Advances in Political Psychology

Advances in Political Psychology, Vol. 38, Suppl. 1, 2017
doi: 10.1111/pops.12392

Self-Interest Is Often a Major Determinant of Issue Attitudes

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Reviewing political opinion patterns in the 1950s, The American Voter *concluded that self-interest played a key role in the public's views on social welfare policy. Since then, however, many researchers have argued that self-interest has very little effect on issue opinions. We argue that the principal reason for this shift lies not in self-interest coming to matter less, but, instead, because some scholars—by narrowing the definition of self-interest, declaring ordinary demographic effects uninterpretable, and assuming that group interest is distinct from self-interest—essentially defined out the possibility of self-interest being a major determinant of political views. Yet even with these limiting moves, the general denial of self-interest has come to include a long and growing list of exceptions. In addition, we find that many of the specific claims grounding the general denial are problematic. Thus, we argue that self-interest remains a potent factor in the context of a number of issue opinions. Further, taking a broader view of human interests, we see self-interest effects not only in economic opinions, but also in various cultural/social domains. For example, when it comes to individuals' opinions on issues relating to meritocracy and discrimination, we find that levels of meritocratic competence are typically a key factor, along with racial, religious, and other relevant categories. Also, there are solid links among individuals' sexual lifestyles, religiosity, and views on issues such as abortion and marijuana legalization. Not only are such domain-specific relationships "major," but self-interest variables typically have more secure claims than individuals' ideology, party, and values to being unambiguous "determinants" of issue opinions.*

KEY WORDS: self-interest; group interest; issue attitudes; public opinion; demographics

Over a half-century ago, the authors of *The American Voter* reviewed evidence showing that people with less income and education had more favorable attitudes towards the government's role in social welfare (medical care, employment, housing, etc.) than did wealthier and better educated people. The authors concluded that "people presented with certain policy alternatives can do a reasonable job of selecting responses that appear to further their self-interest" (Campbell et al., 1960, p. 208). Indeed, self-interest played a far larger role than party identification in predicting individual differences in social welfare policy attitudes in their mid-twentieth-century sample. Importantly, these authors viewed self-interest not as a *competitor* of ideology, but rather as an *explanation* of it: "We have no quarrel with the view that ideological position is largely determined by self-interest" (p. 203).

Roughly half a century later, the authors of a new volume, *The American Voter Revisited*, took a strikingly different position: "The current scholarly consensus holds that self-interest is not a major determinant of issue attitudes" (Lewis-Beck et al., 2008, p. 197). Completing the reversal from the

Published by Wiley Periodicals, Inc., 350 Main Street, Malden, MA 02148, USA, 9600 Garsington Road, Oxford, OX4 2DQ, and PO Box 378 Carlton South, 3053 Victoria, Australia

original volume, they argued that the primary sources of issue attitudes include party identification, ideological position, and (perhaps) core values (p. 198).

Indeed, when it comes to the public's issue opinions, various political scientists have claimed that self-interest "ordinarily does not have much effect" (Sears & Funk, 1990, p. 267), "is surprisingly unimportant" (Kinder, 1998, p. 801), "has often proved to be weak" (Chong, Citrin, & Conley, 2001, p. 541), "rarely has much to do with citizens' political beliefs and behavior" (Lau & Heldman, 2009, p. 515), and "has had very circumscribed and limited effects" (Huddy, 2013, p. 740). This basic position has become influential outside of political science as well. Economist Bryan Caplan (2007) has argued that the antilibertarian preferences of many less educated voters are best viewed not as self-interested but as misguided attempts to achieve general societal benefits. Psychologist Jonathan Haidt (2012) has argued that political opinions do not just lack self-interest, but are actually self-sacrificing.

What accounts for this shift in the description of American voters? Did the role of self-interest remain constant while certain scholars' interpretation of data changed? Or did self-interest come to play a diminished role over the past decades?

Here we reflect on these questions, exploring the possibility that the role of self-interest in affecting people's political attitudes has been obscured. We point out that, for example, some discussions have taken the position that self-interest findings in *The American Voter* were irrelevant because neither education nor income (nor other standard demographic information) can typically be appropriate grounds for a self-interest claim (Sears & Funk, 1990; Sears, Lau, Tyler, & Allen, 1980). Similarly, some discussions not only define what counts as self-interest very narrowly, but they go further to imply that related phenomena not squarely within this narrow definition count as evidence *against* self-interest effects. The second section explores these issues in additional detail.

Based on various empirical findings, we resist the claim that self-interest ceased to play a major role over the past decades. First, there is consensus that there are numerous cases in which self-interest seems to be *a* (though not, of course, *the only*) major determinant of political attitudes. Second, the growing literature on political attitudes presents additional exceptions with some frequency. Third, when we examine some of the specific examples presented in support of the view that self-interest does not matter much (e.g., that the unemployed do not typically have more favorable views towards government assistance for the unemployed), we nonetheless find evidence that self-interest does matter. (See the third section below.)

Given all this, we think that self-interest never stopped being a major determinant of issue attitudes in the sense claimed by *The American Voter*. Further, we suggest that self-interest is a major determinant of opinions in largely unrecognized ways. Indeed, as we explain in the fourth section, rather than narrowing the conception of self-interest, our view, influenced by evolutionary thinking, proposes that people have tangible interests beyond those related to governmental economic redistribution (Weeden & Kurzban, 2014, 2016). This view understands various "cultural" and "social" issues to matter in concrete ways in people's lives.

It matters to the wealthy and the poor whether the government engages in different levels of progressive income redistribution. But this does not exhaust the list of people's tangible concerns. It matters to people with different racial and religious identities whether governmental policies and public pressures encourage or discourage bias against or in favor of people with their own racial and religious identities. It matters to individuals with different levels of human capital (e.g., education and test-taking ability) whether policies and pressures enhance or diminish the role of human capital in determining social and economic advantages. It matters to less educated natives whether policies and pressures encourage or discourage the entry and hiring of similarly educated immigrants. It matters to adventurously sexually active people whether policies and pressures place social costs on nonmarital sex or make birth control or abortion services more difficult to obtain.

As we discuss in the fifth section, these kinds of matterings are plainly visible in the various domain-specific demographic patterns of public opinion. People with current and likely future needs

for government assistance tend to be more likely to favor generous social welfare programs. People tend to oppose discrimination against people with their own characteristics, and people with high levels of meritocratic competence tend to prefer meritocracy over group-based discrimination. People with *Sex and the City* lifestyles tend to avoid religious groups (even when raised religious) and to prefer policies that minimize costly stigmatization of their lifestyles and that provide for unfettered access to birth control and abortion. Further, as we discuss in the sixth section, in addition to being "major," many of these demographic predictors have more secure claims to being genuine causal "determinants" than do symbolic predictors such as party, ideology, and (particularly) values.

Do the demographic patterns of public opinion *necessarily* imply self-interested motives? Perhaps it's just a coincidence that people tend to hold political issue positions that, if implemented, would plausibly produce particular benefits to people like themselves over people not like themselves. Maybe, for instance, people are in fact motivated to advocate positions that benefit most people most of the time, and it's just that occupying a certain social position skews one's view of how to go about achieving these widespread gains. Having said that, our view is that the most promising work in psychology places concrete and competitive social goals at the center of human motivation (Kenrick, Neuberg, & Cialdini, 2014; Shiota & Kalat, 2012), such that their appearance as major factors in motivating competing political issue positions would be satisfyingly consistent.

But is "self-interest" the best label to describe these patterns? We address this issue in more detail below, but the key point is that political issue positions aren't just symbolic or ideological or principled or personality-driven; they're also based on differently situated people reacting to the concrete consequences of competing views. The demographic patterns of the public's issue opinions, we think, are evidence of individuals responding, at least in general ways, to these concrete consequences.

We aren't saying that self-interest (or whatever we call it) is the only or even the dominant factor when it comes to the public's issue positions. Rather, we want to reverse figure and ground when it comes to the current conventional wisdom on self-interest in politics. Self-interest usually matters; the lack of a role for self-interest is the exception.

How to Make Self-Interest Disappear

The authors of *The American Voter* claimed to find self-interest effects in the relationship between socioeconomic status and social welfare attitudes, and, as we discuss below, similar patterns are still present in public opinion. Nonetheless, as we have seen above, it is often said that self-interest doesn't have much of an effect. In this section, we investigate some of the scholarship surrounding the modern understanding of self-interest.

