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Ideological Bias in Social Psychological Research

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"Getting it right" is the sine qua non of science (Funder et al., 2013). Science can tolerate individual mistakes and flawed theories, but only if it has reliable mechanisms for correction. Unfortunately, science is not always self-correcting (e.g., Ioannidis, 2012; MacCoun, 1998; Nickerson, 1998). Equally unfortunately, although the potential political distortion of psychology has been recognized for some time (MacCoun, 1998; Redding, 2001; Tetlock, 1994), calls for corrective action have gone largely unheeded.

This chapter reviews and critically evaluates the evidence suggesting that: (1) liberals are disproportionately represented in social psychology; (2) pernicious factors (hostile environment, discrimination) contribute to that disproportion; (3) conclusions in political social psychology are consistently biased in ways that flatter liberals. We also identify possible solutions to the problems of political bias in social psychology.

HOW MUCH ARE LIBERALS OVERREPRESENTED IN SCIENTIFIC SOCIAL PSYCHOLOGY? AND WHY CARE?

Domination by researchers with *any* narrow outlook, moral perspective, worldview, or political perspective risks creating a social psychology riddled with blind spots, biased interpretations, and distorted and unjustified claims and conclusions (Haidt, 2012; Jussim, 2012a; Prentice, 2012; Tetlock, 1994). Before

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reviewing ways in which a narrow ideological perspective could distort social psychology, it is worth considering the following question: How diverse is social psychology's ideological distribution?

Compared to What?

Americans have self-identified as about 35–40% conservative, 34–38% moderate, and 19–23% liberal for 20 years (Gallup, 2014). These numbers, however, suffer from two limitations: (1) Evidence that many people do not fully understand what it means to be liberal or conservative (Converse, 1964; Feldman & Johnston, 2013; Kinder & Sears, 1985; but see Jost, 2006 for an alternative view); and (2) These data are only for the U.S., whereas social and personality psychologists can be found all over the world. Over a quarter of the members of the Society for Personality and Social Psychology live outside of the U.S. (Inbar & Lammers, 2012). Nonetheless, the American data is useful for at least placing in some context evidence on the ideological distribution of social psychologists.

Results from the Only Survey of the Ideological Leanings of Social Psychologists

It is currently impossible to authoritatively determine the ideological distribution of social psychological scientists, for several reasons. First, there have been no published reports based on representative samples of research-active social psychologists. The only assessment of social psychology's ideological distribution is a pair of surveys conducted via the Listserv of the Society for Personality and Social Psychology (Inbar & Lammers, 2012).

Five hundred and eight of the 1939 participants in the SPSP Listserv completed Study 1; 266 completed Study 2. Except for underrepresenting undergraduates, the gender, nationality, age, and professional positions of those participating closely corresponded to the distribution in the Society for Personality and Social Psychology as a whole. Participants were asked to rate their ideology on a seven point scale (1=very liberal, 2=liberal, 3=somewhat liberal, 4=moderate, 5=somewhat conservative, 6=conservative, 7=very conservative). Responses were then collapsed into liberal (1–3), moderate (4), and conservative (5–7).

Study 1 found that an overwhelming majority of social psychologists self-identified as liberal on social issues (90.6%, with 5.5% identifying as moderates, and 3.9% as conservatives). Results were somewhat less lopsided for economic (63.2% liberal, 18.9% moderate, 17.9% conservative) and foreign policy issues (68.6% liberal, 21.1% moderate, 10.3% conservative).

Results for the ideological distribution were similar for Study 2, but there was one twist. They also asked respondents to rate their ideology "overall." Of these participants, 85.2% self-described as liberal, 8.6% as moderate, and 6.2% as conservative. Furthermore, Study 2 was consistent with the conclusion that

the ideological disproportion is increasing: whereas 10% of faculty identified as conservative, only 2% of graduate students and postdocs did so, a difference that was statistically significant, $r(234)=0.13$, $p=0.044$.[1]

These results appear to bolster the conclusion that social psychologists are overwhelmingly liberals, especially with respect to the social issues that bear on much of social psychology. Furthermore, the distribution seems to be becoming more, not less, extreme. Nonetheless, caution in interpreting their results is warranted on several grounds.

