recipient survey, the policy was assessed with respect to a prospective policy recipient with randomly assigned

characteristics. In the vote survey, candidates with randomly assigned characteristics including policy positions were presented.

Exploratory analysis suggests that policy positions taken by candidates do not reveal policy preferences of the respondents in the same way as the deliberative and recipient panels, as is shown in Figure 4.20. Future research should explore how the positions taken on policies by candidates influence candidate choice above and beyond conventional political factors like candidate partisanship, candidate ideology, candidate sex, and so on. These facets of contextual realism may inform the validity and generalizability of inferences drawn from policy preference survey data. That is, surveys that accurately reflect real-world contexts (e.g., voting) are more likely to measure real-world behavior (e.g., voting). In deliberative contexts, where voting is not salient, the trait preference for equal treatment may be activated, while this trait may be inhibited by political ideology in real-world contexts where voting is salient. Unfortunately, the sample size of the voting condition does not allow for inferences about whether the effects of policies contribute significantly to candidate choice beyond the effects of candidate and recipient ideology alone. Future research should examine whether candidates are rewarded or punished for the stances they take on policies or how they frame policies. The next chapter explores effects of survey contextual realism in greater detail.

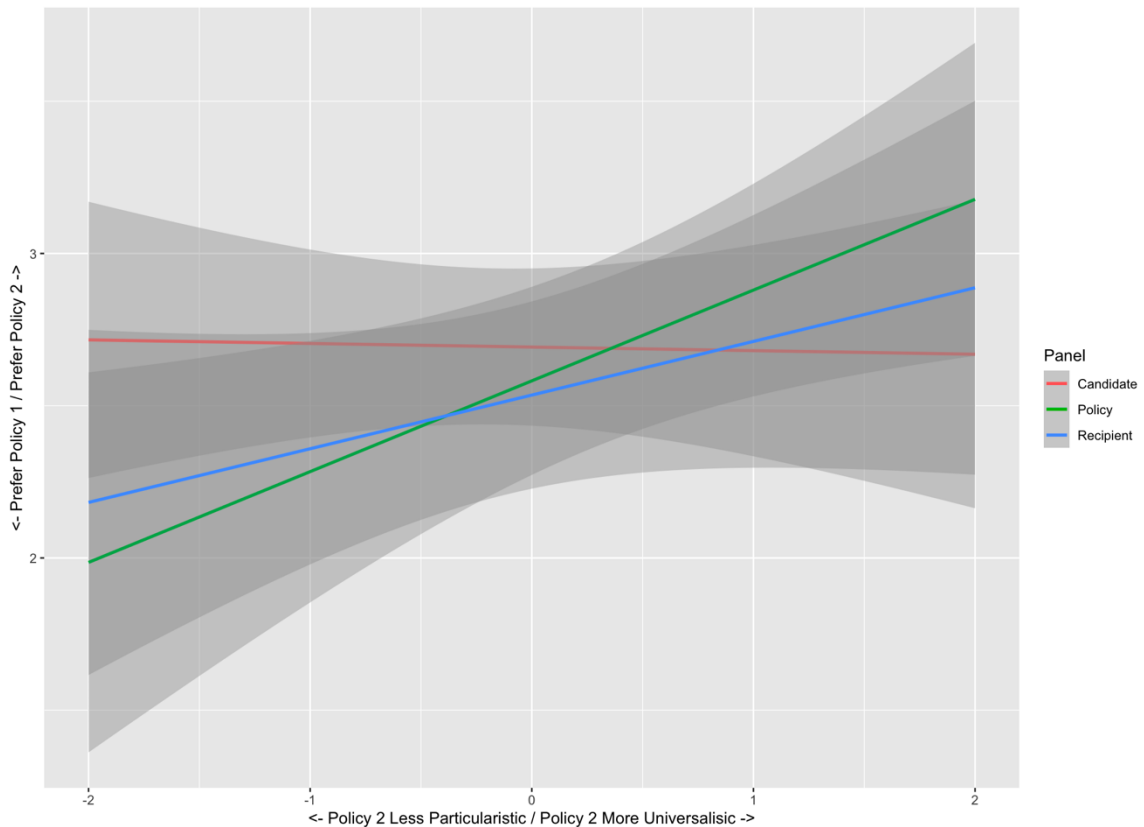


Figure 4.20: *Effects of the measurement context.*

Finally, the computational modeling work by Stewart, McCarty, and Bryson (2020) on political economy and psychology links survey research on intergroup affect to GINI as a measure of economic inequality. However, their approach to measurement fails to include the application of computational psycholinguistic methods (e.g., HAL; Lund & Burgess, 1996) as a tool to quantify and measure phenomena like elites' political ideologies (e.g., Holtzman, Kwong, and Baird, 2015) as inferred, e.g., from their public statements and voting records. Future research should incorporate computational psycholinguistic methods into an analysis of the degree to which survey-based measurements of fiscal policy preferences relate to real-world political behavior (i.e., external validity).

Conclusion

In the United States, where wealth and status stratify along categories like race, I argue that a preference for fiscal policy universalism based on a norm of equal treatment makes evolutionary sense. I assume that members of both high- and low-status groups have an intergenerational interest in preserving a merit-based system through a norm of equal treatment. Regardless of whether their high or low group membership status accurately reflects the average ability of group members, or whether status reflects stereotypes, universalistic policies ensure all future generations benefit, independent of group membership or future group status, while equal treatment allows for equal opportunity across generational cohorts.

An important limitation of the findings in this chapter is that they may not generalize from deliberative surveys, where politics is not salient, to realistic surveys, where politics is made relevant. This suggests that American political ideologies serve to inhibit traits related to equal treatment and fiscal universalism by providing informational heuristics that rationalize for voters the selection of candidates on the basis of partisanship. A larger sample size is necessary to determine whether the fiscal policy positions of candidates for political office confer electoral advantages beyond candidate partisanship, candidate ideology, and other candidate characteristics.

This examination of the strategic social identity theory is further limited by the treatment conditions available in the data used. Future research should validate the proposed hypotheses and mechanisms using a broader set of fiscal policies, including tax

policies (e.g., flat taxes that treat people equally versus particularistic progressive taxes).

It may be that norms other than equal treatment motivate evaluations of tax policies.

Future research should also examine the cognitive determinants of groups to which fiscal policies allocate costs and benefits. For example, Social Security retirement may be seen as treating people equally because it allocates benefits on the basis of age. Age is a permeable social category—most people can expect to retire at some point. In contrast, Reparations may be seen as particularistic because it allocates benefits on the basis of race. Race is an impermeable social category—most people have only a single racial identity. A stricter coding may be applied to future research, as is shown by Table 4.20.

Table 4.20: An expanded typology of policies.

	Low-risk Policies <i>(Coded -1)</i>	High-risk Policies <i>(Coded +1)</i>
Equal Treatment Universalism <i>(Coded +2)</i>	Universal Healthcare (in non-American contexts)	Universal Basic Income, International Basic Income
Age-based Universalism <i>(Coded +1)</i>	Social Security with various retirement ages	Social Security with a retirement age of 18
Class-based Particularism <i>(Coded -1)</i>	Welfare, Earned Income Tax Credit, Child Tax Credit	Minimum Guaranteed Income
Race- or Sex-based Particularism <i>(Coded -2)</i>	Affirmative Action	Reparations

Thus, while the strategic social identity theory is supported in this dissertation, opportunities and challenges remain. The incompatibility of items worded differently across surveys is a threat to the validity inferences drawn in the foregoing chapters and is a focus of the next chapter. In the next chapter, I advance a computational

psycholinguistic theory of survey research to illustrate how quantitative textualism can control for variation in wording across items.

Appendix

The main variable that this chapter adds to the data presented in Chapter 3 is the perception of equal treatment, asked in the CES 2022 and MTurk 2023 data. Data related to the perception of equal treatment is presented in this appendix.

CES 2022 Data

Descriptive statistics for the CES 2022 are shown in Table 4.21.

Table 4.21: Descriptive statistics for CES 2022 data.

Statistic	N	Mean	St. Dev.	Min	Max
Policy Support	995	3.223	1.366	1	5
Policy Scope	998	3.051	1.353	1	5
Policy Impact	995	3.151	1.171	1	5
Group Benefit	997	3.017	1.159	1	5
Group Stability	993	3.359	1.099	1	5
Group Fairness	994	2.819	1.142	1	5
Policy Universalism	1,000	-0.490	0.872	-1	1
Policy Risk	1,000	-0.136	0.991	-1	1
Equal Treatment Perception	996	2.857	1.254	1	5

The correlation matrix for the mediation analysis is shown in Table 4.22. Note that *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation.

Table 4.22: Means, standard deviations, and correlations with confidence intervals.

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Policy Support	3.22	1.37			
2. Equal Treatment Perception	2.86	1.25	.56** [.52, .60]		
3. Policy Universalism	-0.49	0.87	.11** [.05, .17]	.13** [.07, .19]	
4. Policy Risk	-0.14	0.99	-.18** [-.24, -.12]	.02 [-.04, .08]	.29** [.23, .35]

Note: * indicates $p < .05$. ** indicates $p < .01$

The Average Treatment Effect (ATE) of policy universalism on equal treatment perception is shown in Table 4.23.

Table 4.23: ATE of policy universalism random assignment on equal treatment perception.

	<i>Dependent variable:</i> Equal Treatment Perception
ATE	0.371*** (0.090)
Constant	2.763*** (0.046)
Observations	996
R ²	0.017
Adjusted R ²	0.016
Residual Std. Error	1.244 (df = 994)
F Statistic	16.841*** (df = 1; 994)
Note:	*p<0.1; **p<0.05; ***p<0.01

MTurk 2023 Data

Descriptive Statistics for the MTurk 2023 data are shown in Table 4.24. (A correlation matrix is provided in the online Supplemental Materials for replication purposes.)

Table 4.24: MTurk descriptive statistics.

Statistic	N	Mean	St. Dev.	Min	Max
Forced Policy Choice	138	2.594	1.294	1	5
Equal Treatment Perception (Difference)	138	0.312	1.237	-4	4
Policy Universalism (Difference)	214	-0.009	1.267	-2	2
Policy Risk (Difference)	214	0.000	1.408	-2	2
Respondent Partisanship	207	3.522	2.567	1	7
Respondent Ideology	207	4.097	2.221	1	7
Respondent Age	207	30.952	11.026	18	65
Respondent Education	207	4.754	1.220	1	7

The correlation matrix for the mediation analysis of MTurk data is shown in Table 4.25. Note that *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation.

Table 4.25: Means, standard deviations, and correlations with confidence intervals.

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Forced Choice	2.59	1.29			
2. Equal Treatment (Difference)	0.31	1.24	-.31** [-.46, -.15]		
3. Policy Universalism (Difference)	-0.01	1.27	.24** [.08, .39]	-.26** [-.41, -.10]	
4. Policy Risk (Difference)	0.00	1.41	.04 [-.12, .21]	-.20* [-.35, -.03]	.58** [.48, .66]

Note: * indicates $p < .05$. ** indicates $p < .01$

Chapter 5: A Computational Psycholinguistic Theory of Survey Research

An important question motivating this dissertation is “What do Americans want?” in terms of their fiscal policy preferences. This is an important practical question for policymakers and policies, as well as an important scientific question for theorists and empiricists. Beyond the integrative psychometric model of public opinion, public opinion is often used as an indicator of the quality of representation in democratic systems (e.g., Bishin, Freebourn, & Teten, 2021).