It might seem that self-interest is likely present when poorer and less educated people favor social welfare programs. However, some approaches disallow demographic items such as income and education to be potential self-interest indicators. As Sears and Funk (1990) write:

> [O]ur indicators of self-interest have generally been proximal measures of the direct personal impact of political issues, such as tax burdens or receipt of government services. Contrary to the practice of many researchers, *we ordinarily do not regard standard demographic measures such as education, income, race, or gender as adequate indicators of self-interest*. These demographics reflect some unknown mixture of the residues of much earlier socialization and current interests, and therefore their effects cannot be readily interpreted in our terms. (p. 249, our italics)

Most commonly used predictor variables, whether demographic or not, "reflect some unknown mixture" of socialization and interests. When labor union members and African Americans tend to

support Democrats, and when wealthy White Christians tend to support Republicans—to pick just a few examples—are we justified in taking the strong position that their party identification is wholly unrelated to their interests? Similarly, it seems plausible that there is at least *some* truth to that view of the authors of *The American Voter* that self-interest plays a major role in determining ideological positions. Yet, in the view of some who minimize the role of self-interest, only demographic predictors are viewed as ambiguous enough to demand such a high level of interpretive agnosticism. Sears and colleagues (1980) discuss "symbolic" measures (such as party identification, ideology, and racial prejudice) as products of early socialization that are typically unrelated to interests: "In the world of 'symbolic politics,' one's political and personal lives exist largely isolated from one another" (p. 671). Thus, for demographic variables, the possibility that there is a non-interest-based component disqualifies them as variables that demonstrate the role of self-interest. In contrast, for party identification, ideology, and racial prejudice, the claim that they are anchored in early socialization rules them out as partially interest-based predictors.

In short, if interpretive ambiguity prevents demographic predictors such as education, income, race, and gender from grounding self-interest effects—but a weaker standard is applied to non-self-interest effects—then the appearance of self-interest effects is inherently diminished. Further, demographic predictors nonetheless appear in empirical studies underlying self-interest-minimizing claims, but they typically have played the role of controls that can deflate the significance of variables deemed plausible grounds for self-interest claims, variables that are closely related to the demographic controls but are narrower in scope. Even if the results are that the narrow self-interest predictors produce limited effects while the broader self-interest demographics produce larger effects, one can still claim that self-interest has only limited effects if one categorizes the broader demographics as uninterpretable.

In related moves, some scholars have used definitions of "self-interest" that are quite narrow. These definitions focus on short-term material or tangible interests, typically excluding longer-term material interests, social status, and group interests (e.g., Kinder, 1998; Lau & Redlawsk, 2006; Sears & Funk, 1990; Sears et al., 1980). Our view, however, is that each of these exclusions is, even if outside a narrow definition of "self-interest," likely to be closely related to self-interest.

For example, we take it that longer-term self-interest is simply a subset of self-interest. We see no transparent conceptual advantage to limiting self-interest to the short term.

With regard to social status, while some political scientists view it as intangible and thus outside the realm of self-interest (e.g., Huddy, 2013), our view is that social status is valuable in large part because of its tangible effects. Imagine, for example, a political proposal that states: The government is going to enhance African Americans' social status by saying nice things consistently about them but will not attempt to protect African Americans from discrimination in the housing or job market, disproportionate police scrutiny, and so on. We feel confident that African Americans wouldn't generally favor such a proposal.

In terms of group interests, political researchers frequently claim that self-interest is not very important in political issue opinions but that group interests are quite important (e.g., Haidt, 2012; Huddy, 2013; Kinder, 1998). However, there is substantial overlap between group interests and the individual interests of group members.

There are various senses in which one might use a term like "group interest." Converse (1964), for example, used it largely to refer to individual interests that arise by virtue of being a member of a group. He refers not only to the group interests of members of racial and religious groups, but also to the group interests of farmers, business owners, workers, and members of social classes. As such, the findings from *The American Voter* (of which Converse was an author) regarding income/education and social welfare attitudes, while described as "self-interest" in 1960, could have equivalently been described by him as "group interest" in 1964. "Group interest" in this sense is essentially "self-interest based on group memberships."

More recent scholarship, though, has often claimed a clear contrast between self-interest and group interest. For example, Huddy (2013) recently provided an extended discussion of group

identities in politics, arguing that "self-interest has had very circumscribed and limited effects [except] when government decisions or actions have large, clear, and certain effects on an individual's interests. . . . But the political effects of self-interest need to be disentangled from those of group interest, which is often more powerful politically" (pp. 740–741). However, the discussion of group interest used phrases like "economic and political interdependence," "common fate," and "shared interests." Huddy (2013) acknowledged the relevance of "material interests" but claimed that "group power" and "group status" are "symbolic interests" that are in "contrast to material interests focused on tangible economic and related concerns" (p. 752). Our view, as indicated above, is that power and status are emphatically "related concerns" to tangible, material interests. A set of interests that are shared (or common or interdependent) among individual members of a group are very difficult to distinguish from individual interests. On this formulation group interests *are* often politically important. But such observations can't then be used to say that self-interest is unimportant, given the close conceptual relationship between group interest and self-interest.

Sears and Funk (1990) attempt to distinguish group interests as "interests that affect the well-being of the individual's groups but not that of the specific individual" (p. 248). Haidt (2012) conceives of group interests as areas in which individuals sacrifice their self-interest to their groups. As a practical matter, though, it's hard to find examples that demonstrate people advocating group interests with a genuine lack of self-interest, much less with self-harm. In a paradigmatic case of group interests, for example, African Americans might be especially likely to oppose discrimination against African Americans. It strikes us as incoherent to say that such a general orientation is unrelated to most African American individuals' interests. No doubt we could find examples where some specific form of discrimination is likely to affect some African Americans more than others, and we might still find African Americans with antidiscrimination views (perhaps with a small boost for the folks currently explicitly affected). Nonetheless, we don't conclude from this that the opposition of African Americans to discrimination against African Americans belongs in a definitional category that is fundamentally distinct from self-interest.

There are further problems with the self/group distinction. Typical definitions of "self-interest" explicitly include the interests of a group, including one's family members along with one's self (e.g., Kinder, 1998; Sears & Funk, 1990). This becomes an important point when discussing individual versus group interests regarding categories that individuals are statistically likely to share with family members, such as race, region, immigrant status, class, and religion. In addition to the direct inclusion in "self-interest" of family members, there are also indirect self-interest concerns tied up in social networks (including close friends, neighbors, coworkers, etc.), in which individuals share to some degree personal benefits and harms. Here, too, there are obvious statistical overlaps between an individual's group memberships and those of others in their social networks. It becomes ever harder to cleanly distinguish self-interest from group interest when self-interest includes effects on family members as well as the indirect effects on a self from that self's social network.

Our view is that, as a practical matter, "self-interest" and "group interest" typically collapse into a notion that reflects what most people would plausibly consider to be "self-interest"—in the sense of recognizing that people often prefer policy outcomes that are more likely to benefit themselves, their family members, and their social-network partners, while also benefiting lots of other people who are similarly situated to themselves. It doesn't really matter to us whether researchers want to label some of these closely related phenomena as self-interest and others as group interest as long as these phenomena are recognized as different species in the same genus (or at least the same family).

In sum, our view is that the disappearance of self-interest was largely an illusion. It derived from adopting a definition that reduced "self-interest" to its smallest unit and then claiming that anything not unambiguously counting as a narrow self-interest effect was irrelevant to judgments regarding self-interest effects. Indeed, many ambiguous factors came to count *against* the self-interest claim. So, demographic predictors were deemed uninterpretable given that they might not be pure indicators of

self-interest, but then used as controls to dilute the coefficients of limited self-interest predictors. Further, group interest went from being a kind of self-interest to being presented as a cleanly distinguishable concept, and any effect of race or religion or other group indicators became evidence that group interests matter but self-interest does not.

In the end—if one bypasses demographics and accepts that advancing the interests of people with one's own group characteristics is fundamentally distinct from advancing one's own interests—what is left is a pretty small claim, namely, that short-term economic self-interest doesn't have much of an effect on issue attitudes. Yet, even so limited, is this claim empirically supported? This question is the topic of the next section.

Counterexamples and a Counter to Examples

The prior section reviewed some ways in which self-interest minimizers have selectively applied evidentiary standards and narrowed definitions to reduce the appearance of self-interest effects. This section reviews evidence that, nonetheless, these self-interest effects often persist.

Even in its narrow form, there are widely acknowledged empirical exceptions to the general self-interest-minimizing claim. These exceptions pertain to policy issues in which "the material benefits or harms . . . are substantial, imminent, and well publicized" (Kinder, 1998, p. 802), where "the material outcomes . . . are very clear, very large, and very imminent" (Taber, 2003, p. 448), that "have large, clear, and certain effects on an individual's interests" (Huddy, 2013, p. 741), "that offer unambiguous benefits or impose tangible costs" where "the policy being considered was clearly going to help or hurt some elements of the population more than others" (Chong, 2013, pp. 102–103). Two commonly cited examples involve taxes. Sears and Citrin (1985) found that homeowners supported a local proposal to cut property taxes more than nonhomeowners. Green and Gerken (1989) found that smokers opposed cigarette taxes more than nonsmokers.