Because we are interested in how politics might distort science, it would be optimal to sample from research-active social psychologists. Certainly, SPSP is one of the main organizations for social and personality psychologists, and many research-active social psychologists are members. But being a research-active social psychologist and a participant in the SPSP Listserv are not the same thing. Are research-active social psychologists systematically underrepresented in either the Listserv or in SPSP more generally? Although a strength of the study was that its samples were indeed demographically comparable to the members of the SPSP Listserv, we know of no data that can address this issue.

Another limitation to this survey is that we cannot tell whether nonliberal social psychologists are underrepresented, which could occur in several ways. Perhaps nonliberal social psychologists are less likely to join SPSP. Or perhaps they were less likely to participate in the Listserv. Or perhaps they were less likely to complete the survey. We are aware of no data that can address these issues. Absent fully representative sampling of some target population of research active social psychologists, it is impossible know how successful this study was at capturing the ideological distribution of social psychologists (see Skitka, 2012, for similar points).

A second limitation stems from the way in which they combined respondents, including "somewhat liberal" and "somewhat conservative" together into the categories "liberal" and "conservative." Although this was, perhaps, reasonable from the standpoint of simplifying their results for presentation, it is unclear what people meant by the "somewhat" modifier. Overall, therefore, the results suggest that social psychology is heavily disproportionately left of center, but the precise extent of that disproportion, and its precise meaning, awaits clarification by additional research.

STUDIES OF PSYCHOLOGY FACULTY

One of the earliest surveys of academic psychologists found that 78% identified as Democrats, socialists, or liberals, and 22% identified as Republicans (McClintock, Spaulding, & Turner, 1965). Participants were randomly selected from the APA directory, and were excluded if they were found not to be employed in an academic institution. Secondarily, they also assessed respondents' attitudes, and found self-identified Democrats were far more liberal than self-identified Republicans. These results were consistent with research suggesting that political elites, especially those with higher education, do indeed

understand that Democrats are generally more liberal than Republicans (something both Converse, 1964, and Jost, 2006, would agree on).

More recent research has suggested that the disproportion of Democrats to Republicans in psychology has been increasing over time. Although the ratio (D:R) was about 3.5:1 in the McClintock et al. (1965) study, it has averaged about 10 to 1 in more recent surveys (Gross & Simmons, 2007; Klein & Stern, 2008; Rothman & Lichter, 2008). Of course, these are surveys of *psychology* faculty, not social psychology faculty. Nonetheless, the evidence of increasing ideological homogeneity among psychologists is consistent with Inbar and Lammer's (2012) results showing greater ideological homogeneity among younger social psychologists.

Conclusions Regarding the Ideological Distribution of Social Psychologists

Data fall short of being definitive about the degree of ideological homogeneity within social psychology because no surveys have been based on representative samples of social psychologists, and because the studies that have drawn such samples have focused on psychologists generally. Nonetheless, despite its imperfections, the evidence consistently points in the same direction (even if identifying population percentages may be elusive): Social psychologists seem to be disproportionately left-wing in their ideological beliefs, and this disproportion appears to be increasing. What are the causes and consequences of this disproportion?

PERNICIOUS SOURCES OF IDEOLOGICAL HOMOGENEITY IN SOCIAL PSYCHOLOGY

Many factors can contribute to a disproportion of ideologically left-wing social psychologists. Some may be relatively innocent. For example, people on the left may be more attracted than those on the right to careers in social psychology (see Duarte, Crawford, Stern, Haidt, Jussim, & Tetlock, 2014, for a review). This pattern is consistent with the conclusions reached by Vallacher's (Chapter 13, this volume) dynamical modeling approach. Even when group members initially hold a wide diversity of viewpoints, over time, most members converge on a single viewpoint.

It is also possible, however, that less innocent processes also play a role. Such processes are discussed next.

Political Prejudice in General

Prejudice and intolerance have long been considered the province of the political right (e.g., Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950; Duckitt, 2001; Lindner & Nosek, 2009). Social psychologists have suspected both the

existence of a personality type associated with generalized prejudice toward a variety of social groups (Akrami, Ekehammar, & Bergh, 2011), and that this personality type is associated with political conservatism (Roets & van Hiel, 2011). Aspects of right-wing political ideologies (i.e., right-wing authoritarianism and social dominance orientation) correlate with many prejudices (Sibley & Duckitt, 2008). This body of evidence has led to the conclusion that there is a "prejudice gap" (Chambers, Schlenker, & Collisson, 2013), such that conservatives are more prejudiced than liberals.