As was discussed in previous chapters and is summarized in Table 5.1, fiscal policy preference items vary greatly in how they are asked across different surveys. The General Social Survey (GSS), for example, does not randomly assign policies, meaning that survey-takers could anchor their item responses to particular policies (e.g., by comparing all policies to Social Security) in a way not observable to or modeled by analysts. In contrast, the Congressional Election Study (CES, formerly the Cooperative Congressional Election Study or CCES) does randomly assign policies, eliminating the choice of respondents to anchor their responses and allowing for causal, policy-centered inferences about true-score preferences.

Table 5.1: Comparison of fiscal policy preference items across surveys.

Survey	General Social Survey (Non-experimental)	Congressional Election Study (Experimental Assignment)
Item Frame	We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount.	Welfare is typically thought of as money for food (EBT, WIC, SNAP), housing assistance (Section 8), or other targeted programs (FASFA). Welfare is only given to people who make less than a certain amount of money.
Survey Item	Welfare are we spending too much, too little, or about the right amount on welfare?	I support Welfare.
Item Responses	<ul style="list-style-type: none"> • Too much • About right • Too little 	<ul style="list-style-type: none"> • Strongly Agree • Agree • Neutral • Disagree • Strongly Disagree
Underlying Construct	Welfare preferences	Welfare preferences

On the one hand, these items clearly both ask about the concept of Welfare.

Similarly, both items omit information about taxes necessary to fund Welfare, or other budgetary details that may require respondents to consider their fiscal preferences more holistically. On the other hand, these items are frame in quite different terms, with the GSS providing framing in terms of survey instructions and the CES providing framing in terms of policy definitions. Moreover, the set of item responses varies considerably across these items (e.g., “Too much” versus “Strongly Disagree”), with no words in common.

The GSS more clearly asks about fiscal spending preferences, asking respondents whether they want to spend more, spend the same, or spend less on a given policy. In contrast, the CES less clearly asks about fiscal preferences, necessitating an experimental approach to identifying latent fiscal preferences as explained in previous chapters. While there is some sense to interpreting the GSS in terms of support and agreement, i.e., that “spend more” is more supportive of Welfare and “spend less” is less supportive of Welfare, this requires an inference based in conceptual abstraction into the construct of “Welfare” rather than the text alone.

Conceptual abstraction of similar phenomena (e.g., survey items about spending and taxing preferences) into constructs (e.g., fiscal policy preferences) is essential for the scientific process. However, political psychologists caution that some construct domains lack adequate conceptual and methodological distinction, resulting in measurement contamination (e.g., Huddy, Sears, & Levy, 2013, p. 549). For example, if “willingness to spend more on aid to Blacks” is taken as an indicator of individual-level racism and as an indicator of fiscal preferences, then the measurement of individual-level racism is contaminated by fiscal preferences and the measurement of fiscal preferences is contaminated by individual-level racism, reducing the validity of our inferences about both constructs.

To maximize the inferential validity of claims about policy preferences, a method for the comparison of items across surveys and constructs is necessary. Current work in the study of public opinion has sought to incorporate contextual data into survey research, with *Public Opinion Quarterly* issuing a call for papers on the augmentation of surveys

with paradata (e.g., interviewers' field notes), administrative data (e.g., respondents' census information), and contextual data (e.g., respondents' informational environments). Beyond the comparison of items that are worded differently, a broader focus of this chapter is the incorporation of contextual data about respondents' information environment (e.g., news articles about Welfare) into the analysis of survey data. In this chapter, I review the existing literature psycholinguistic methods, propose a method to compare item wording, and demonstrate its application to survey data. I draw on the hyperspace analogue to language (HAL; Lund & Burgess, 1996; Murphy, Burgess, Johnson, & Bowler, 2012; Perkins, Yu, & Sovine 2020) as an extensively validated computational psycholinguistic method for the comparison of textual information across sources, across contexts, and over time.

The Hyperspace Analogue to Language

Of general concern to survey-based public opinion research, and of specific concern to the measurement of American fiscal policy preferences in this dissertation, is the comparability of items across surveys. As demonstrated, small changes in item wording (e.g., "Welfare" versus "Assistance to the poor") can have large effects on the level of support for a construct inferred from polling data. To quantify and control for the construct irrelevant variance that variability in item wording introduces, this chapter draws on the hyperspace analogue to language (HAL; Lund & Burgess, 1996; Murphy, Burgess, Johnson, & Bowler, 2012; Perkins, Yu, & Sovine 2020) as the basis for a computational psycholinguistic approach to survey-based public opinion and fiscal policy preference research. As the Army Corps of Engineers describes in a graph neural network

application of computational psycholinguistic methods to mission analysis (Perkins, Yu, & Sovine 2020, p. 14 – 15):

The inspiration for this characterization comes from language models, such as Hyperspace Analogue to Language (HAL) as outlined by Lund and Burgess (1996). This characterizes a word in terms of the frequencies with which other words occur near that word. Given a large amount of input data, the team believes the word-context characterization could be used to meaningfully categorize and compare entities.

Since World War I, United States military has a long history of concern with and attention to the validity of inferences drawn from survey data, as the ability to infer predictors of job performance from predictor measures is key to selecting personnel on the basis of merit for jobs vital to national defense (Benjamin, 1997). Drawing on organizational psychology, which is also a basis for management science, traits related to knowledge, skills, abilities, and other job-relevant characteristics are identified and selected for in high-stakes contexts of military selection, training, and attrition using surveys, tests, and other behavioral traces of latent propensity for meeting job-relevant performance criteria (Cascio & Aguinis, 2018). The fields of scientific management and industrial-organizational psychology may, for these reasons, be where republican values are most clearly achieved in the American context.

In the context of survey research, and relevant to a textualist methodology of measuring democratic performance, variation in the wording of survey items and the responses this variation elicits remains a barrier to the validity of inferences drawn from survey data, and a limitation to generalizing inferences across surveys. This is important because survey data provide an important basis for inferences about the quality of

democracy, democratic responsiveness, and substantive representation (e.g., Bishin, Freebourn, & Teten, 2021).

The hyperspace analogue to language (HAL; Lund & Burgess, 1996) begins to solve this problem by allowing the transformation of survey items into cooccurrence matrices using an objective, deterministic algorithm. As is shown in Table 5.2, the HAL algorithm generates a weighted lexical cooccurrence matrix by sliding a moving window of a specified size along a corpus, in this example the hypothetical survey item, “*Do you prefer the estate tax or death tax?*” This item is used as an example to illustrate the effect of repeated words (e.g., “tax”) and to reiterate the sensitivity of survey responses to item wording and issue framing. As the window moves, the frequency with which words occur relative to the focal word is encoded in the cooccurrence matrix, those in the moving window, with the value of each cooccurrence diminishing with distance from the focal word for a weighted cooccurrence (or HAL) matrix—a vector hyperspace for spatial modeling.

The lexical cooccurrence matrix has rows and columns for all unique words in the input text string. Repeated words do not have repeated rows and columns in the HAL lexical cooccurrence matrix.

Table 5.2: HAL matrix 1.

	do	you	prefer	the	estate	tax	or	death
do	0	0	0	0	0	0	0	0
you	5	0	0	0	0	0	0	0
prefer	4	5	0	0	0	0	0	0
the	3	4	5	0	0	0	0	0
estate	2	3	4	5	0	0	0	0
tax	1	2	3	5	7	3	4	5
or	0	1	2	3	4	5	0	0
death	0	0	1	2	3	4	5	0

Note: A weighted lexical cooccurrence matrix (moving window size 5). Data frames may be hierarchically nested by modality, with characters in words in sentences and so on. Words that appear together frequently (e.g., “Democrat”, “Republican”, “partisan”) are assumed to share more meaning compared with words that cooccur less frequently (e.g., “neutrino”).

The matrix is square, and its number of rows and columns (size or order) is the number of unique words scanned by the moving window. In computer science and psycholinguistic applications, the “meaning” of individual words is obtained by concatenating its row and column vectors (Bai, Song, Pruza, Nie, & Cao, 2005). The semantic similarity of different words may be calculated by taking the vector cosine angle (e.g., between the word vectors for “estate” and “death”), a common technique in natural language processing applications. Although many tools like HAL exist in computer science (e.g., `text2vec`), these have not always received the extensive validation in cognitive or political science that HAL has enjoyed, reducing their scientific validity and legal defensibility.

Legal defensibility of inferential claims drawn from survey data is of interest to policymakers who may be required to identify the rational basis for their decisions. For example, evidence from social science about the negative consequences of race-based

discrimination was used to support the racial desegregation of American schools by the United States Supreme Court in the 1950s. A strength of HAL is its compatibility with textualism, a conservative methodological approach to legal scholarship that emphasizes how meaning arises from text alone, not facets of context. The late Supreme Court justice Antonin Scalia is a paradigmatic example of a textualist legal scholar who believes meaning arises, e.g., from the text of the Constitution alone.

As HAL encodes information from the text of survey items alone, it provides a rational basis for the comparison of survey items with each other or to other textual sources like news articles. From a strict textualist perspective, two survey items asking about Welfare are not directly compatible unless they are worded identically. Surveys like the General Social Survey are valuable from a textualist perspectives because they ask questions with identical wording repeatedly over time. However, this focus on item wording invariance limits the ability to scholars to introduce new items to an established survey or compare items across surveys. The ability to quantitatively control for variation in the wording of items across surveys using HAL solves the problem in survey research of drawing inferences from survey items that assess attitudes towards similar topics (e.g., fiscal policies) using inconsistent language (e.g., different definitions).

In the example tax item, public support for taxing the heirs of wealthy estates is reduced when the fiscal policy is framed as a tax on death (Bartels, 2016), raising mortality salience for American voters, and priming them to narrow the social or time horizons over which they consider the provision of public goods by the state to their most immediate in-group—family. HAL encodes the textual variability of such item-level

framing effects, allowing valid inferences to be drawn across similar classes of fiscal policy preference or other survey instrument measures.

Application to Item Comparison

HAL has been applied to the analysis of language in a context much like that of surveys: ballot initiatives (Murphy, Burgess, Johnson, & Bowler, 2012). In this research, the semantic content of arguments for and against propositions on the ballot are compared using HAL to encode the latent semantic meaning of the words proponents and opponents used to strategically frame initiatives to influence the choices of voters. In this application, HAL served to compare variation in word usage and latent semantic meaning across partisan proposition frames.

The present focus departs from this past application in that our concern is not identifying which frames are different, but rather in the use of HAL to compare items and frames across surveys. Ultimately, the goal of this chapter is to demonstrate the application of HAL as a method to control for textual variation across surveys (e.g., how fiscal policies preferences are asked) that is not relevant to constructs of interest (e.g., true-score fiscal policy preferences). Consider, for example, how the HAL matrix for the hypothetical death tax versus estate tax item changes when the word order of “death” and “estate” are swapped, as is shown in Table 5.3.

Table 5.3: HAL matrix 2.

	do	you	prefer	the	death	tax	or	estate
do	0	0	0	0	0	0	0	0
you	5	0	0	0	0	0	0	0
prefer	4	5	0	0	0	0	0	0
the	3	4	5	0	0	0	0	0
death	2	3	4	5	0	0	0	0
tax	1	2	3	5	7	3	4	5
or	0	1	2	3	4	5	0	0
estate	0	0	1	2	3	4	5	0

The cosine similarity angle theta (θ) quantifies how similar or dissimilar two vectors are and is given by: $\theta = \cos^{-1}\left(\frac{a \cdot b}{\|a\| \|b\|}\right)$, where a and b represent vectors. This angle ranges from zero (0) to 1.57 or $\frac{\pi}{2}$ radians. A cosine angle of $\theta = 0$ reflects total similarity of vectors, while a cosine angle of $\theta = \frac{\pi}{2}$ reflects total dissimilarity of vectors.