Similar examples appear regularly. Doherty, Gerber, and Green (2006) found that "lottery winnings have a profound effect on views toward estate taxes, which touch directly on respondents' material interests" (p. 456). In "a striking example of the power of self-interest to disrupt and transform political views," Erikson and Stoker (2011) examined the political effects of randomly assigned draft lottery numbers in the Vietnam era: "Those who were . . . handed an adverse draft number tended to turn against the war and against the new draft policy's champion, President Richard Nixon . . .. In almost every comparison, lottery status outstrips preadult party identification in accounting for the political views draft-eligible men came to hold by their mid-twenties" (pp. 235–236). Looking at changes in opinions about the Affordable Care Act between 2008 and 2010, Henderson and Hillygus (2011) found that those "expressing the greatest concern about medical expenses are far less likely to join the growing opposition to universal coverage" (p. 954). Hacker, Rehm, and Schlesinger (2013) found that "[d]irect economic experiences are strongly correlated with support for risk-buffering social policies—at times rivaling partisanship and ideology as correlates" (pp. 32–33). Margalit (2013) found "compelling evidence of the strong impact of personal economic circumstances, particularly the loss of employment, on individuals' preferences on welfare spending" (p. 98). Nteta (2013) found "in line with the expectations of self-interest theory that class membership alongside a number of objective and subjective measures of self-interest are among the most consistent determinants of African American, and to a lesser extent White, opinion on restrictive immigration policies" (pp. 160–161). Owens and Pedulla (2014) found that "preferences for government redistribution do respond to changes in employment and income, supporting theories of political preference formation that emphasize the material underpinnings of political preferences" (p. 1104).

The narrow definition of "self-interest" equates it with short-term economic outcomes, yet there are numerous exceptions to the general self-interest-minimizing claim. When we make both the

narrow definition and the exceptions explicit, we end up with something like this: Short-term economic self-interest doesn't often matter in political issue opinions unless the issue in question is a short-term economic one where people recognize the short-term economic implications. This is very close to a case in which the exception swallows the rule.

In short, we agree that short-term economic self-interest tends only to apply to short-term economic issues where people recognize the relevant implications. We also think that self-interest based on having a certain religious identity is particularly relevant when it comes to issues based on religious identity in which people recognize the implications for people with their own religious identity. We further think that self-interest based on having a certain sexual and reproductive lifestyle doesn't often matter in political issue positions, unless the issue is a sexual/reproductive one where people recognize the implications for their own sexual/reproductive lifestyle. The point is that, *taken together, these kinds of statements actually imply a substantial role for self-interest in political issue opinions; it's just that the particular connections between issues and demographics are often domain-specific*.

Nonetheless, even on the narrow self-interest-minimizing claim, perhaps the exceptions are greatly outnumbered by nonexceptions. Indeed, extended discussions of the limited role of self-interest typically are supported by several specific examples of the lack of self-interest effects. But we have an empirical worry here as well: Many such claims that animate this discussion are misleading.

For example, Kinder's (1998) review of the determinants of the public's political opinions in *The Handbook of Social Psychology* has been influential among psychologists. In it, he produced a list of specific claims that carry much of the weight of the overall argument that self-interest rarely matters much in politics:

> For the self-interested citizen, then, the question is always and relentlessly, What's in it for me and my family—what's in it for me and mine now? Defined in this way, self-interest is surprisingly unimportant when it comes to predicting American public opinion. . . . Consider these examples. When faced with affirmative action, white and black Americans come to their views without calculating personal harms or benefits. The unemployed do not line up behind policies designed to alleviate economic distress. The medically indigent are no more likely to favor government health insurance than are the fully insured. Parents of children enrolled in public schools are generally no more supportive of government aid to education than are other citizens. Americans who are subject to the draft are not especially opposed to military intervention or to the escalation of conflicts already under way. Women employed outside the home do not differ from homemakers in their support for policies intended to benefit women at work. On such diverse matters as racial busing for the purpose of school desegregation, anti-drinking ordinances, mandatory college examinations, housing policy, bilingual education, compliance with laws, satisfaction with the resolution of legal disputes, gun control, and more, self-interest turns out to be quite unimportant. . . . American society is marked by huge differences in income, education, and wealth, but such differences generally do not give rise to corresponding differences in opinion. (pp. 801–802, citations omitted)

To be sure, Kinder is basing his summary on numerous published studies by many researchers. The studies are complex—and many involve the sorts of self-interest-minimizing maneuvers we discussed above—and summaries like Kinder's boil these down to rather simple claims that, if true, would indeed help make the case that self-interest is surprisingly unimportant. But are these simple claims actually true?

We used General Social Survey (GSS) data to run basic tests of many of these straightforward statements (Weeden & Kurzban, 2014, chap. 2). In most cases, our interpretation of the results

contrasts sharply with Kinder's summary. We found, for example, that 74% of the unemployed thought that it should be the government's responsibility to provide a decent standard of living for the unemployed, and 57% thought that government spending on unemployment benefits should be increased; these opinions were in marked contrast to people working full time, among whom only 46% and 27% agreed, respectively. These results echo longitudinal studies finding substantial effects of unemployment on economic policy views (Margalit, 2013; Owens & Pedulla, 2014). We therefore resist the conclusion that the "unemployed do not line up behind policies designed to alleviate economic distress."

Similarly, we found large racial differences in views on race-based workplace affirmative action. Some might say that this is a case of group interest and not self-interest, but we went further into individual circumstances. In particular, African Americans who feared losing jobs to Whites supported affirmative action more than African Americans who did not fear such losses; at the same time, Whites who feared losing jobs to African Americans opposed affirmative action more than Whites who did not fear such losses. One might call this a self-interest-laden case of group interest, or, if one prefers, a group-interest-laden case of self-interest. These analyses suggest that affirmative action views *are* related to "personal harms and benefits."

On the claim about the "medically indigent," similar to other studies (e.g., Henderson & Hillygus, 2011), we found that poorer people and those lacking medical coverage supported government help with healthcare more than richer people and those who had health coverage. Also in line with other studies (e.g., Wolpert & Gimpel, 1998), we found gun owners to be substantially more opposed to gun ownership restrictions than nonowners. In a final example, while Kinder claimed that differences in income generally do not give rise to differences in opinion, we found that when we looked at opinions relating squarely to whether the government should reduce income differences and provide for the poor, there were in fact substantial correlations with income. These findings align with a large number of studies noting important differences in policy preferences between the rich and the poor (e.g., Gilens, 2012; Hacker & Pierson, 2010).

In sum, while it is often said that self-interest is of minimal importance to issue attitudes, the case is weak. Such claims rely on a narrow definition of self-interest and on viewing what are surely closely related phenomena (like demographic effects and group interest) as irrelevant or even as evidence against self-interest. In addition, the list of exceptions is substantial, growing, and seems to cut to the heart of the narrowed definition of self-interest. And, further, when we look at self-interest-minimizing examples on their face, accepting for purposes of the exercise the narrow definition of self-interest, many of the specific supporting claims are arguably misleading.

We therefore conclude that the change that occurred from the original version of *The American Voter* to its revisited version was not due to basic changes in how Americans choose their positions. Despite efforts to make it disappear, self-interest was visible then and remains visible today. To be clear, we're not saying that self-interest is the only determinant that matters, or that it always matters, or related extreme positions. But when it comes to issues impacting short-term material positions, short-term material self-interest is often one of the major determinants of individuals' opinions.

A Wider View of Self-Interest

Having addressed the usual objections to self-interest effects, we now step back and take a wider view. What justifies equating self-interest with short-term material self-interest? Is there a plausible theory of human nature that would recommend that equation? In this section, we discuss our own view of self-interest, grounded in modern perspectives on humans.

These days, not even economists typically believe that human motives are reducible to short-term material considerations. Standard economic perspectives posit individuals that maximize their

preferences. These preferences might include getting more money in the short term, to be sure, but that by no means exhausts the list. People might also seek to gain prestige, have sex, assist their children in fulfilling their own preferences, or various other goals (Becker, 1996). But a perspective on self-interest that would be useful for purposes of large-scale empirical study cannot be one that views the advancing of self-interest as anything that helps a given individual get what they want at a given moment. While the equation of self-interest with short-term material self-interest is too restrictive, an overly individualized view of self-interest would be too loose.