More recently, however, theory and new evidence have called this "prejudice gap" into question on several grounds. First, liberals and conservatives both tend to exaggerate their differences, but this tendency is *more* pronounced among liberals (Graham, Nosek, & Haidt, 2013) and among those who care more deeply about the underlying political issues (e.g., Chambers, Baron, & Inman, 2006). If liberals exaggerate their differences with conservatives, especially on the things liberals care most about, it would be unsurprising to discover that liberals are hostile to conservatives.

This seems to be the case and goes a long way toward explaining why: (1) recent research shows liberals are just as prejudiced as conservatives, even though (2) the bulk of empirical research in social psychology has shown that conservatives are more prejudiced. How can both of these claims be true? Because the groups typically considered as targets of prejudice in extant research programs are disproportionately left-wing groups (e.g., feminists, ethnic minorities, sexual minorities; see Chambers et al., 2013; Crawford & Pilanski, 2013 for further description of these arguments). Thus, target group has been confounded with ideology – the field has, until recently, disproportionately investigated prejudice against left-wing target groups. This raises at least two general possibilities: (1) the conventional wisdom that conservatives are more prejudiced than liberals would remain intact when right-wing targets were studied; or (2) liberals would be about as prejudiced against right-wing targets as conservatives are against left-wing targets.

Three independently-working research groups have demonstrated that the weight of the evidence is more consistent with the second possibility. Summarizing these and other studies with similar results, Brandt, Reyna, Chambers, Crawford, and Wetherell (2014) put forward the *ideological conflict hypothesis* (ICH), which argues very simply that people across the political spectrum are prejudiced against ideologically dissimilar targets. The ICH has been supported on the basis of research designs that include a more ideologically diverse array of target groups, and across nationally representative as well as student and community samples. The relationship between conservatism and prejudice is not positive and linear (i.e., more conservatism does not always equal more prejudice). Instead, conservatives *and* liberals are more prejudiced against (Chambers et al., 2013), more politically intolerant toward (Crawford & Pilanski, 2013), and more willing to discriminate against (Wetherell, Brandt, & Reyna, 2013) ideologically dissimilar groups than ideologically similar groups. Thus, inconsistent with the "prejudice gap," this research demonstrates a great deal of ideological symmetry in political prejudice and intolerance.

Importantly, the ICH research also demonstrates ideological symmetry in prejudice against social groups as well as political groups. For example, compared to liberals, conservatives are more intolerant of or prejudiced against Democrats, liberals, and pro-choice activists, but also against atheists and people on welfare. Likewise, compared to conservatives, liberals are more intolerant of or prejudiced against Republicans, conservatives, and pro-life activists, but also against evangelical Christians and rich people (e.g., Chambers et al., 2013; Crawford, Wance, Brandt, Chambers, Inbar, and Motyl, 2014).

Indeed, Chambers et al. (2013) directly compared the ICH and prejudice gap hypotheses by having liberals and conservatives evaluate liberal and conservative Black and White targets. Consistent with the ICH, conservatives liked conservative targets regardless of race and liberals liked liberal targets regardless of race. Even more important, conservatives disliked Black liberals about as much as liberals disliked Black conservatives, thereby disconfirming the prejudice gap hypothesis. Furthermore, target ideology completely explained (mediated) the relationship between ideology and liking. Race had no effect after controlling for ideology. These results suggest that the typical "prejudice gap" finding regarding social groups, such as ethnic minorities, is at least sometimes explained by ideological dissimilarity.

These findings are consistent with recent evidence that liberal and conservative prejudice against certain social groups (e.g., evangelical Christians and atheists, respectively) is driven by perceived ideological dissimilarity (Crawford et al., 2014). Furthermore, political intolerance and prejudice occurs because ideologically dissimilar target groups are experienced as threatening in a variety of ways (Crawford, 2014; Crawford et al., 2014; Crawford & Pilanski, 2013). These results are doubly important with respect to the main ideas of the present chapter. First, they foreshadow our later section on political distortion within social psychology: Why has social psychology labored under the erroneous conclusion that conservatives are inherently more prejudiced than liberals for so long?