The cosine similarity between the word “do” for each HAL matrix is obtained by concatenating the row and column vectors into a meaning vector for the word ($\mathbf{do}_{HAL2} = \langle 0, 0, 0, 0, 0, 0, 0, 0, 0, 5, 4, 3, 2, 1, 0, 0 \rangle$). The vector elements must be in the same order for comparability, making the meaning vector for the word “do” in the first HAL matrix $\mathbf{do}_{HAL1} = \langle 0, 0, 0, 0, 0, 0, 0, 0, 0, 5, 4, 3, 0, 1, 0, 2 \rangle$. Note that the 2, which comes from the row “death” in the “do” column of the second HAL matrix appears in the last spot of the meaning vector for the first HAL matrix. This is because “death” appears at the end of the sentence in the first HAL matrix and the middle of the sentence in the second HAL matrix.

The cosine similarity angle for the word “do” across these HAL matrixes is 0.384 radians. In contrast, the cosine similarity angle for the word “tax” across these HAL matrices is 0.465 radians, because the word “tax” differs more in usage and latent semantic meaning across sentences than the word “do” varies.

To compare HAL matrices, not individual words, the subspace angle between the matrices can be used. Geometrically, this subspace angle is the angle between two hyperplanes embedded in a higher dimensional space (Strang, 1993), and is calculated here using the `pracma` package for numerical math functions in R (Borchers, 2022).

The overall similarity between the two HAL matrices as calculated by the subspace angle between them is approximately zero because they are highly similar. In contrast, the subspace angle between these two HAL matrices and the HAL matrix for “I support Welfare.” is 1.57 or $\frac{\pi}{2}$ radians, the maximum value the similarity angle can be, indicating minimal similarity. This is because neither “Do you prefer the death tax or estate tax?” nor “Do you prefer the estate tax or death tax?” has any words used in common with “I support Welfare.”

This abstraction of survey instruments allows all facets of a survey context (vignette framing, item wording, etc.) to be controlled for when it is not of analytic focus. Whereas a psychologist might care about trait racism as predicting opposition to redistributive policies, an economist may care only in identification of attitudinal responses to fiscal policies, all else equal.

A strength of classic HAL is the simplicity with which it apparently captures semantic meaning, syntactical structure, and grammatical facets with fidelity to human

coding and machine learning methods (Burgess & Lund, 2000). That is, the HAL algorithm produces information that has been validated using multiple, convergent methods and HAL requires no “black box.” Social psychologists claim to have demonstrated convergent validity of HAL with traditional, political science measures of elite ideology (e.g., NOMINATE scores; Holtzman, Kwong, and Baird, 2015), while cognitive psychologists and political scientists (Murphy, Burgess, Johnson, & Bowler, 2012) have further integrated HAL, specifically, and but not computational psycholinguistics, generally, into the study of heresthetics in ballot proposition arguments—voter cognition and behavior.

Because HAL uses an objective, deterministic algorithm to encode information using text alone—no human judgment or contextual metadata required—which makes it an ideal method to control for construct-irrelevant variance or contamination across survey items. Thus, I propose:

Proposition 2: If the quantitative textual method of HAL meaningfully encodes information using text alone, then inferences drawn from quantitative textual methods (e.g., about traits or fiscal preferences) are valid.

This mirrors the argument from Chapter 3 that non-experimental methods can be used to meaningfully infer relationships among variables. Again, such an axiom is necessary for fields where non-experimental data are routinely used to test predictions that arise from theory. This proposition serves to connect inferences drawn from non-experimental data in scientific disciplines to with inferences drawn from non-experimental data in disciplines other than science (e.g., legal or religious textualism)

As mentioned, a common focus in survey-based public opinion research is race-based attitudes towards policies, especially distributive or fiscal policies. Unfortunately, this research tends to lack the specificity of economics, leading to potential measurement contamination and lack of construct clarity. Early efforts in the study of public opinion, therefore, used a variants of survey items to characterize effects of item wording on survey responses.

While not directly asking about fiscal policies or assessing fiscal policy preferences, these items do serve to demonstrate how HAL can be used to encode information about textual variability across survey items in an objective, deterministic way.

Comparison of survey item text variants illustrates this method, as shown in Table 5.4. For each item variant, this table compares the item cooccurrence matrix cooccurrence matrixes for other item variants by taking the angle between these subspaces using the `pracma` package for numerical math functions in R (Borchers, 2022), as before. The following variants of the American National Election Study VCF0830 survey item are included:

Item 1: “Some people feel that the government in Washington should make every possible effort to improve the social and economic position of blacks and other minority groups. Others feel that the government should not make any special effort to help minorities because they should help themselves.”

Item 2: “Some people feel that the government in Washington should make every possible effort to improve the social and economic position of Negroes and other

minority groups. Others feel that the government should not make any special effort to help minorities because they should help themselves but they should be expected to help themselves.”

Item 3: “Some people feel that the government in Washington should make every possible effort to improve the social and economic position of blacks and other minority groups even if it means giving them preferential treatment. Others feel that the government should not make any special effort to help minorities because they should help themselves.”

Item 4: “Some people feel that the government in Washington should make every possible effort to improve the social and economic position of blacks. Others feel that the government should not make any special effort to help blacks because they should help themselves.”

As the table shows, the HAL method captures to a degree how similar these item variants are to one another. A score of zero radians denotes total similarity, while a score of $\pi/2$ (1.570796) denotes total dissimilarity. However, this approach tends to exaggerate small differences, with the variation in the words “blacks” versus “Negros” making Item 1 and Item 2 totally dissimilar, despite other words in the item being identical. In contrast, Item 1 and Item 3 are semantically similar, despite Item 3 containing more words. This is because the subspace angle between the HAL matrices is more influenced by words contained by both items than words contained by only one item. When words are contained in only one item, they are coded as zero—no

cooccurrence—for the comparison item. (Note that this approach tends to inflate the number of values near zero and near $\pi/2$.)

Table 5.4: Subspace angles for item variants.

	Item 1	Item 2	Item 3	Item 4
Item 1	0	1.570796	≈ 0	≈ 0
Item 2	1.570796	0	1.570796	1.570796
Item 3	≈ 0	1.570796	0	≈ 0
Item 4	≈ 0	1.570796	≈ 0	0

More nuances can be observed by comparison of each item HAL to a global HAL matrix that contains the sum of each item HAL. Rather than comparing each item HAL to other item HALs, which compares many numbers to zero, this approach ensures that fewer comparisons to zero are made. As is shown in Table 5.5, items can be distinguished from one another numerically in a manner that more accurately reflects variation in their actual content (note that these differences are numerically quite small). However, I do not use this approach of item comparison to a cumulative global HAL matrix in later applications because it is more mathematically lax than the stringent comparison of many HAL matrices to one another.

Table 5.5: Subspace angle for each item relative to cumulative global HAL matrix for all items.

Survey Item (ANES VCF0830 variants)	Subspace Angle (To global matrix)
Item 1: <i>Some people feel that the government in Washington should make every possible effort to improve the social and economic position of blacks and other minority groups. Others feel that the government should not make any special effort to help minorities because they should help themselves.</i>	0.33788961116586091471
Item 2: <i>Some people feel that the government in Washington should make every possible effort to improve the social and economic position of Negroes and other minority groups. Others feel that the government should not make any special effort to help minorities because they should help themselves but they should be expected to help themselves.</i>	1.2508817728810466274
Item 3: <i>Some people feel that the government in Washington should make every possible effort to improve the social and economic position of blacks and other minority groups even if it means giving them preferential treatment. Others feel that the government should not make any special effort to help minorities because they should help themselves.</i>	0.33788961116586058164
Item 4: <i>Some people feel that the government in Washington should make every possible effort to improve the social and economic position of blacks. Others feel that the government should not make any special effort to help blacks because they should help themselves.</i>	0.3199145539138495975

By comparing a cooccurrence matrix for survey items to new items for each year, a summary statistic, the subspace angle Ψ characterizes the ideological deviance of survey items from public discourse in the news.

Geometrically, this subspace angle is the angle between two hyperplanes embedded in a higher dimensional space (Strang, 1993). Mathematically, this process abstracts the survey instrument suitably for computational methods to be applied. The result is a data point for each year that compares the survey item with news sample in an

objective, deterministic way, as is illustrated for the General Social Survey (GSS) item

NATSOC:

We are faced with many problems in this country, none of which can be solved easily or inexpensively. I'm going to name some of these problems, and for each one I'd like you to name some of these problems, and for each one I'd like you to tell me whether you think we're spending too much money on it, too little money, or about the right amount. Social Security are we spending too much, too little, or about the right amount on Social Security?

This item has been repeatedly asked by the GSS across the operation of the survey from 1972 – present.

In principle, the quantitative textualism of HAL allows for the deterministic and objective comparison of survey items like NATSOC across cultures and over time.

This points to a broader threat to the validity of inferences drawn from survey items: the meaning of the words used in those items may change in common use over time. Even within a single cultural context, the common meaning and usage of words tends to change over time, which could affect how survey respondents interpret survey items. For example, the common label for Black people in the United States has shifted from “Negro” to “African-American” during the twentieth century. A survey item asking about Negroes in the 1930s would be seen as inoffensive, while the same question in 2020 may be seen as potentially offensive due to changes in word use and meaning over time. Thus, a “gold standard” survey that repeats the same survey items over time, like the General Social Survey, may in fact not be asking the same question as the meaning and usage of words varies over time.

I argue that HAL can be used to compare the textual content of survey times to the textual content of culture to control for variation in item meaning and heuristic availability over time. This is illustrated in Figure 5.1, which compares the subspace angle between a sample of news items and the NATSOC GSS item over time. This reduces complex psycholinguistic information about the contingent mass media environments in which sets of survey respondents think and act to a simple, mathematical form.