In the middle ground, we have proposed a view of self-interest that has some fealty to key aspects of the narrower views of self-interest, but one that acknowledges that typical human motives extend beyond short-term monetary ones (Weeden & Kurzban, 2014, chap. 2). We agree, for example, that it's preferable to ground notions of self-interest in widely shared goals rather than overly individual ones, that it's preferable to focus on goals with tangible implications, and that an explanation of competing political views will likely be driven by goals that have competitive social implications. We also agree that short-term economic goals fit the bill—the desire for more money in the short-term is a widely shared human goal, it has tangible implications, and it's an area where people compete over opposing outcomes. Where we part company is that we do not view short-term economic advancement as the only (or even the most important) widely shared, tangible, competitive human goal.

Our own view of interests derives from our evolutionary approach, which views humans as social animals with minds designed to advance tangible, fitness-related goals (Kurzban, 2010; Petersen, 2016). These goals are genetically selfish (Dawkins, 1989)—that is, aimed at advancing the outcomes of one's self and one's relatives—and involve competitive aspects of social life that have been biologically relevant throughout human existence, including satisfying immediate physiological needs (e.g., eating and finding shelter), defending one's self and valued others, establishing social ties, gaining and maintaining social status and esteem, attracting and retaining mates, and parenting (Kenrick, Griskevicius, Neuberg, & Schaller, 2010). Further, the *social* aspects of human life include nonrelatives sharing (to various degrees) a range of costs and benefits within coalitions and social networks. This is particularly true among close friends, who often share to a degree the benefits of each other's positive outcomes and the burdens of each other's negative outcomes (DeScioli & Kurzban, 2009; DeScioli, Kurzban, Koch, & Liben-Nowell, 2011) but also involves other kinds of networks (work colleagues, friends of friends, fellow church members, and so on).

In short, we think that humans generally are motivated to advance outcomes across various evolutionarily relevant domains (including resources, social status, and mating lives) particularly among themselves, their relatives (in accordance with the degree of their relatedness), and members of their own social networks (in accordance with the closeness of the benefit-and-burden-sharing connection). While the narrow self-interest definition has focused on short-term economic matters—tracking political issues such immediate tax hikes or unemployment benefits for the currently unemployed—our evolutionary view expands the political terrain on which a tangible self-interest perspective can operate. As we explain below in the fifth section, we find interest-based demographic patterns involving not only issues of economic redistribution and provision of resources to the poor, but also issues of discrimination, meritocracy, and social status as well as issues affecting sexual and reproductive lifestyles.

So is our view about "self-interest"? In a sense, no. Just as Dawkins (1989) discussed how (ultimately) selfish genes can produce individuals who behave at times nonselfishly, our view is one of social agents designed to behave genetically selfishly but not necessarily individually selfishly. On the other hand, as we mentioned, typical definitions of "self-interest" in political science explicitly include the interests of both one's self and one's family (e.g., Kinder, 1998; Sears & Funk, 1990). So a common political science usage of "self-interest" already contains a genetic expansion of self. Does our inclusion of social network members mean it's not "self-interest"? Not really, given that we view

these considerations as a kind of indirect self-interest through shared benefits and burdens among individuals.

Or perhaps it's only "self-interest" when we're talking about economic outcomes, but something else when we're talking about areas like social status or sexual lifestyles. But we view status and sex as tangible areas. Discrimination tangibly impacts everyday life. Restrictions on abortion and birth control tangibly impact everyday life.

Thus, we have described our viewpoint as one that sees a major role for "self-interest" in political issue positions and political coalitions. We have also introduced the phrase "inclusive interests" (borrowing from the evolutionary term "inclusive fitness") as a reminder that we're talking about self-and-family interests across a range of evolutionarily salient social outcomes (Weeden & Kurzban, 2014, chap. 2).

Domain-Specific Demographic Patterns in Public Opinion

In this section, we review evidence that speaks to the role of self-interest from the perspective of inclusive interests that we sketched above. A key point across this evidence is that the links between demographics and issue opinions are often domain-specific. To the extent that one searches for the impact of real-life concerns on particular issue attitudes, one should be matching the issue with the relevant domain of demographic facts. As we review, indicators of socioeconomic status are typically relevant for economic politics but are not necessarily major predictors for social status issues or for sexual and reproductive issues. For social status issues, the major predictors typically include the relevant group membership (so, e.g., race if the issue is racial or immigration status if the issue is immigration) along with measures of meritocratic competence or human capital (e.g., education and test performance). For sexual and reproductive issues, the major predictors typically include measures of sexual and reproductive lifestyles and religiosity (which itself is closely related to lifestyles).

Economics

We've already covered some self-interest findings with regard to economic issues—income relates to views on income redistribution and government safety nets, being unemployed relates to views on unemployment benefits, experiencing economic hardships results in leftward movements on economic issues, and so on. More broadly, issues of redistribution and safety nets also relate to longer-term interests. Government safety net programs are in some ways analogous to (and sometimes plainly phrased in terms of) insurance programs. And hard-times insurance programs of this kind are not only about who is experiencing hard times today, but also about who is more likely experience hard times down the road and who has a greater need for the government to play the role of insurer because of a relative lack of nongovernmental support.

Those more likely to experience economic hard times include, of course, those with less wealth and income. However, also more likely to experience need are those with little education, minorities, women, those with young children, and so on. The likelihood of receiving nongovernmental support when hard times hit depends on access to wealthier families and social networks, well-funded religious charities, and other sources. In some ways, this reinforces the demographics of hard times generally—for example, lower-income, less educated, and minority individuals not only have higher likelihoods of experiencing hard times, but also tend on average to have less wealthy social networks. Further, the large role of White religious groups as nongovernmental charitable centers in the United States also provides people who are non-White, non-Christian, or nonheterosexual with additional reasons to have relative preferences for governmental safety nets over private safety nets for at least a couple of reasons. First, racial minorities, non-Christians, and nonheterosexuals might reasonably be

concerned about discrimination from White, Christian charities, whereas discrimination is less of a concern for governmental programs in the present day. Second, those who can more safely assume that they could find support in private networks might be less willing to pay for redundant public insurance, especially when it would primarily benefit people outside their own social networks.

In analyzing public opinion on a range of economic issues, we found patterns broadly consistent with these demographic expectations (Weeden & Kurzban, 2014, chap. 6). On views regarding government spending on the poor and healthcare, for instance, White, heterosexual Christians with higher incomes tend to hold substantially more conservative opinions than minorities and poorer Whites with young children. Indeed, across various economic issues, the most consistently predictive demographic variables were income and race. Other variables added further predictive punch to opinions on policies relating to safety nets as well: Non-Christians and nonheterosexuals were often more liberal (e.g., on poverty and healthcare), seniors were often more conservative (e.g., on education and poverty), immigrants were quite liberal on income redistribution generally but sometimes less supportive of particular governmental programs (from which many, as noncitizens, are excluded), and so on.

Of course, just from analyzing demographic patterns we can't infer that these results constitute unambiguous signs of self-interested motives. However, these demographic patterns are coherent and substantial enough to be seen as more than uninteresting "controls." In general, we view the patterns as consistent with the notion that people who tend to have a greater need for governmental support also tend to have more favorable attitudes towards governmental support.

Social Status

Social status isn't just about symbolic markers of respect. It's about power and influence, college admissions, hiring and promotion, favored business relations, voting rights, whose opinions carry more weight, the legal benefits of marriage, who is allowed to immigrate, and so on. The tangible impact of these matters is felt in the major milestones of life as well as everyday living. Similarly, while sometimes the issues involved may seem symbolic—for example, whether the Confederate flag is displayed on government buildings or whether religious material appears in courtrooms or public parks—we think these issues have obvious links to wider concerns over tangible discrimination.

While researchers have sometimes viewed group-based discrimination through the interest-based lens of realistic group conflict (e.g., Bobo, 1983), we've proposed an expanded interest-based framework (Weeden & Kurzban, 2014, chap. 5). We have two primary conceptual points in thinking through the interest-relevant implications of group-based discrimination. First, while the *harms* of discrimination are often acknowledged, we also stress that there are *benefits* to some people from discrimination. The influential writer Ta-Nehisi Coates, for example, has discussed notions of White supremacy, plunder, and reparations in making the case that not only have African Americans been harmed by racial discrimination, but also Whites have benefited at the expense of African Americans (Coates, 2014, 2015). Second, the policy competition isn't just about whether to discriminate on the basis of particular group-based features but involves an additional level of competition between regimes that allocate social advantages on the basis of group-based features and those that allocate social advantages on the basis of human-capital-based meritocratic features (primarily involving education and knowledge-based test performance). In a sense, the disagreement isn't over discrimination and nondiscrimination, broadly defined—hardly anyone takes the position that social advantages should be allocated randomly—but between human-capital-based regimes and group-based regimes (and then involves further disagreements over the particular groups to be favored or disfavored).