Although we cannot know for sure, one possibility is that it did not occur to the (most likely, overwhelmingly liberal) researchers working on prejudice that they were primarily studying prejudice against liberal groups (see Haidt, 2012 for a discussion of ideologically-induced blind spots; see Jussim, 2012b for examples applied to intergroup relations). Or, perhaps, most liberal researchers just do not consider prejudice against conservative targets to be an interesting or important phenomenon.

There is, however, a second reason such results are important with respect to the present chapter. These results have important implications for how we understand social psychologists' capacity for political prejudice, and how it might influence the decisions of scientists. Given the strength and replicability of the ICH findings, there is reason to suspect that social and personality psychologists are not immune to such psychological processes. Indeed, there is a growing literature indicating that such processes do indeed occur among social psychologists.

Political Prejudice in Social Psychology

Although political prejudice is generally symmetrical (Brandt et al., 2014), the rest of this chapter largely ignores the potential for conservative prejudice because there seem to be so few conservatives in social psychology. If there is political prejudice in social psychology, the seemingly heavy disproportion of liberals means that such prejudice is likely to manifest primarily as prejudice against conservatives. Are liberal social psychologists prejudiced against conservative colleagues and ideas? Some certainly are, though the prevalence of such attitudes is unclear. Inbar and Lammers (2012, Study 1) asked their respondents whether they believed there was a hostile climate in social psychology for researchers holding their political beliefs. Liberals said "No," and conservatives said "Yes" (the correlation between ideology and perceived hostile climate was 0.50). Furthermore, the liberal social psychologists in their survey were largely oblivious to the hostile experiences of nonliberals. Respondents indicated whether they thought there was a hostile climate directed toward conservatives. Again, liberals mostly said "No" and conservatives said "Yes" (correlation between ideology and perceptions of hostile climate directed towards conservatives was 0.28).

Have liberal social psychologists actually created a climate hostile to non-liberal colleagues? To address this question, Inbar and Lammers (2012, Study 2) asked their social psychological respondents how reluctant they would be to invite a conservative colleague to participate in a symposium, whether they would be reluctant to accept papers or fund grants taking a conservative perspective, when choosing between equally qualified candidates, they would be inclined to select the more liberal one over the more conservative one.

The results were eye-opening. Any response above 1 (not at all) on the 7-point scale represents *some* stated willingness to discriminate against conservative colleagues. The proportion of liberal social psychology faculty in their survey declaring at least some willingness to discriminate against conservatives in symposia invitations, grant funding, publication acceptance, and hiring were, respectively, 56%, 78%, 75%, and 78%. This standard of treating *any* response other than (1) *not at all* is, of course, very stringent, and it is possible that some respondents chose responses above 1 for nonsubstantive reasons (e.g., avoiding scale extremes, not wanting to give the same response to each item, etc.). Nonetheless, even if we used scores at or above 4 (the scale midpoint), which, we would argue, is a very benevolent standard, the levels of endorsed discrimination would still be 27%, 21%, 15%, and 43%, respectively. Our view is that, no matter how these data are viewed, they reflect substantial endorsement of discrimination against conservatives.

Because only 14 conservative social psychology faculty members participated in the survey, any results regarding their responses must be taken with extreme caution. Despite the small number of conservatives, the correlations between ideology and willingness to discriminate were substantial and significant for grant funding ($r = -0.33$), paper publication ($r = -0.33$), and hiring

(r = -0.40, all ps < 0.001). The correlation for the symposium invitation (r = -0.13) was not significant (p = 0.152).

Although Inbar and Lammers (2012) did not set out to test the ICH, their results provide evidence that one of its predictions *does* apply to social psychologists. Specifically, there was clear evidence of liberal prejudice against conservative colleagues in social psychology. Whether these results represent the appalling levels of willingness to engage in political discrimination that it seems, however, is unclear. The study has sufficient limitations to preclude general statements about the levels of any attitude or belief among research active social psychologists.