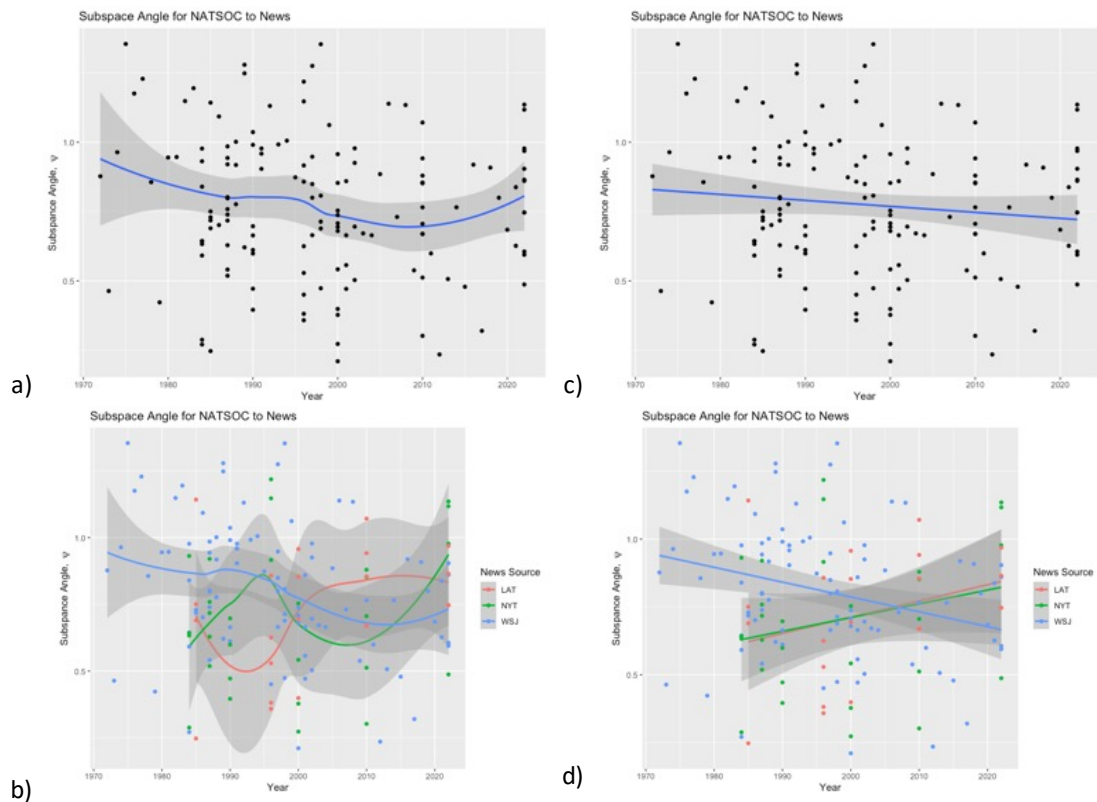


Figure 5.1: a) Semantic similarity scores for the General Social Survey item, NATSOC. Values close to zero radians (0°) reflect higher semantic similarity between survey and news items, while values closer to $\pi/2$ ($1.57\dots$) radians (90°) reflect lower semantic similarity between survey and news items. b) Item angles by news source. c) Linearized semantic similarity. d) Linearized semantic similarity by news source.

For each year of the General Social Survey (1972 – present), this figure plots the similarity angle between the SPKRAC survey item, and several news articles sampled for

that year. This comparison of the survey item to news articles provides some indication of how the meaning of the survey item may be changing over time. Ideally, all news articles would be included for completeness, along with transcripts of television programs, radio broadcasts, published books, and so on to fully model how the meaning and usage of words may be varying over time (or not!). For the scope of this project, however, approximately three articles were sampled from each year from the main newspapers to which the UC Riverside library had access (the *New York Times*, the *Los Angeles Times*, and the *Wall Street Journal*). These articles were found using the search term “Welfare”.

Because the focus of this chapter is not to make inferences about change over time, but rather to assess the invariance of the proposed trait preference for fiscal universalism and equal treatment, the sample size for each year is not an important indicator of statistical power. Rather, the total number of year-item observations is important.

With this in mind, Figure 5.1 shows this quantitative textual approach appears to capture meaningful variation between survey and news items, with apparent divergence between the semantic content of right-leaning news sources (*The Wall Street Journal*) and left-leaning news sources (*The New York Times* and *The Los Angeles Times*), bolstering the face validity of the method. Thus, quantitative textualism may serve as a valid mechanism to encode normative, emotional data from both public opinion surveys and mass media texts to serve as a mathematical basis for (a) computational social

science, and (b) trustworthy artificial intelligence, at least from the standpoint of conservative textualist legal scholarship.

Application to Policy Preference Data

Application of HAL to policy preference data allows for more accurate identification of psychological traits by controlling for variation in the availability of heuristics to which survey respondents are exposed and by controlling for variation in the meaning of words used in surveys over time. To accomplish this, a HAL matrix is created for each survey item to be analyzed. A HAL matrix is also created for each news item sampled. For each survey item and year, a subspace angle, Ψ , is calculated to capture the similarity or difference between that survey item and news articles for each year.

As a focus of this project is identification of effects of policy universalism on policy support, I therefore use the subspace angle, Ψ , between policy preference survey items and the news corpus as a control variable. This accounts for likely effects of exposure to news articles on familiarity with and support of policies, at least within the scope of the news articles used. In general, I expect that survey item similarity to the news corpus will negatively explain and predict variation in the level of support for policies. As the subspace angle between survey items and the news corpus increases, the level of support for policies should decrease, As the items use words in a manner that is less familiar to respondents.

Combining policy preference items across the 1972 – 2022 GSS, 2018 CCES, and 2022 CES surveys allows for the subspace angle, Ψ , to be included as a control, as is shown in Table 5.6. This allows for more accurate identification of effects due to *Policy*

Universalism, the proposed trait that explains and resolves the paradox of universalism in sociology. As the number of textual sources grows to include all news articles, legal texts, television transcripts, and so on, our confidence in estimation of effects specific to trait likewise grows.

Table 5.6: Regression analyses.

	<i>Dependent variable:</i>		
		Policy Support	
	(1)	(2)	(3)
Subspace Angle, Ψ	-0.159*** (0.037)	-0.221*** (0.030)	-0.210*** (0.034)
Policy Universalism (H1, $\beta > 0$)		0.257*** (0.015)	0.305*** (0.029)
Policy Risk		-0.236*** (0.021)	-0.274*** (0.030)
Ψ :Universalism			-0.082** (0.040)
Ψ :Risk			0.085** (0.041)
Constant	0.228*** (0.028)	0.216*** (0.028)	0.223*** (0.030)
Observations	639	639	639
R ²	0.028	0.363	0.369
Adjusted R ²	0.027	0.360	0.364
Residual Std. Error	0.375 (df = 637)	0.304 (df = 635)	0.303 (df = 633)
F Statistic	18.521*** (df = 1; 637)	120.727*** (df = 3; 635)	73.897*** (df = 5; 633)

Note:

*p<0.1; **p<0.05; ***p<0.01

On average, the subspace angle between HAL matrices generated for news articles and the HAL matrices generated by survey items negatively explains and predicts variation in *Policy Support*. As survey items become less like the news corpus, the level of support decreases. These and interactive effects of Policy Universalism are shown in Figure 5.2, while interactive effects of Policy Risk are shown in Figure 5.3. In general, as the subspace angle Ψ increases, and the similarity of survey items to news articles decreases, the level of support for policies inventoried by the items decreases as expected.

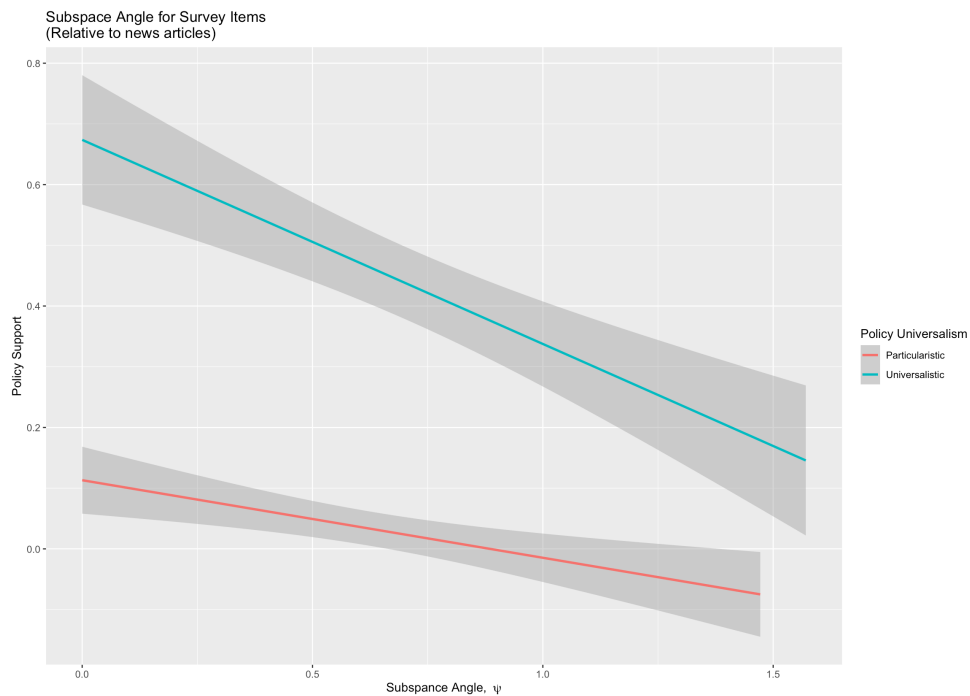


Figure 5.2: Effects of item-news similarity on policy support, by policy universalism.

Again, these results should be viewed as a demonstration of method and taken with a grain of salt because of the limited quantity and quality of news articles included

in the psycholinguistic control corpus.

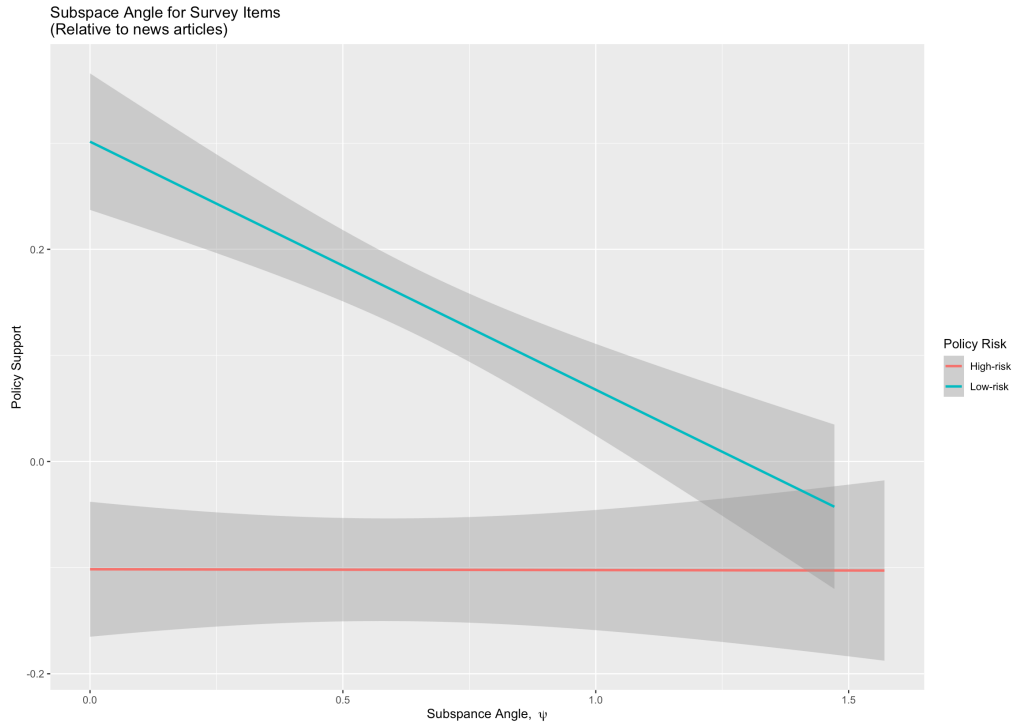


Figure 5.3: Effects of item-news similarity on policy support, by policy risk.

Despite such limitations, a computational psycholinguistic approach to survey research appears to be a useful interdisciplinary tool for the analysis of public opinion data. Because this quantitative method encodes data from the *text* of items, news articles, and other sources alone, it should be viewed by conservative legal scholars as a valid tool for the transformation of these data into forms suitable for computational processing. These concerns are of particular importance to scholars of management—where legal defensibility of surveys is paramount—and representation—where valid survey data serve as criteria related to democratic performance, as is discussed in the Appendix.

Application to Psychometrics

One limitation of public opinion survey research is that survey length constrains the inclusion of validated psychological measures, e.g., of traits. For psychometric validity, inventories of psychological traits can range from several items to tens of items for a single trait. The social dominance orientation item, for example, ranges from 7 to 16 items, depending on the version.