Combining these points, we think that antimeritocratic, barrier-imposing, group-based discrimination in the modern context does the most harm to the people who would benefit most under a meritocratic regime, namely those who are of high "merit"—well-educated, for example—and are also members of traditionally subordinate groups. By way of analogy, before Major League Baseball was

integrated, potential players who lost out the most were talented Black players who otherwise would have made a team were it not for the ban. Less talented Black players might still object to the ban, but they endure less tangible losses insofar as they would not have made a team anyway.

Symmetrically, the main beneficiaries of antimeritocratic discrimination are traditionally dominant group members with lower levels of meritocratic competence. Continuing with the MLB example, the biggest winners from a ban against non-Whites were those White players talented enough to make a team with a ban in place but not talented enough to earn a position without the ban. Or, to return to policy examples, well-educated homosexuals, racial minorities, atheists, and so on would typically find economic success so long as social advantages are human-capital-based and not based on traditional group-based distinctions. On the other hand, poorly educated White, heterosexual Christians would enjoy greater relative success under regimes that institute antimeritocratic group-based discrimination.

In a wide-ranging review of data on group-based issue attitudes, we found patterns consistent with self-interest in the modern context (Weeden & Kurzban, 2014, chap. 5). For example, consider the issue of banning people opposed to religion from teaching, having books in libraries, and giving public speeches. We found particularly strong opposition to these bans from people with no religious affiliation and middle-to-high levels of human capital (think of them like the talented Black baseball players). The strongest support for these bans came from the religiously affiliated with low levels of human capital (think of them like the marginally talented White baseball players). Similarly, immigrants were most strongly in favor of immigrant-friendly policy while those most opposed were White natives with low levels of human capital. In parallel, non-Christians with high levels of human capital were most opposed to school prayer while Christians with low levels of human capital were most supportive.

Generally speaking, in the domain of social-status fights, people tend to favor policies benefiting people like themselves. Those with high levels of human capital (e.g., education and test-taking performance) disproportionately favor meritocratic policies allocating social advantages to people with high levels of human capital. At lower levels of human capital, opinions on group-based issues tend to be based more transparently on one's own group memberships—immigrants favor immigrants and the native-born favor the native-born, African Americans favor African Americans and Whites favor Whites, non-Christians favor non-Christians and Christians favor Christians, and so on. Unless their demographics align into all-dominant categories, those lower in human capital typically hold group-based views that defy a simple left-right ideological account but nonetheless match demographic interests. So, for instance, among U.S. residents with less human capital, Christian immigrants often support barrier-imposing discrimination on the basis of religion but oppose barrier-imposing discrimination against immigrants, while many native-born individuals who are not Christian occupy the reverse positions.

Some scholars view education effects in social-status issues as not interest-based but, instead, reflecting socialization involving symbolic notions of tolerance (e.g., Sears & Funk, 1990). That is, the claim is that education makes one more tolerant with regard to members of other groups and, in parallel, oppose discrimination. Education, on this view, enlightens. (This view of education casts those with a great deal of education, such as scholars, in a particularly flattering light; with education has come virtue.) Our view of education is somewhat different. Education, we think, changes where one's interests lie with respect to minimizing group-based discrimination in favor of meritocratic competition.

We have examined further differentiating evidence on this point. When we looked at views on race-based and gender-based workplace affirmative action, we found that the role of group identities were about as one would expect, but that the role of human capital essentially flipped from its usual pattern in group-based political attitudes. That is, while African Americans and women tended to show stronger levels of support for workplace affirmative action, White men with middle-to-*high*

levels of human capital showed stronger levels of opposition (Weeden & Kurzban, 2014, chap. 5). College education doesn't seem to motivate greater tolerance and inclusivity in this case but instead motivates preferences for policies that sustain meritocratic advantages.

In sum, among those with little human capital, opinions on group-based issues tend to fall in line with one's own group-based features. Among those with high levels of human capital, attitudes tend to be consistent with support for human-capital-based allocation regimes, which can involve liberal views on questions of barrier-imposing discrimination but conservative views on workplace affirmative action. Even among those with high meritocratic competence, though, opposition to barrier-imposing discrimination is particularly solid among those implicated by the policy in question, such that, for example, non-Christians are especially likely to be liberal on issues of religious discrimination while racial minorities are especially likely to be liberal on racial issues.

Sexual and Reproductive Lifestyles

From an evolutionary point of view, sexual and reproductive lifestyles are a central area of potential conflict (Symons, 1979). The large literature addressing these issues (e.g., Buss & Schmitt, 1993; Gangestad & Simpson, 2000) draws a key distinction between long-term mating strategies (characterized by committed sexual relationships and high paternal investment in children) and short-term mating strategies (characterized by more sexual partners and low levels of paternal investment in children). Importantly, when members of a given society pursue these different strategies, conflicts can emerge. Long-term strategists might seek to minimize others' sexuality as a way to, among other things, protect their own long-term relationships from destabilizing pressures. While fights over sexual and reproductive matters are often popularly phrased as fights between men and women, empirical patterns don't bear this out (Weeden & Kurzban, 2014). Instead, based on evolutionary notions of strategic sexual conflict, we view fights over sexual and reproductive lifestyles (including issues such as the regulation of abortion and recreational drugs) as at their core fights over the regulation of sexual promiscuity that pit sexually restricted men and women against sexually unrestricted men and women (Kurzban, 2010; Kurzban, Dukes, & Weeden, 2010; Weeden, 2003; Weeden & Kurzban, 2014).

One of the major obstacles that we think has impeded seeing these issues in strategic, interest-relevant terms is the close relationship between these issues and religiosity, along with the unexamined notion that religiosity is in essence almost wholly the effect of upbringing. To clarify matters, we examined data from the National Longitudinal Survey of Youth 1997. We found that while around 40% of the sample had parents who attended church weekly when the sample members were teenagers, by their mid-20s fully three-quarters of the sample members from these high-attendance households were not themselves attending weekly (Weeden, 2015). Crucially, this tremendous decline coincided with the entry by many in their late-teens to mid-20s into unrestricted sociosexual lifestyles marked particularly by sexual activity outside marriage and relatively high levels of drinking and drug use (i.e., partying). By their mid-20s, people's lifestyle patterns were as strong a predictor of church-attendance levels in the sample as was earlier parental-attendance levels. These and related findings raise the possibility that religious service attendance in developed countries is in large part a social tool employed by high-commitment, high-fertility strategists to support their own lifestyles (Weeden, 2015; Weeden, Cohen, & Kenrick, 2008; Weeden, Kurzban, & Kenrick, 2016). Religious upbringing matters in this context, but people (especially young adults) also frequently make fairly dramatic adjustments to align religious service attendance with their own sexual and reproductive lifestyles.

Our view, based on these and other data, is that people with competing lifestyle patterns have competing interests with regard to the moralization and regulation of sexual promiscuity, abortion, recreational drugs, and related areas, as well as with regard to whether they affiliate with and promote traditional religious groups (Kurzban, 2010, chap. 10; Kurzban et al., 2010; Weeden, 2003, 2015; Weeden et al., 2008; Weeden & Kurzban, 2014, chap. 4; Weeden et al., 2016). Those who adopt

high-commitment, high-fertility sexual and reproductive lifestyles benefit when increased social costs are placed on low-commitment, low-fertility lifestyles. Those with low-commitment, low-fertility lifestyles benefit when such social costs are minimized.

To investigate these claims in detail, we used GSS data to explore issues such as the moralization of premarital sex, the availability of birth control, and the legality of pornography, abortion, and marijuana (Weeden & Kurzban, 2014, chap. 4). One of the key benefits of GSS data in this regard is the measurement of a decent array of sexual and reproductive lifestyle information, including number of sexual partners since age 18, number of children, recent frequency of going to bars, present marital and cohabitation status, and past history of divorce.

We found that there are close relationships among religious service attendance, sexual and reproductive lifestyles, and sexual and reproductive politics. Adult churchgoers tend to have fewer lifetime sex partners, less time spent at bars, less nonmarital cohabitation, more marriage, less divorce, and more children. Both church attendance and these kinds of lifestyle variables predict more conservative views across a range of lifestyle issues (Weeden & Kurzban, 2014, chap. 4). To a greater extent than the other kinds of demographics we have covered in this article, in this context the causal picture is complex, likely involving causality flowing in each direction among religious attendance, religious beliefs, sexual/reproductive morals/politics, and sexual/reproductive lifestyles (Weeden et al., 2016).