THE POLITICAL DISTORTION OF SOCIAL PSYCHOLOGICAL SCIENCE

We next consider whether political prejudice might manifest, in part, by leading social psychological science to reach unjustified conclusions. The evidence reviewed thus far raises the possibility that many social psychologists may be hostile not just to conservative individuals, but also to *ideas, studies, and results* that seem to contest liberal narratives or advance conservative ones. If this is the case *even when those ideas, studies, and results are of equal or greater quality* (internal logic, empirical evidence, sound methodology, etc.) than ideas that advance liberal narratives, some common claims in social psychology may not be justified.

Theoretical Bases for Predicting that Political Bias Could Distort Social Psychology

Confirmation bias/myside bias/motivated reasoning in general. A family of related terms has grown around a set of similar phenomena, all of which capture the phenomena of people privileging information that comports well with their preexisting beliefs, preferences, attitudes, and morals (e.g., Nickerson, 1998). Myside bias occurs when people evaluate evidence or test hypotheses in ways biased toward supporting their own attitudes (Stanovich, West, & Toplak, 2013). Motivated reasoning refers to the general phenomena whereby people often seek out, interpret, and evaluate evidence in ways that are partial to their preexisting views (see Kunda, 1990, for a review).

People easily accept evidence consistent with beliefs while critically evaluating evidence challenging their views (Ditto & Lopez, 1992; Edwards & Smith, 1996; Klaczynski, 2000; Klaczynski & Gordon, 1996; Lord, Ross, & Lepper, 1979). When presented with information challenging their views, people experience negative arousal, which induces effortful processing aimed at disconfirming the evidence (Jacks & Devine, 2000; Munro & Ditto, 1997; Munro, Ditto, Lockhart, Fagerlin, Gready, & Peterson, 2002; Zuwerink & Devine, 1996). People are largely unaware of the fact that their reasoning is emotionally driven and biased because the post hoc rationalization processes provide the illusion of objectivity (Haidt, 2001; Koehler, 1993; Nickerson, 1998).

The creation of majoritarian political/theoretical norms. Processes both innocent and malicious can create pressures that could distort scientific conclusions. If ideology influences theorizing, then a mere numerical domination by liberals could lead the scientific "air" to be disproportionately filled with theoretical ideas focusing on topics and explanations interesting and appealing to liberals. These ideas may then become current, easily accessible to scientists, and often provide both avenues for new research and ready-made explanations for many phenomena. They can become default explanations entrenched in the field's "distilled wisdom," and, as such, alternative explanations less flattering to liberals may face considerable resistance gaining access to publication and funding.

Thus some scientific conclusions may seem to validate liberal perspectives, not because they provide the best theoretical accounts for data, but because liberal-enhancing theoretical narratives are readily accessible and entrenched. Science is not necessarily self-correcting (Ioannidis, 2012), probably at least in part because of phenomena described in Fiedler, Hofferbert, Woellert, Kruger, and Koch (Chapter 12, this volume). They report data showing that groups often have difficulty reaching optimal decisions even when large amounts of information are available, if that information is subject to bias. As they put it (pp. 000–000), "Pooling biased information samples may worsen rather than improve the validity of decision." This raises the possibility that systematic biases in social psychological data may be particularly difficult to recognize, especially if political blinders render few members in the field able to generate superior alternative perspectives and explanations. Even if they are able, many may be unwilling to do so recognizing that they may face a particularly difficult uphill battle (obtaining funding, persuading reviewers and editors to publish) contesting an entrenched view.

And those are the relatively innocent processes. Prentice (2012, pp. 516–517) recently succinctly summarized some of the less innocent implications for the conduct of social psychological science of decades of social psychological research on conformity and social norms:

> ideological homogeneity alone is enough to produce strong liberal norms, which in turn give rise to … felt pressures to conform to liberal views (Festinger, Schachter, & Back, 1950); a reluctance to express nonliberal views (Miller & Morrison, 2009); an assumption that liberal views are even more prevalent and extreme than they are (Prentice & Miller, 1996); a tendency to explain the field's liberal bias in terms of the properties of conservatives, not liberals, that produce it (Hegarty & Pratto, 2001; Miller, Taylor, & Buck, 1990); and, yes, an inclination to derogate and punish PSPs [personality and social psychologists] who express conservative views (Schachter, 1951).