Here, I demonstrate how HAL can be used to circumvent this limitation on survey research on the ability of psychologists to draw valid inferences about psychological traits. Specifically, I use data from the 2023 Amazon Mechanical Turk survey (discussed in Chapter 3) to illustrate how random sampling of items from an inventory can be used to shorten inventories of psychological traits. In this survey, I randomly sampled 3 of the 16 social dominance orientation items.

Because the items are randomly assigned across the SDO1, SDO2, and SDO 3 questions, the reliability for SDO1, SDO2, and SDO3 is quite poor ($\alpha = 0.12$). This is because the textual content of these survey variables are random. As Figure 5.4 shows, only by including a psycholinguistic variable to quantify the psycholinguistic variation within each question does a factor model for the social dominance orientation construct converge.

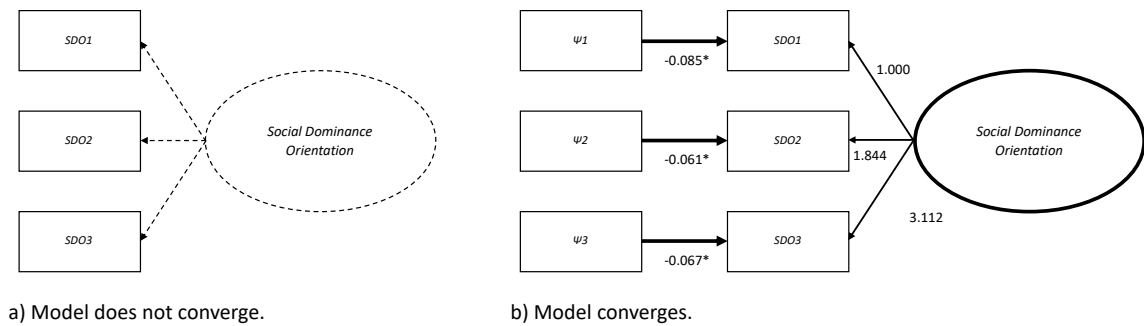
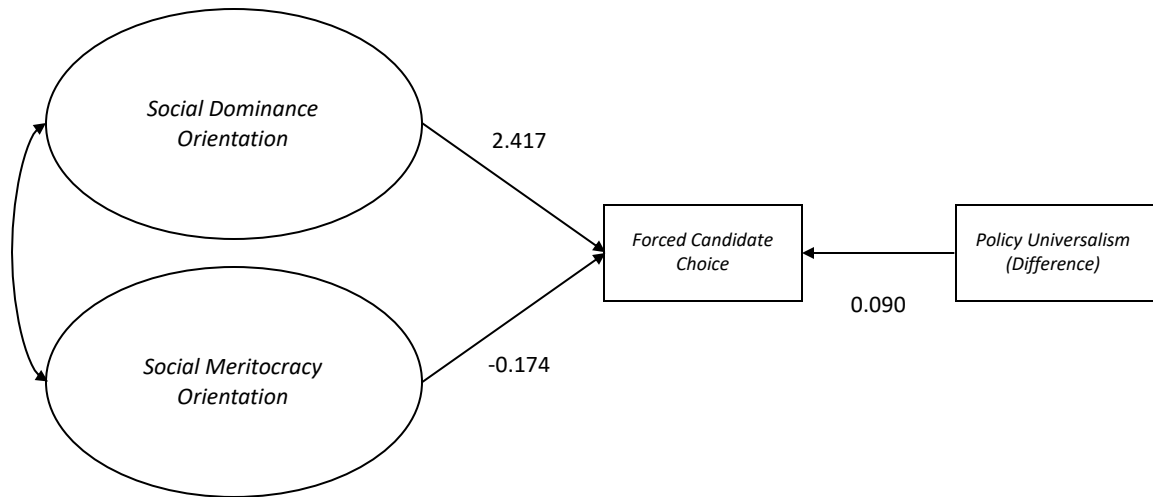


Figure 5.4: A factor analysis with and without psycholinguistic controls.

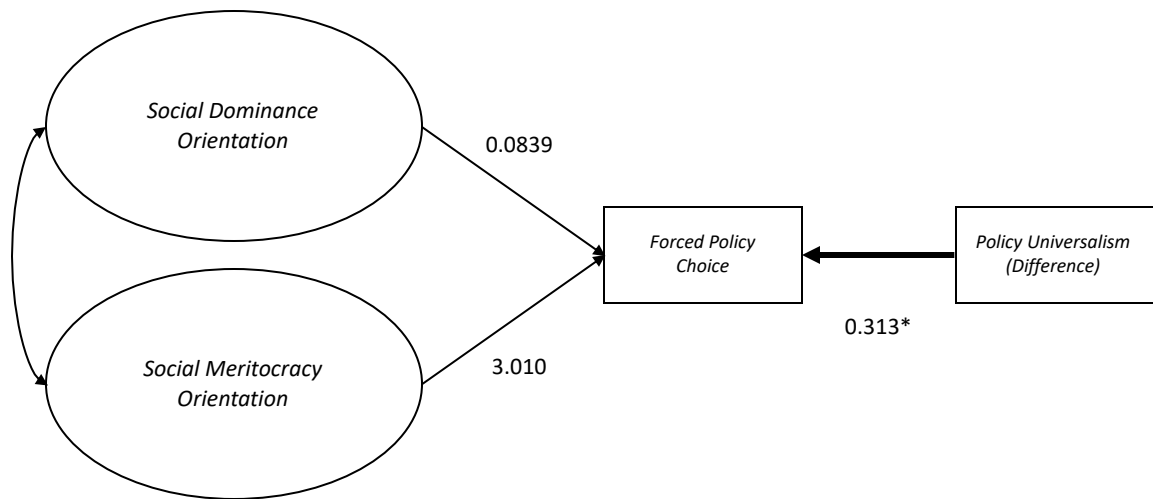
One problem is that the indicators (SDO1, SDO2, & SDO3) do not load onto the latent social dominance orientation variable as they should. This problem arises from the limited way in which variation in item wording was controlled for, comparing variation in wording only across items, not to news sources, and that I did not account for the dimensionality of the social dominance orientation construct. Future research may expand on this approach for greater methodological utility.

Applying this method to the social meritocracy orientation construct, a suggestive pattern of trait activation and inhibition can be observed across types of survey measurement contexts. As was mentioned in Chapter 4, participants in the MTurk survey were randomly assigned to one of three contexts where policies were randomly assigned for evaluation. Effects of policy universalism were most pronounced in the deliberative policy evaluation context, where neither politics nor race were made salient. Effects of policy universalism were least pronounced in the realistic policy evaluation context, where both politics and race were made salient. In this panel, participants were forced to choose between two hypothetical candidates for political office who took different stances on the randomly assigned policies.

As shown in Figure 5.5, the social dominance orientation trait appears active and the social meritocracy orientation trait inhibited in the realistic survey panel of candidate selection. The effect of policy universalism on candidate support is not significant, suggesting related traits are inhibited. In contrast, the social dominance orientation trait does not appear active, and the social meritocracy orientation trait appears active in the deliberative survey panel of policy evaluation. Moreover, the effect of policy universalism on forced policy choice is significant, suggesting related traits are activated.



b) Realistic Survey Panel (Candidate vote choice)



a) Deliberative Survey Panel (Forced policy choice)

Figure 5.5: Preliminary effects of survey contextual realism.

While constraints of sample size and survey quality limit the validity of these inferences, the approach suggests that randomly varying the type of survey context—from deliberative to realistic—may be an important methodological tool for understanding how traits are activated and inhibited as people form preferences and behave politically. Future research should examine these effects using computational

psycholinguistic methods in greater detail. A preliminary typology of survey contexts is provided in Table 5.7 to facilitate this research.

Table 5.7: Types of surveys and levels of measurement context realism.

Contextual Realism			
Lowest: <i>A deliberative survey where neither identity nor politics are salient</i>	Low: <i>A deliberative survey where only identity is salient</i>	High: <i>A voting survey where identity and politics are salient</i>	Highest: <i>Actual electoral behavior</i>

By assessing patterns of variance and invariance in trait activation and preference expression, the validity of trait-based models, e.g., of fiscal policy preference formation, can be robustly established. Moreover, the generalizability of behavior from the context of surveys can be established with greater accuracy. As the next section briefly lays out, surveys may provide an important basis for the training of artificial intelligence systems.

Application to AI Ethics

As mentioned, the Army Corps of Engineers uses tools like HAL for the analysis of mission data. This is because HAL encodes textual information in a manner compatible with graph theory and neural network analysis, as is shown in Figure 5.6. This means that textual information can be used in machine learning and artificial intelligence applications, including ethical decision-making as I briefly argue here.

Graph Representation of Hypothetical Survey Item

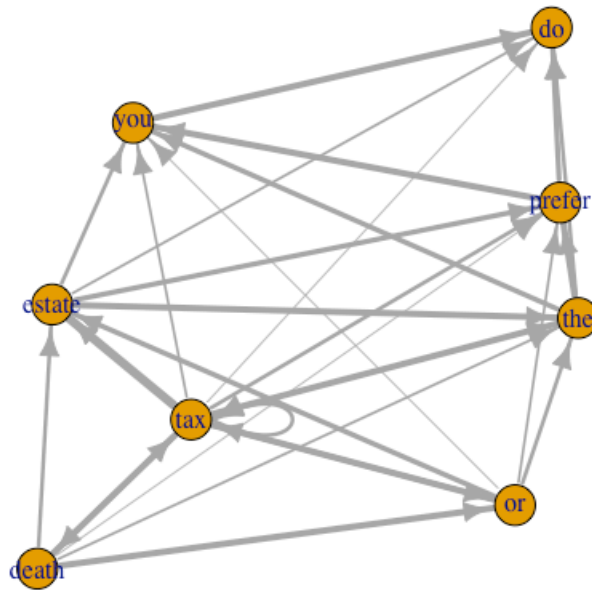


Figure 5.6: Graph representation of the hypothetical survey item “Do you prefer the estate tax or death tax?”

Survey data can be thought of as tests of the situational judgement of survey respondents. When a person responds to a survey, rendering their fiscal policy or other preferences, they reveal the endpoint of their moral and ethical decision-making process. Thus, surveys constitute a rich set data for training artificial intelligence applications on the norms and values of the public.

For policymakers, the training of generative artificial intelligence on data across surveys may serve as a tool to understand how prospective policy changes may be evaluated by the public. Future research should implement this approach such that a policymaker could input a query (e.g., “Do you support conditional basic income?”) and receive a response characteristic of the American public. Such an approach could also be

of use to managers in corporate settings as a first-pass examination of, e.g., prospective effects of marketing campaigns.

For political theorists, such a tool may aid in the evaluation of normative theories about public life by condensing the available corpus of public opinion, psychology, and economics research into an easy-to-use assistive technology. For the general public, the ability to ask a natural-language question of a trustworthy artificial intelligence and receive an interpretable response may aid voters in understanding complex topics in science and policy. Interested readers may examine Appendix A for greater detail on the conceptual basis of validity in the scientific analysis of complex social systems.

Conclusion

This chapter has demonstrated the application of computational psycholinguistic, quantitative textual methods to the analysis of survey data. By quantifying and controlling for variation in the wording of items across surveys, true-score preferences may be identified as the entire lexical universe is measured. Inclusion of quantitative textual controls demonstrates the robustness and limits of a preference for universalistic fiscal policies (Hypothesis 1, $\beta > 0$) across surveys.

The approach used here is limited by the amount of textual data included and by the analytic tools used. Future research should train models using HAL on all survey, news, and other textual sources while controlling for demographic factors to characterize effects more accurately. Moreover, future research should go beyond the standard regression tools of social science and integrate more fully with the standard text analysis tools of computer science and industry.