Thus, sexual and reproductive issues are an additional area with strong domain-specific demographic patterns, suggesting in this area an alignment between sexual/reproductive politics and sexual/reproductive interests. People pursuing high-commitment, high-fertility lifestyles attend religious services more frequently and have more conservative views on sexual and reproductive political and moral items. The holders of these political and moral positions seek to impose social and legal costs on low-commitment, low-fertility lifestyles, which are in strategic conflict with their own lifestyles. And the people who pursue low-commitment, low-fertility lifestyles tend to avoid religious services (even when they were raised in churchgoing households) and maintain liberal views on sexual and reproductive political and moral items. These positions seek to minimize social and legal costs that would interfere with low-commitment, low-fertility lifestyles.

As we discussed, Sears and colleagues (1980) have described the symbolic politics position as one in which "one's political and personal lives exist largely isolated from one another" (p. 671). Viewed in this way, we don't see that religiosity fits as a symbolic area. Religious service attendance is a major correlate of lifestyle issues, but people adjust their religious service attendance to a large degree to fit their personal lifestyles (Weeden et al., 2016). Even in this case, in an area that isn't closely related to direct economic concerns, there are nonetheless strong indications that tangible, personal interests are in the mix of relevant factors.

Table 1 summarizes some of the major domain-specific demographic predictors that are relevant in analyzing different issue opinions. In short, economic issues often have major relationships with income and race, social status issues often have major relationships with the specific group-based feature implicated by a given issue as well as with indicators of education- and test-based meritocratic competence, and sexual and reproductive issues often have major relationships with personal lifestyles as well as with religion and church attendance.

A "Major Determinant" Must Be Both "Major" and a "Determinant": Demographics, Party, Ideology, and Values

Our work has explored the relationship between interest-relevant demographics and particular issue opinions without "controlling" for party identification, ideology, or values. There are three primary reasons for this. First, the question in which we are interested is whether self-interest-related predictors have major domain-specific connections with issue opinions. As described above, we have

Table 1. Summary of Domain-Specific Demographics

Domains	Examples of Issues	Examples of Interest-Relevant Demographics
Economics	Government redistribution of income; government support for the poor.	Household and personal income; race.
Social Status	Discriminatory treatment on the basis of group-based features (e.g., same-sex marriage, school prayer, immigration, racial discrimination, affirmative action).	Group-based feature implicated by the specific issue (e.g., sexual orientation, religion, immigrant/native, race); meritocratic competence (e.g., education, test performance).
Sexual and Reproductive Lifestyles	Abortion; birth control; marijuana legalization; premarital sex; pornography.	Personal sexual and reproductive lifestyles (e.g., number of past sex partners, marriage, divorce, non-marital cohabitation, alcohol and drug use, number of children, sexual orientation); religion and church attendance.

found substantial evidence that they do. It does not matter to our thesis whether party identification, ideology, or values *also* have substantial connections with issue opinions. That's not a point of disagreement in this debate. The disagreement is specifically over whether self-interest is a major factor, whatever the mix of other factors.

Second, it wouldn't matter to our thesis if self-interest predictors turned out to be partially or even fully mediated by items such as party identification, ideology, or values. By way of analogy, let's say we're claiming that men tend to buy longer jeans than women do. And let's say someone disagrees with our view, claiming that, no, in fact gender is unrelated to jean length. And let's say, to prove it, they run a multiple regression showing that, when gender and height simultaneously predict jean length, there's a large and significant coefficient for height in predicting jean length but a nonsignificant coefficient for gender. Have they showed that men don't buy longer jeans than women do? Of course not. What they've shown is *why* men buy longer jeans than women do: A consequence of being male is that one is, on average, taller.

We don't view demographic measures as *direct* causes of political issue opinions. We're not even sure what that would mean in most cases. How, for example, could one's amount of income directly affect one's views on social welfare issues? There is always some longer story to be told about how, say, it matters whether one perceives one's income as higher than other people's, and what one's perceptions are of what this means for one's need for and likelihood of receiving current or future social welfare benefits, and how one might go about learning such conclusions (affected in part, no doubt, by information provided from elites or one's family or social network), and how such processes could in turn influence a range of general or specific political orientations, and so on, and so on. If it were to turn out that self-interest-related demographics substantially predict issue opinions, but that their coefficients are smaller when controlling for party, ideology, and values, have we come to learn that self-interest-related demographics never really predicted issue opinions? No. At best, we've learned something about *how* or *why* self-interest-related variables predict issue opinions—because they partially determine party, ideology, and values. Our project has been limited to identifying the self-interest-based domain-specific determinants of policy opinions, not exploring at length the various direct and indirect routes through which self-interest variables have their effects. That would be an interesting project, but we're still trying to clear the first hurdle by addressing the current confusion over whether there are substantial self-interest effects in the first place, regardless of whether they might be partially or fully mediated by a range of mid-level variables.

But now we reach our third reason for avoiding using party, ideology, and values as controls in our research, and it's a reason that requires a lot of unpacking. In short, the search for "major determinants" of political issue opinions has tended to focus mostly on "major" and insufficiently on

"determinant." The relationships between the specific issues and symbolic variables (party, ideology, and values) are declared to be indicative of causal flow from symbolic items to issues, but without secure justification. This is no trivial matter, as we discuss in the remainder of this section.

It is widely stated that correlation does not imply causation. Nonetheless, as Tufte (2006) quipped: "Correlation is not causation but it sure is a hint" (p. 5). There obviously exist examples of correlations that arise from noise or coincidence. But, equally obviously, there are many that are real. In cases in which we have high levels of confidence that a meaningful correlation really is present within a population, it is typically appropriate to take the hint and assume that causation is implied—we just don't necessarily know how the causation is working. Variable A could be a cause of Variable B. Variable B could be a cause of Variable A. Variable A and Variable B could share causal origins but have no direct effect on each other. These various causal relationships might be direct or indirect, situated in complicated causal chains, mediated or moderated by a range of additional variables. And, importantly, these things can all be happening at once with the same variables in the same sample—such as when, say, some members of a sample have left-leaning views on a particular economic issue in part because they're Democrats while other members of the same sample are Democrats in part because they have left-leaning economic views. These patterns might, in turn, be moderated by race, religiosity, education, and other factors.

Importantly, typical multiple regressions do not *reveal* causal priority but *assume* causal priority; as a result, they can produce starkly misleading results when substantial noncausal correlates are mistakenly included as predictor variables. As a demonstration, elsewhere we presented a dataset composed of some randomly generated initial variables and some variables created using the randomly generated variables, leading to a situation where "causality" is known with certainty (Weeden & Kurzban, 2014, pp. 227–235). We then ran multiple regressions involving these variables in a manner that would be typical in disciplines such as political science. When the regression reflects accurate causal assumptions—that is, when a variable is predicted using only some set of its causal variables—the regression behaves as expected, accurately showing the relative impact of the upstream variables on the downstream variable. When the causal assumptions are mistaken, however, things can go haywire. We show an example of a multiple regression in which a variable is predicted simultaneously by (1) a partial set of its actual causal variables, (2) another predictor variable that is in fact a partial *effect* of the predicted variable, and (3) a kind of sibling predictor variable (that is, a variable that shares many of the same causes as the predicted variable, but one that has no direct causal role in producing the predicted variable). This regression resulted in major coefficients for the effect and sibling of the predicted variable and diminished coefficients for the actual causal predictors included.

Multiple regressions carry underappreciated practical concerns that go beyond the usual correlation-causation warnings. When effects or siblings of the predicted variable are used as predicting variables, not only can those noncausal variables carry substantial coefficients, but they can also give the appearance of "mediating" directly causal predictors.

To make some of these concepts more concrete, imagine this hypothetical scenario. A researcher has data on a set of adult identical twin pairs and their parents that include the height of each twin, the height of their parents, and the gender of the twins. The researcher arbitrarily splits up each twin pair into Twin-1 and Twin-2. The researcher runs a multiple regression using mother height, father height, and gender to predict Twin-1 height. The result is that there are large coefficients for each predictor variable—it turns out that increased height in the Twin-1 camp is associated with taller mothers, taller fathers, and being male. Now, one could argue that these aren't actual causal predictors. For example, it's clear that much of the correlation between parental height and offspring height is not the direct effect of height on height, but the indirect effect of shared genetic sequences in producing differences in height through complicated developmental processes. So, in a sense, this is a case in which a third variable (genes) is driving a correlation between two variables on which that third variable has causal

effects (parental height and offspring height). Having said that, it's still clear enough for practical purposes: There's something about taller parents that makes their kids taller.