Beyond regression analysis, graph theory and graph neural networks are a standard method of textual analysis compatible with HAL. Although beyond the scope of this dissertation project, a graph neural network of textual information encoded by HAL provides the methodological basis for the computational modeling of public opinion in an objective, deterministic way.

Comparisons between states and political parties can also be advanced by this method of quantitative textualism. For example, party platforms and manifestos can be encoded using HAL and the distance between them compared in an objective, deterministic way. The process of bargaining can be conceptualized in psycholinguistic terms, as variability in the distance between the platforms or manifestos of bargaining parties.

Appendix

What, one may be tempted to ask, do we get for democratic theory—what Americans want—from a trait-based approach to fiscal policy preferences? After all, if a trait preference for equal treatment can be shown to exist using the strictest, quantitative textual standards for the validity of evidence, then one might argue that democratic performance cannot be meaningfully said to vary when we, on average, all want the same thing. As I argue here, the crux of this question is that the conceptualization of democratic performance is necessarily a multi-level challenge in clearly specifying the logical bases for inferential claims to avoid misspecification when making claims, e.g., about survey respondents nested in media markets, economic regions, or semi-sovereign states.

Although HAL provides a direct tool for the incorporation of survey data with existing computational methods, its importance for the application of artificial intelligence to questions of public policy rests in the nature of survey items as tests of respondents' situational judgement to ethical questions posed, e.g., by the allocation of scarce fiscal resources to solve the problems faced by their polity. That is, survey data provide a training set for artificial intelligence to learn what Americans want, given their traits, and how to deliver effective and appealing policy, given our values, to maximize the performance of our institutional design using conservative textualists methods.

Of relevance to scholars of democratic institutions (e.g., Bowler, Freebourn, Teten, Donovan, & Vowles, 2022) is the so-called criterion problem in management. The criterion problem refers to the challenges that scientists and practitioners face in conceptualizing criteria to measure performance in complex social systems (e.g., the military or a workplace). This challenge arises because different people have different material and ideational interests depending on their status or position and ideational interests depending on their socialization or temperament.

HAL constitutes a conservative, quantitative textual method to incorporate multiple facets of institutional design into the study of democratic performance by placing, e.g., the text of laws created by democracies in a common analytic framework with, e.g., the text of survey items used to assess citizens' evaluations of democracy.

In the study of democracy, political scientists conceptualize democratic performance according to several criteria (Pitkin, 1967): formalistic representation, symbolic representation, descriptive representation, and substantive representation. While

the first three criteria deal with a straightforward assessment of how the rules of democracy affect perceptions of legitimacy and inclusion (e.g., the underrepresentation of women), quantifying substantive representation poses a greater challenge because it directly ties to what people want in terms of policy outcomes. An interdisciplinary conceptualization of substantive representation therefore depends on the ability of scholars to measure “what Americans want” valid way.

In management (Cascio & Aguinis, 2018) and industrial-organizational psychology (Binning & Barrett, 1989), a conceptual analysis of the inferential and evidential bases for scientific inferences serves as the legal framework to justify personnel decisions made in employment contexts (e.g., Uniform Guidelines, 1978; 29 C.F.R. § 1607). The classical analysis examines how a measure of anxiety is used to predict manual dexterity on the job. Here, I adapt the standard unitarian model of validity for use in political and economic science to make clear the rational basis for inferential claims about democratic performance.

To begin, consider how liberal political and economic institutions serve to explain and predict variation in the quality of political representation of a polity. Political scientists and economists attempt to draw inferences based on procedures for sampling traces of behaviors within each construct domain (e.g., laws written or surveys completed). They may, for example, examine constitutional texts to characterize the institutions of a polity as democratic or monarchical, or look to opinion surveys to establish whether preferences translate into policy (i.e., substantive representation; Pitkin,

1967). We think of these as X and Y . As is shown in Figure 5.7, four logical inferences link these constructs (Binning & Barrett, 1989, p. 479):

1. X and Y are related in some specified way.
2. X is a measure of institutional design.
3. Institutional design and representational quality are casually related in some specified way.
4. Y is a measure of representational quality.

Of these, only Inference 1 can be empirically tested. This is because X and Y are measures that are directly observed (rectangular shapes in Figure 5.7). We choose measures that we can observe directly, like the texts of laws or the responses to surveys. In contrast, Inference 2, 3, and 4 link observable measures to hypothetical concepts (i.e., legal, social, or scientific constructions; circular shapes in Figure 5.7). These link ideas about performance and its predictors.

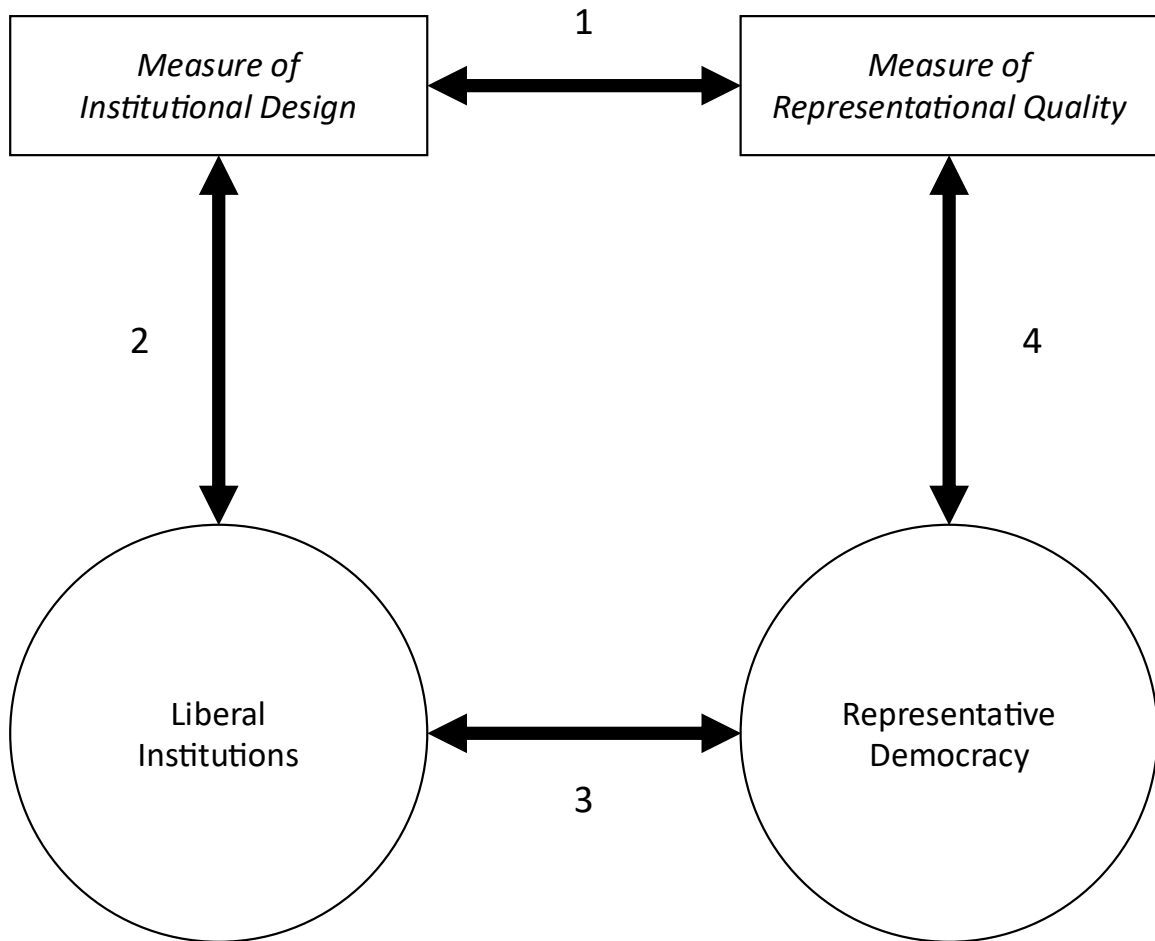


Figure 5.7: Inferential linkages.

Beyond philosophical concerns, scientists and policymakers require a pragmatic analysis of construct validity to establish inferential claims beyond a reasonable doubt. This involves qualitative analyses of the concepts and practices associated with political and economic behavior in relation to ideal theory. Scientists and policymakers must ultimately choose observable traces of behavior (e.g., a country's current account) to operationalize measures of normative performance (e.g., human development).

Policymakers in particular are likely to conceptualize the validity of their decisions on the basis of inferences shown in Figure 5.8 (Binning & Barrett, 1989, p. 480):

5. Predictor measurements relate to criterion measurements.
6. The predictor measure is an adequate sample from the construct domain.
7. The predictor construct domain overlaps with the performance domain.
8. The criterion measure is an adequate sample from the performance domain.
9. The predictor measure is related to the performance domain.

Of these inferences, policymakers are likely to care the most about Inference 9, which links empirical measures of institutional design (e.g., constitutional texts) with latent concepts of democratic performance (e.g., substantive representation).

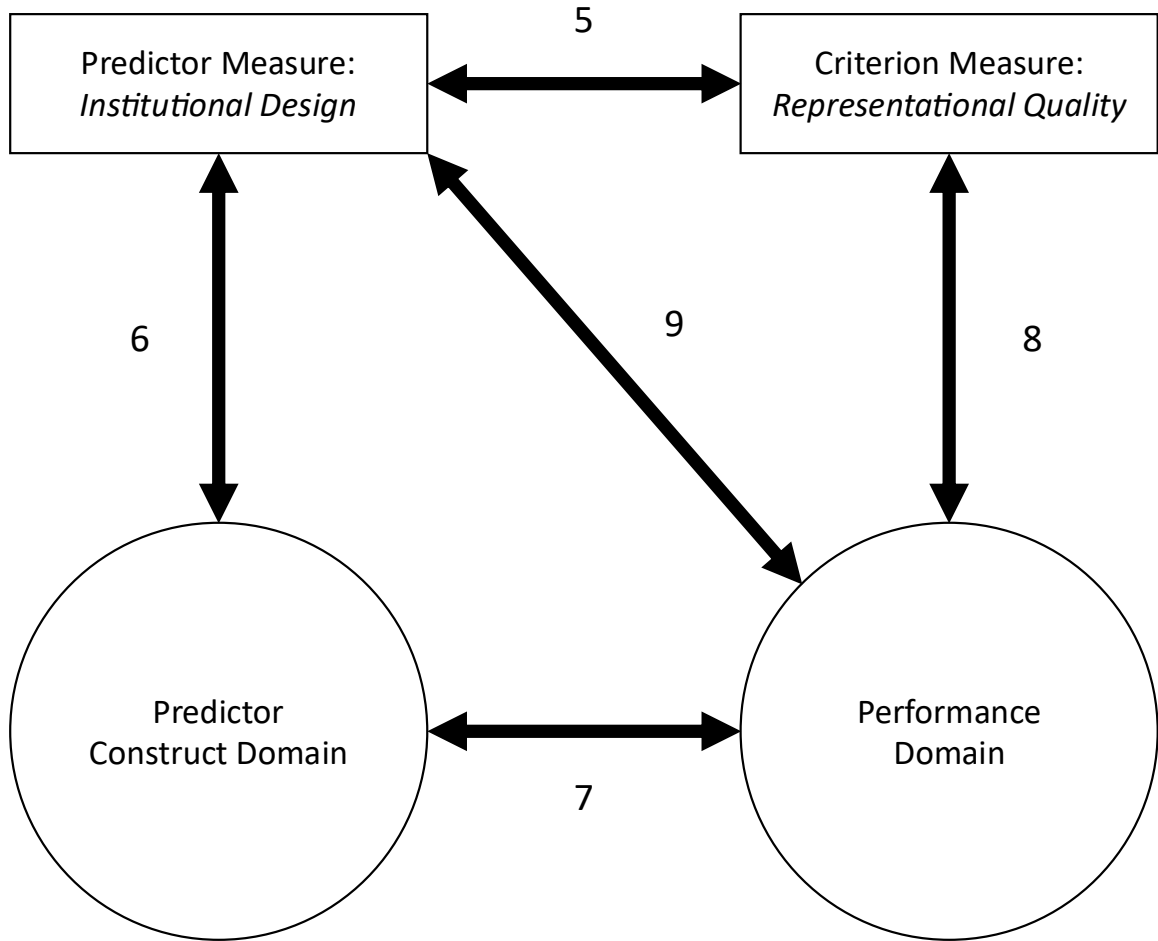


Figure 5.8: Generalization of inferences.