But now imagine that the researcher runs a second multiple regression, still predicting Twin-1 height, still including mother height, father height, and gender as predictors, but this time also including Twin-2 height as a predictor. Now what happens? In all likelihood, this model will show an enormous coefficient for Twin-2 height in predicting Twin-1 height, and, further, the coefficients for mother height, father height, and gender will be reduced substantially, probably near zero. Has the researcher thus discovered that parental height and gender never really had an effect on offspring height, or even that their causal effects are "mediated" by sibling height? Of course not.

The scope of these kinds of interpretive problems depends on the variables in question. Some of the biggest practical problems in political issue research arise when values and related attitudinal scales are used as predictors of closely related issue opinions. As Feldman (2003) has stated: "Most work on values begins with the assumption that values influence attitudes but not the reverse. At this point, there is little hard evidence to support this assumption" (p. 498). And even this statement, though laudably causally agnostic, ignores a third alternative: Values and attitudes with closely related content might be "sibling" (or even "twin") variables that have substantial shared causal influences, but they might not typically have strong causal impacts on one another.

Take, for instance, symbolic racism (or racial resentment), a prominent variable in the context of symbolic politics. Henry and Sears (2002) have claimed that symbolic racism is "highly successful in explaining Whites' racial policy preferences" (p. 277), based essentially on the correlation between the two being rather large. In this case, however, inferring what is cause, effect, or sibling is extremely difficult. The measure of "racial policy preferences" is a scale including views on race-based affirmative action, while the "symbolic racism" scale includes items such as: "Irish, Italian, Jewish, and many other minorities overcame prejudice and worked their way up. Blacks should do the same." This item is, in effect, a position on race-based affirmative action, explaining why it so strongly predicts differently worded views on race-based affirmative action. To take another example, the measure of "racial policy preferences" includes items on support for government spending on minorities, while the "symbolic racism" scale includes items such as: "Over the past few years, Blacks have gotten more economically than they deserve." In all likelihood, such items share much causal origin, but they can't usefully be viewed as having pervasive, unidirectional causal impact from one to the other. This is an extreme example, but similar problems could arise in many contexts, for example, in using a generally worded egalitarianism measure (including, say, "A fair and just nation will try to make sure that the nation's wealth is shared equally by all citizens") to predict policy views regarding the redistribution of wealth.

Further, there is some direct evidence that responses to value-related scales can indeed be influenced by specific concerns. For example, a study of Israeli Jews found that Jews of lower ethnic status provided more liberal responses to the social dominance orientation scale when thinking about higher status Jews, but their responses became more conservative when thinking about Arabs (Pratto, Sidanius, & Levin, 2006). Similarly, in Taiwan, when made to think about gender, men gave more conservative social dominance responses than women, but the various Taiwanese demographic groups didn't differ; but when made to think about demographic groups, members of Taiwan's dominant group gave more conservative social dominance responses than members of other groups, but men and women didn't differ (Huang & Liu, 2005).

Thus, we think extreme caution should be exercised when using values and similar measures as assumed causal predictors in multiple regressions on closely related policy opinions. As in our Twin-1/Twin-2 hypothetical, such cases can—even if there is no direct causality between the sibling variables—produce regression results where values carry very large coefficients and a wide range of actually causal predictors are apparently "mediated." None of this is to say that values and similar measures aren't interesting and useful for a variety of purposes. One can explore their origins using

plausibly causal variables; one can explore how they contribute to and also are affected by candidate choices, party identification, and ideological positions, and so on. But using them as multiple regression predictors of closely related policy opinions is likely to extinguish more light than it sheds.

For many interest-related and demographic variables, potential problems from mistaken causal assumptions, while not eliminated, are greatly reduced. In particular, with most demographic information we have a pretty clear sense that, if it has any kind of causal relationship with political variables, the causal flow goes from demographics to politics and not from politics to demographics. Assuming, for example, we believe that income, race, and gender have a causal relationship with economic policy attitudes, it's just not plausible that a substantial portion of this causality runs from economic policy attitudes to these demographics. Having liberal views on economic policies doesn't cause lots of rich, White men to become poor, minority women. But, of course, not all demographics are equally plainly early in the causal flow. In particular, when it comes to the relationships among sexual/reproductive lifestyles, religiosity, and sexual/reproductive politics, we believe that there is substantial causal flow in all directions (Weeden et al., 2016), and thus matters must be treated more cautiously. Nonetheless, most demographic-political relationships do not plausibly involve substantial causal flow from politics to demographics.

Finding correlations between demographics and political variables doesn't tell us necessarily how the causality is operating. There can still be spurious correlations. For example, we might find that income is correlated with views on discrimination issues, but that multiple regressions show this relationship to be mediated by human capital (e.g., education). A plausible interpretation of this pattern would be that increased education tends to produce both higher incomes and more liberal discrimination views, such that the correlation between income and discrimination views is spurious. It is in such cases that multiple regressions are most useful—in helping to sort through the direct and indirect effects of predictor variables assuming that the predictors are all causally prior to the predicted variable.

Thus, when it comes to predicting issue opinions in multiple regressions, we think that closely related values are dangerous predictors (because it's very unlikely that the bulk of the value-issue connection involves causality from values to issues) and that demographics are often relatively safe predictors (because it's usually likely that the bulk of the demographic-issue connection involves causality from demographics to issues, though there can still be spurious correlations between demographics and politics). We think that party identification and ideology are somewhere in between. There is evidence both that party and ideology can influence issue positions and that issue positions can influence party and ideology. This isn't a contradiction. Both processes can occur for different people in different situations. Further, there are solid connections these days that link demographics to party, ideology, and (as we discussed above) domain-specific issue opinions (Weeden & Kurzban, 2016). While we think it's clear that demographics are (typically) better viewed as early in the causal chain, this does not imply a lack of additional reciprocal causation among party, ideology, and issue opinions.

To the extent party and ideology on the one hand and issue opinions on the other relate to one another predominantly because of causal flow going from party and ideology to issue opinions, there would be at least two empirical effects. First, when parties change issue positions, we would mostly see people changing their issue opinions rather than changing their parties. Second, if these strong causal forces (from party and ideology) are both pushing people to have generally liberal or generally conservative issue opinions, we would see a high degree of cross-issue correspondence within the public on a left-right axis—such that, for example, the individuals who are liberal on economic issues also tend to be the same individuals who are liberal on religious issues.

On the other hand, to the extent these variables relate to one another primarily through causal flow from issue opinions to party and ideology, we would see different patterns. First, when parties change issue opinions, we would see lots of people who prioritize the particular issue changing

parties. Second, while we would see substantial correlations between issue opinions and party/ideology, we would not necessarily see high cross-correlations among distinct issue opinion domains. So, for example, pro-union folks and pro-choice folks, for different reasons, might be attracted to Democratic candidates and might be more likely to call themselves liberal. And the folks that happen to be both pro-union and pro-choice might be especially likely to do so. Yet, given the direction of the causal flow we're assuming in this case (from issue opinions to party/ideology), there's no obvious reason to think that being pro-union would strongly predict being pro-choice.

The available evidence provides a case for both sides. For party identification in the United States, many researchers have found that it is in substantial part an *effect* of individuals' preexisting issue opinions (e.g., Carmines, McIver, & Stimson, 1987; Carsey & Layman, 2006; Highton & Kam, 2011; Sniderman & Stiglitz, 2012). Some examples involve cases in which the parties have switched positions on key issues or taken new positions on previously nonpartisan topics. So, when the modern parties took opposing positions on civil rights, this resulted, over time, in the consolidation of African American support for (the now pro-civil rights) Democrats and, reciprocally, the movement of many middle-class and Southern Whites to the (anti-civil rights) Republican party (Kuziemko & Washington, 2015). Later, when the parties took opposing positions on abortion and related issues, this resulted, over time, in the movement of many White churchgoers and Catholics to the Republicans while secular Whites became more consistently Democrats (Cohn, 2013; Judis & Teixeira, 2002). When the parties took opposing positions on immigration, this resulted, over time, in the consolidation of Latino and Asian-American support for (pro-immigration) Democrats and increased White support for (anti-immigration) Republicans (Abrajano & Hajnal, 2015). (As we write this in 2016, this last trend looks to be accelerating with the Republican nomination of Donald Trump, who has attracted less educated Whites with high levels of anti-immigrant views and racial resentment.)