Importantly, this analysis reinforces the notion that democratic performance is a social and legal construction. That is, we select from the universe of behaviors and ideas a few to which we ascribe value in scientific or policy analyses (Cascio & Aguinis, 2018, p. 76), as is shown in Figure 5.9. In the context of this dissertation, the labels of *fiscal Policy Universalism* and *Policy Risk*, for example, represent research-coded interpretations of survey items deemed relevant to the identification of psychological and biological traits.

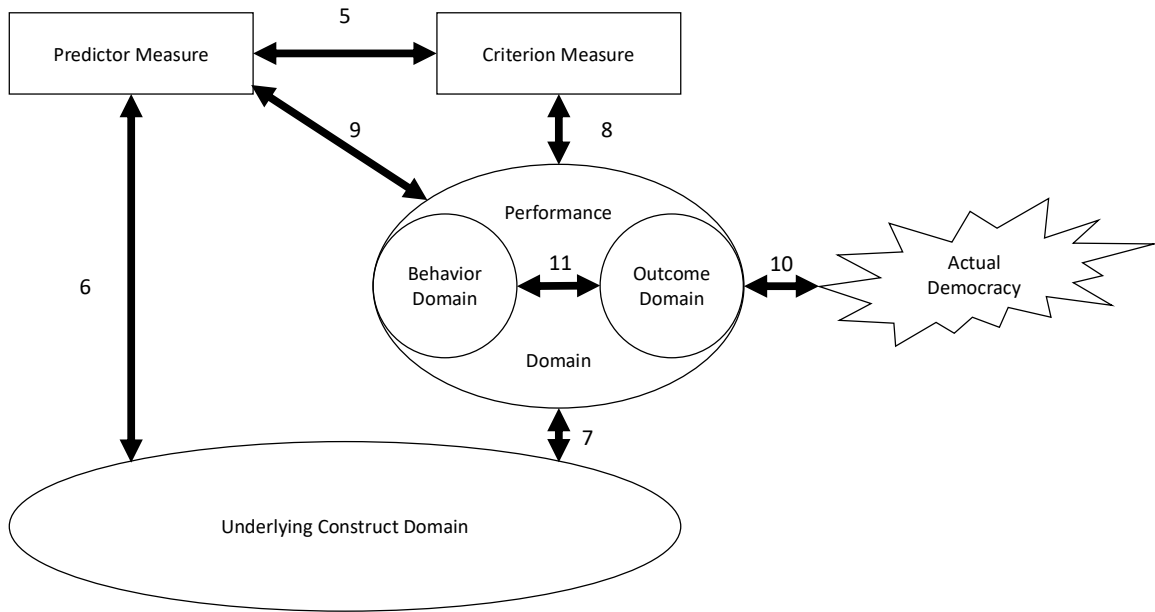


Figure 5.9: The criterion problem of democratic institutional theory.

In management (Cascio & Aguinis, 2018, p. 76), for example, “[o]utcomes (e.g., dollar volume of sales) are valued by an organization, and behaviors (e.g., selling sales) are the means to these valued ends.” Thus, a full accounting of democratic performance implies a computational psycholinguistic analysis of all behaviors relevant to the actual practice of democracy—an analytic threshold I argue can be approached with HAL. In particular, the text of legal documents (e.g., constitutions and election laws) ought to be included via HAL into future analyses of democracies and other polities in the study of democratic performance.

This is because the texts of constitutions serve as important theoretical predictors about the performance of democracy as measured by public opinion surveys. In the American context, survey respondents are best conceptualized as nested within states that have constitutions, which are in turn nested in the U.S. Constitution. The textual content

of these constitutions—the most distal and broad predictor of democratic performance—is likely to change over time, potentially influence both news articles and respondents directly.

Moreover, the effects of news articles on survey responses may vary by region. To identify true score preferences independent of context, tools like HAL must be used to quantify variation within and between media markets that shape the availability of heuristics on which respondents rely to make decisions when responding to surveys. In a general implementation, survey items may be compared with the global cooccurrence matrix for all news, legal, and other textual sources to meet increasing standards of validity beyond the minimum viable implementation demonstrated here. Thus, a fully mathematical social science may model a hypertopology analogue to language, such that $i: x \mapsto \overline{\{x\}}$, where the smaller set of survey item words is contained within the larger set of all observed words, X , such that $x \in X$ is trivially met.

The nesting of survey items or survey item responses within media markets, economic regions, or semi-sovereign states requires theoretical and methodological attention to issues of levels and units of analysis in scientific research. Even when links between concepts from different levels are adequately specified (e.g., inferences 1 – 11), it cannot be assumed that homologous models that generalize across domains of science will emerge (Rousseau, 1985). Because different scientists focus on different things, as is shown in Table 5.8, the inferences they generate may not converge across levels.

Table 5.8: Issues of multi-level and cross-level integration in science.

Level and Unit of Analysis	Relevant Domains of Science
Individual-centered <i>(More micro-level)</i>	Trait psychology and behavioral economics.
Family-centered <i>(Micro-level)</i>	Counseling psychology and vocational training.
Group-centered <i>(Meso-level)</i>	Social psychology and team management.
Organization-centered <i>(Macro-level)</i>	Industrial psychology and performance management.
State-centered <i>(More macro-level)</i>	Political psychology and political economy.

By placing survey data in a quantitative textual framework, entire surveys may be compared with the scientific communities that generate them. It may be that surveys constructed by political psychologists or political economists focused on macro-level phenomena (e.g., democratic performance) differ from surveys constructed by neuroscientists or behavioral economists focused on micro-level phenomena (e.g., compulsive gambling). As the textual data for more and more surveys and manuscripts across disciplines are quantized, gaps in measurement may be identified and effects of researcher interest on survey design controlled for to maximize the validity of inferential claims drawn from the response data.

Of final note is the of aggregation of survey data from individual-level to the level of the public (Rousseau, 1985). The Psychometric Model presented in Chapter 3 suggest that public opinion survey data, which tends to be time-series cross-sectional rather than repeated measures of individuals' preferences in a panel over time, can be meaningfully aggregated at the meso-level by income, education, ideology, partisanship, and votes to understand dynamics within the public over time in terms of the groups implied by the

categories (e.g., latent political interest groups) used to measure these variables. This integration of individual-level characteristics, through meso-level groups, to macro-level performance is the conceptual basis for the subconstituency politics theory of representation (e.g., Bishin, 2009).

Preservation of meritocracy and protection of minority groups is central to conceptualization of institutional performance of democratic republics like the United States, as is shown in Figure 5.10. In the United States, for example, the social construction of race began with the passage of the Naturalization Law of 1790, which granted citizenship on a discriminatory basis to “free white persons” only (Golash-Boza, 2016). Extension of citizenship to Black Americans did not occur until the passage of the 14th Amendment following the Civil War, while Native Americans and other groups did not win citizenship until the Indian Citizenship Act of 1924 and the Nationality Act of 1940, respectively.

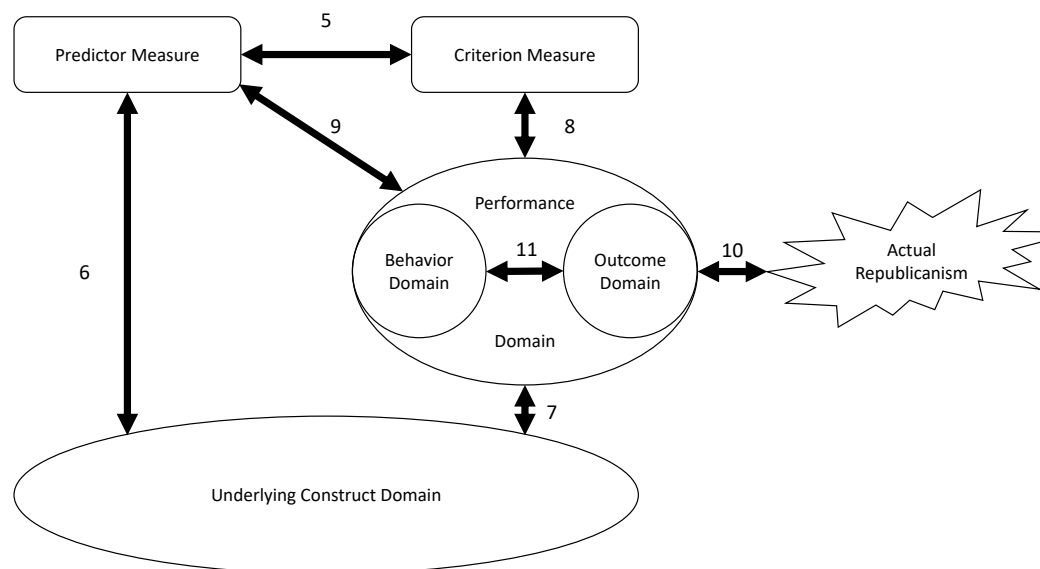


Figure 5.10: The criterion problem of republican institutional theory.

For republicans, performance criteria go beyond substantive representation (i.e., the correspondence of policy outcomes to public preference). Actual republican ideology (Dahl, 2003, p. 92 – 93) requires that constitutional arrangements:

1. maintain the democratic system;
2. protect fundamental democratic rights;
3. ensure democratic fairness among citizens;
4. encourage the formation of a democratic consensus; and
5. provide a democratic government that is effective in solving problems

Constitutional originalists (e.g., Antonin Scalia, the Federalist Society, etc.) emphasize how the model of government implied by the unamended United States Constitution is singularly effective among institutions internationally in maintaining the democratic system of the United States, Criteria 1. Thus, a conservative bias towards maintaining the status quo of American political institutions is rational because institutional innovation risks the loss of not only American democracy but democracy throughout the world. Psychologists, however, tend to pathologize this as the cognitive bias of system justification (e.g., Van der Toorn & Jost, 2014), whereby an irrational attachment to the status quo is legitimized by palliative ideological heuristics. To reconcile these perspectives, and to elaborate the republican institutional performance criteria, a theory of individual difference that can structure deliberation and translate concepts across types of people seems necessary, and is briefly elaborated on in the concluding chapter.

Chapter 6: Conclusion

This dissertation has examined the content of Americans' fiscal policy preferences (hypotheses 1 & 4) as well as the mechanisms that explain an apparent public preference for fiscal universalism over fiscal particularism, a trait preference for equal treatment (hypotheses 2 & 3). The strategic social identity theory proposed explains this trait as evolving through natural selection to maintain the genetic diversity of the population, preserving low-status groups from extinction in case their characteristics become necessary for the population to adapt changing selection pressures. The empirical evidence presented suggests partial support for the proposed theory, related hypotheses, and demonstrates robustness when extended to non-fiscal policy preferences.