Having said that, certainly party preferences can and do serve as an important source of issue opinions (e.g., Bartels, 2002; Cohen, 2003). This seems particularly true in circumstances where the issue under consideration is complex or unfamiliar, where learning information regarding party support can serve as a useful short-cut to thinking though the issue more deeply. We also suspect that this is also a common occurrence when individuals support a party because of a certain set of strongly held issue opinions, and then adjust, in line with their preferred coalition, other issue opinions about which they do not have strong views. In these ways, then, party identification can play the role of cause while issue opinions play the role of effect.

With regard to cross-issue correspondence, which is predicted by a strong view of the causal role of party and ideology, political scientists have long noted the lack of substantial left-right coherence among political issue opinions (Converse, 1964). Indeed, even in our polarized era, only within limited demographic groups do issue positions align relatively consistently (Weeden & Kurzban, 2016). In particular, college-educated Whites have recently come to display rather high levels of left-right issue alignment, but this tendency remains much less robust among the rest of the population. Importantly, in some groups, such as non-White college students, individuals often have ideological labels and party preferences that match their issue positions, but with almost no tendency to bring different issue domains into left-right alignment. Here, party and ideology are apparently not acting as strong causal forces with respect to issue attitudes, at least not enough to regularly produce left-right alignment among various issues.

Even for populations that do show strong left-right alignment among their issue positions, a further question is where these ideological orientations come from in the first place. As we quoted at the outset, the authors *The American Voter* had "no quarrel with the view that ideological position is largely determined by self-interest" (Campbell et al., 1960, p. 203). We think this is still arguably the case. Looking at a middle-aged sample of Harvard graduates, for example, we found that standard demographics were major predictors of contrasting ideological and party positions (Weeden & Kurzban, 2014, chap. 7). Five key variables were being non-White, nonheterosexual,

non-Christian, female, and nonrich. For the participants who had three or more of these features, liberals and Democrats outnumbered conservatives and Republicans by an astounding 44 to 1. For those with only two of these features, it was 6.5 to 1. With only one or none of those features, it was 1.5 to 1. Importantly, as we've indicated, we think it's rather obvious that most of these demographic relationships are exceedingly unlikely to be cases in which the participants were adjusting their demographics to their ideologies and parties. Here, the demographics are surely (mostly) causes of ideological and party differences. The least secure causal inference here relates to non-Christian versus Christian religion. Perhaps a liberal ideology causes many Christians to become non-Christians, and vice versa. Having said that, we note that almost half of the non-Christians in the sample were Jewish, where it's unlikely that large numbers had converted from Christianity.

The lay of the causal land is thus quite complex. There are substantial connections these days among demographics and issue opinions, demographics and party, demographics and ideology, issue opinions and party, issue opinions and ideology, and party and ideology. We have commonsense reasons to think that (most) demographic information is early in the causal flow, influencing—either directly or indirectly, with various mediators and moderators—the downstream issues, party identifications, and ideologies. We then have empirical reasons to think that issue positions can affect party identifications and ideological self-labeling, but also that party and ideology can affect issue positions. And we have reasons to think that different social groups at different times can work differently in terms of the directions and strengths of these various causal flows.

Conclusion

If we were to stress one thing from our work on political attitudes, it would be this: Across lots of issues, there are substantial domain-specific connections between public opinion and the relevant concrete details of people's own lives. We've covered several examples in this review. When it comes to short-term economic issues, short-term economic factors are often predictive (as when the unemployed support more robust measures to benefit the unemployed, or when those experiencing economic decline move generally to the left on economic issues, or when those particularly affected by tax policies oppose efforts to increase the taxes of people like themselves). When it comes to more general views on income redistribution and government support for the poor, income itself is a major predictor, along with various other features that are predictive of differences in current and future need for governmental support. On issues implicating discrimination and meritocracy, those highest in meritocratic competence tend to support meritocratic policies and are particularly likely oppose antimeritocratic discrimination against people with their own group-based features, while those lower in meritocratic competence are more likely to support discrimination against people not like themselves while opposing discrimination against people like themselves. On issues relating to sexual and reproductive lifestyles, people tend to favor policies that align with the interests of people with their own lifestyles, and while religiosity is strongly involved as well, it's clear that religiosity itself is strongly aligned with personal lifestyles.

Of secondary importance to us is the issue of the appropriate terminology to describe the underlying relationships between demographics and issue attitudes. As we explained, we think "self-interest" is a reasonable term, though we've also used others, including our term "inclusive interests." We think "group interest" can also be a reasonable term in some circumstances, so long as there's a clear recognition that, in this context, it is challenging to distinguish group interest from self-interest.

As we explained, we view humans generally as social animals driven by concrete, competitive goals, and so we find a self-interest interpretation of the domain-specific demographic patterns in public opinion to be easily digestible. There are obviously many other people for whom a self-interest interpretation gives heartburn. We certainly acknowledge that there are a number of possible avenues

open to them. Most particularly, motives are typically very hard to study, and there are various ways to try to claim that apparently self-interested opinion patterns don't actually arise from self-interested motives. These matters are tremendously complex, and we don't claim to have settled them once and for all. But we do claim to have provided substantial evidence that undercuts a recurring objection to self-interest claims, namely, the objection that there really aren't substantial, plausibly self-interested patterns present in public opinion that need explaining in the first place. In other words, for example, one should feel free to explore alternative motivational accounts for why poorer people would often prefer more robust governmental income redistribution, but it would be misleading to state that poorer people don't, in fact, have such preferences on average. (And, as we discussed, showing that such a relationship can be mediated by a third variable doesn't necessarily show that the relationship never existed.)

In exploring motivational accounts, we think it's important to pay attention to psychological research suggesting that people are often consciously ignorant—and indeed often strategically self-deceptive—regarding their own motives (Kurzban, 2010; Weeden & Kurzban, 2014). This situation creates additional hurdles in studying self-interested political views. Asking questions about self-interest too directly can trigger self-presentational maneuvers, including self-deceptive ones, in which individuals routinely seek to encourage others to view the individual as reasonable and generous rather than self-serving. Similarly, asking questions about whether respondents think that certain policies are beneficial to society as a whole or whether they view the beneficiaries of a given policy to be deserving are likely to access self-presentational discourse strategies rather that straightforward internal motives. Thus, we think that it's generally appropriate in studying self-interested political views to piece together a more objective view of respondents' personal interests (through demographic and related measures) rather than asking them to directly characterize their motives or their views on who benefits from particular policies.

To be clear, we're not claiming that self-interest is always and everywhere the only or plainly dominant determinant of issue attitudes. Elsewhere, we have been explicit about some issue areas that don't obviously fit in an interest-based perspective. One example was our examination of Kinder's (1998) claim about working women: "Women employed outside the home do not differ from homemakers in their support for policies intended to benefit women at work" (p. 801). This was the one area from Kinder's list that we tested that seemed to be plainly accurate (Weeden & Kurzban, 2014, chap. 2). We have also discussed policies involving the environment, the military, and right-to-die as examples of areas where it seems to us that a self-interest-based perspective can advance the ball only in limited ways (Weeden & Kurzban, 2014, chap. 10).

We similarly don't deny that there are relevant factors beyond those involving concrete aspects of everyday life. While we do have substantial doubts about the value of values (given our concerns that they are likely not independent causes of closely related policy preferences, even if they can have really large correlations), we view party identification and ideology as partial causes (in addition to being partial effects) of issue opinions (Weeden & Kurzban, 2014, 2016). But we have also noted that the alignment of lots of issue positions into left-or-right bundles is both a recent phenomenon and mostly limited to college-educated Whites (Weeden & Kurzban, 2016). To be sure, this has led to demographic patterns among college-educated Whites that don't seem obviously interest-based—the key examples involve the recent rise of substantial contrasts across a very wide range of issues between Christians and non-Christians and between those with only four-year degrees and those with graduate degrees (Pew Research Center, 2016; Weeden & Kurzban, 2016). These kinds of patterns supplement, but do not supplant, the usual domain-specific interest-based demographic patterns.

While the authors of *The American Voter Revisited* stated that the "current scholarly consensus holds that self-interest is not a major determinant of issue attitudes" (Lewis-Beck et al., 2008, p. 197), our view is that self-interest (or something closely related to it) is often a major determinant. Yes, it's complicated. Yes, there are exceptions. Yes, there are other major determinants.

In fact, there remains much work to be done in unravelling when and how self-interest (or closely related factors) impact individuals' policy views. But in order to move forward with this work, researchers need to acknowledge that self-interest-minimizing claims are an inappropriate point of departure. Researchers need to recognize consistently that there are many domain-specific patterns in public opinion that are strongly suggestive of something closely related to self-interest and that many of these patterns are grounded in predictive variables that have relatively clear claims to being early in the causal flow.

ACKNOWLEDGMENTS

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