In Chapter 1, examination of fiscal preferences was motivated by an apparent paradox. Americans want to help the poor, but they oppose welfare policies that help the poor. Following emerging fiscal policy preference research (Scheve & Stasavage, 2023), I proposed a trait preference for equal treatment and fiscal universalism as determinants of Americans' fiscal policy preferences.

Chapter 2 examined the challenges to studying the contents and determinants of Americans' fiscal policy preferences. American fiscal policies are complex, and Americans rely on simplified ideological heuristics to make decisions. Across surveys and ideological perspectives, items measuring fiscal policy preferences can be interpreted multiple ways, reducing the validity of inferences drawn from survey data about Americans' fiscal policy preferences.

Chapter 3 adapted the theory of planned behavior as an integrative, interdisciplinary model of fiscal policy preference formation and expression in survey measurement. This draws on work in management applying the theory as a structural and measurement model of pollution reduction preferences (Cordano & Frieze, 2000). The proposed model fit data across several surveys well and provided initial evidence for a preference among Americans for universalistic fiscal and non-fiscal policies, consistent with Hypothesis 1.

Chapter 4 presented the strategic theory of social identity to explain what Americans want and why. This chapter explained why and presented evidence that public preference for universalistic fiscal policies (Hypothesis 1) that treat people equally (Hypothesis 3) is rational from the standpoint of evolutionary theory because it preserves both biodiversity of the population and meritocracy within society. Evidence across survey experiments finds that Americans prefer universalistic fiscal policies (Hypothesis 2), although the evidence that Americans prefer universal basic incomes to other policies (Hypothesis 4) is somewhat mixed.

Chapter 5 examined the challenges to comparison of items across surveys. It demonstrated the use of the hyperspace analogue to language as a quantitative textual tool to encode information about the variability of survey item wording and framing in an objective, deterministic, and automated way that does not rely on human judgement. An apparent preference for fiscal universalism (Hypothesis 1) is robust to the inclusion of quantitative textual controls, suggesting a true-score trait preference has been identified, rather than merely recapturing heuristics Americans encounter, e.g., from the news.

Thus, this project demonstrates further support for emerging fiscal policy preference research that fiscal policy preferences are driven by a preference for equal treatment (Scheve & Stasavage, 2023) as well as explaining why such a preference may have evolved and been conserved over time. Fiscal universalism and equal treatment preserve population biodiversity and societal meritocracy as a hedge against changing selection pressures.

However, mixed support for Hypothesis 1, a preference for fiscal universalism, suggests additional theoretical development is necessary. Moreover, a perspective rooted in evolutionary theory poses conceptual challenges for republican political ideology, which predates modern social science, necessitating a reconceptualization of republican ideology in scientific terms.

A Neurodiverse Theory of Meritocracy and Democracy

A central tension between modern Republican perspectives on meritocracy, modern republican perspectives on science, and American democracy is the importance of evolution by natural selection. On the one hand, modern republicans tend to embrace variants of Social Darwinism, or the notion of survival of the fittest rooted in eugenics. On the other hand, the strategic theory of social identity suggests a trait-preference for fiscal universalism and equal treatment has been conserved over time to preserve biodiversity; these cannot both be right, as they imply disparate criteria to assess the performance of American institutions and democracy. A focus on neurodiversity may serve to resolve these tensions.

Neurodiversity refers to the emerging science of individual cognitive differences that arise from variation in brain connectivity, as well as the perspective rooted in ecological science that diversity is of intrinsic value to for the health and survival of a population. Some people, for example, think only in pictures and have no internal monologue, while others think only words and are unable to generate internal imagery. Beyond the prospective value of different perspectives on society and the world, ecological science explains that such diversity is essential for a population to maintain if it is to adapt to uncertain future selection pressures (e.g., climate change). Indeed, British intelligence considers neurodiversity to be “mission critical for protecting the country” (Government Communications Headquarters, 2021). Similarly, the RAND Corporation (Weinbaum, Khan, Thomas, & Stein, 2023, p. vi)— a non-partisan, non-profit American think-tank—finds “[f]undamental strengths that are common among the neurodivergent population can include pattern recognition, analysis, visualization, problem-solving, memory, and achieving a state of hyperfocus to complete a project—skills that can be beneficial in many fields of interest to national security.”

Future research in psychology may incorporate Keirsey’s temperament sorter (Keirsey, 1998; keirse.com) as a conceptual basis for understanding neurodiversity. For a discussion of the Keirsey temperament sorter from a psychometric perspective, see Marshall, 2020). However, a perspective rooted in neurodiversity necessitates a brief reconceptualization of republican ideology.

Reconceptualizing Republican Ideology

Recall from Chapter 1 how perspectives on economics rooted in trade theory imply differing consequences for cooperation and conflict in society. Social dominance theory explained how societal conflict is likely emerge, consistent with mercantilist and Marxist perspectives, while social identity theory explains how societal harmony can be maintained, consistent with classical liberal perspectives. This is summarized in Table 6.1.

Table 6.1: Perspectives on economics.

Economic Ideology	Societal Consequence
State-centered Mercantilism (e.g., “America first!”)	Zero-sum Conflict (States compete for supremacy.)
Individual-centered Liberalism (e.g., <i>doux commerce</i>)	Positive-sum Harmony (Competition empowers consumers.)
Group-centered Marxism (e.g., <i>authoritarian communism</i>)	Zero-sum Conflict (Groups compete for supremacy.)

In the context of the United States, a political ideology can be associated with each economic ideology, as is shown in. Institutional republicans (e.g., Dahl, 1956; Bishin, 2009) emphasize the inadequacy of voting alone to characterize democratic political systems, explaining that checks and balances are necessary for a fully-realized democratic polity to protect minority rights from tyranny of the majority. Because the United States has never had a successful fascist tyranny, American institutional republicans consider its Madisonian system to be exceptional among states.

In contrast, commercial republicans (e.g., Montesquieu, 1748; Saadia, 2016) emphasize the notion that political peace arises as a consequence of positive-sum gains from international trade that empower consumers. In the American context, this perspective has inappropriately aligned, at times, with a neoliberal ideology that

emphasizes a market fundamentalism to the exclusion of the state as a provider of public goods (e.g., education) and corrector of market imperfections (e.g., monopolies).

Neoliberalism, as an ideology, explains that people should be subordinate to the market, which contains only errors that arise from other ideologies that emphasize group identities (e.g., Marxism). Consequently, psychologists would characterize neoliberalism as a system justifying ideology used to legitimize a status quo modern liberals deem unjust (e.g., racism).

Because the United States effectively prohibits the Communist Party, political elements of Marxist ideology are mostly subsumed by social democracy and the modern liberalism of the Democratic Party, which emphasizes a particularistic welfare state to correct market imperfections (e.g., racism). Much like commercial republicanism, this perspective has inappropriately aligned with a neoliberal ideology, as internal contradictions between Marxism and social democracy filter the ideologies of candidates for political office (e.g., Schumpeter, 1942; Bishin, 2003) on the basis of their trait-like ability to reduce cognitive dissonance around these contradictions.

Table 6.2: An expanded set of ideologies.

International Economic Ideology	American Political Ideology
Family-centered Feudalism <i>(e.g., Imperial Japan)</i>	Imperial republicanism <i>Slavery is justified.</i>
State-centered Mercantilism <i>(e.g., “America first!”)</i>	Institutional republicanism <i>The Constitution prevents autocracy.</i>
Individual-centered Liberalism <i>(e.g., doux commerce)</i>	Commercial republicanism <i>Competition empowers consumers.</i>
Group-centered Marxism <i>(e.g., eschatological communism)</i>	Social democracy <i>Poverty prevents peace.</i>
Organization-centered Psychology <i>(e.g., the Academy of Management)</i>	Corporate republicanism <i>Science promotes meritocracy.</i>

I argue that the foregoing theoretical examination yields important insights for actual Americans embedded in real partisan politics. Specifically, I identify several duties that arise from a scientific analysis of American political ideology:

- **Conservative republican duty:** *Promote American institutional values and preserve human life through space industrial policy (e.g., Mike Pence).*
- **Liberal republican duty:** *Promote sustainable free trade through consumer financial and educational empowerment (e.g., Elizabeth Warren).*
- **The social democratic duty:** *Examine the science of basic income as a basis for green industrial policy (e.g., Andrew Yang).*

To the degree that conservative republicans wish to promote American institutional values (e.g., our Madisonian system) and preserve human life (e.g., from nuclear war), American space dominance is necessary. To the degree that conservative republicans wish to preserve American values and terrestrial biodiversity in the long run, a space industrial policy is necessary because the Sun will die in 4 – 5 billion years, destroying the Earth as it expands. Thus, a space industrial policy is necessary to ensure the ability of the American state to govern for future generations.

Liberal republicans, in contrast, have a duty to promote free trade through consumer financial and educational empowerment. This duty arises from American constitutional law that affords corporations the right to unlimited political speech, potentially creating imperfections in our political markets that reduce the gains consumers may otherwise accrue from positive-sum international trade.

Finally, American social democrats have a duty to examine the science of basic income as a basis for green industrial policy. This duty arises from the need to reduce political polarization, which computational modeling links to rising inequality or declining economic conditions, in order for the state to respond effectively to public concern over global warming and climate change. To the degree that basic income directly eliminates poverty and reduces inequality, it must be scientifically evaluated as an essential element of an evidence-based green industrial policy.

With the aftermath of the Trump Administration, and the ideological clarity provided by the January 6th Capitol Insurrection he incited, political conservatives in the United States appear poised to transition from a conservatism rooted in imperial republicanism, which legitimizes race-based slavery and dehumanization, to a conservatism rooted in institutional republicanism, which legitimizes American institutions as necessary and sufficient for the prevention of autocracy. At the forefront of development in American political ideology is the organization-centered psychology of management science, which emphasizes that science is our most effective tool for enhancing meritocracy.

Future Steps

The motivating question for this project, “What do Americans want?”, is it seems paradoxically more and less complicated than its simplicity belies. On the one hand, Americans want to help the poor. On the other hand, Americans want equal treatment—like the Germans and British want—and fiscal universalism.

A central barrier to understanding what Americans want is that their fiscal policy preferences are challenging to measure. Americans are understandably risk averse. They

rely on simple heuristics that can be contaminated by effects of framing when researchers attempt to measure preferences.

A variety of trait constructs have been proposed, mainly in psychology, to explain and predict fiscal policy preferences. From social meritocracy theory to social dominance theory, constructs have proliferated to the detriment of scientific utility. The psychometric model and strategic theory of social identity impose parsimony to explain a preference for fiscal universalism and equal treatment as evolving to preserve biodiversity and measuring facets of this trait preference using methods chosen to maximize the validity of inferences drawn from survey data.

Beyond survey data, the quantitative textual method of HAL provides a tool for the incorporation of news articles, legal texts, and other sources into the analysis of survey items in an objective, deterministic, and automated manner. This quantitative textual approach retains compatibility with the conservative methods of textualist originalism, while imposing strict standards on the identification of traits using survey data. Using these methods validates the foregoing: Americans prefer fiscal universalism and equal treatment, controlling for policy risk.

This chapter has provided an ideological framework to facilitate deliberation about fiscal policies from liberal republican and democratic perspectives. More generally, it points to how the diversity of human experience—neurotypes—represents a frontier in the study of economic, political, and social behavior.

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