Ideologically Motivated Reasoning among Scientists?

Prominent researchers have recognized the vulnerability of scientists to various forms of confirmation bias, including political ones (e.g., Eagly, 1995; Lilienfeld, 2010). Several lines of research have concluded that most published findings

are false, and most published effect sizes are inflated, in large part because of a whole range of confirmation biases (e.g., Fiedler, 2011; Ioannidis, 2005, 2012; Vul, Harris, Winkielman, & Pashler, 2009). We know of only one study to directly test this among social psychology faculty.

One way to assess political bias is to conduct an experimental audit study, in which researchers fabricate studies for evaluation by peers. In such studies, everything about the fabricated study is held constant, except one factor (such as the hypotheses or results), which can be framed as supporting liberal or conservative worldviews.

We are aware of only one audit study of political bias in social psychology. Articles purporting to demonstrate either that anti-war activist college students were psychologically healthier (liberal-enhancing) or less healthy (liberal-contesting) than their nonactivist peers were submitted to over 300 psychological reviewers (Abramowitz, Gomes, & Abramowitz, 1975). Except for the result, all aspects of the papers were otherwise identical. The reviewers were designated as more liberal or less liberal based on a known-groups technique. The reviewers assumed to be more liberal were strongly affiliated with the Society for the Psychological Study of Social Issues (SPSSI; as reviewers, editors, contributors or fellows); the reviewers assumed to be less liberal were not associated with SPSSI in any of these ways, but were active in similar ways (reviewer, editor, contributor, fellow) of APA Division 8 (Personality and Social Psychology).

Results confirmed the political bias hypotheses. The more liberal reviewers evaluated the manuscript finding that activists were mentally healthier more positively than the manuscript finding they were less healthy. The pattern was weaker but in the opposite direction for the less liberal reviewers.

The most obvious weakness of this method is its indirect means of identifying researcher ideology. Nonetheless, given SPSSI's commitment to left-wing social activism (e.g., Unger, 2011), it seems likely that there was at least some difference between the strength of liberalism of the two groups. That even a weak ideology predictor produced such an effect is, in fact, rather striking and raises the possibility that ideological biases might often be considerably more powerful than Abramowitz et al.'s (1975) results suggest. However, the study is about 40 years old, and there have been, as far as we know, no attempts at replication. Whether such a pattern would still hold today is a matter of speculation until the scientific evidence is produced.

The Potentially Invidious Creep of Ideological Bias: Three Risk Factors, Examples, and Remedies

Research on confirmation bias, myside bias, the ideological conflict hypothesis, the Abramowitz et al. (1975) audit study, and Inbar and Lammers (2012) survey all point in the same direction: That political distortion of social psychology has likely occurred in the past, and is probably continuing today. Vallacher's (Chapter 13, this volume) dynamic modeling approach also finds results consistent with the conclusion that social influence processes often lead to a view

of reality shared by most members in a group, and the attempted suppression of minority views. Such suppression, we argue, is as likely to undermine scientific validity as it is to undermine the types of democratic processes Vallacher discussed. Although such effects can take place in many ways, we next review three specific sources of distortion, provide a concrete example of each, and offer solutions.

Risk Point One: Double standards.   One of the more obvious ways in which bias might be observed is through double standards. Double standards can manifest in many ways. The Abramowitz et al. (1975) audit study shows researchers privileging liberal-enhancing findings over liberal-contesting findings obtained from research of equal quality.

Another manifestation of double standards is interpreting a specific pattern of results as demonstrating something bad about conservatives, *but interpreting identical patterns of results among liberals as demonstrating something good about liberals*. This has been exactly what has occurred within social psychology. Regardless of whether research has found that conservatives or liberals hold more double standards, the result has been interpreted as evidence of conservative rigidity (in other words, social psychologists have held a double standard regarding the meaning of results demonstrating double standards!).

Altemeyer (1988, 1996, 1998) suggested that people high in right-wing authoritarianism (RWA) are more likely to commit double standards in social and political judgments than people low in RWA. For example, Altemeyer (1996) found that highs were more likely to support mandatory Christian prayer in Western public schools than mandatory Islamic prayer in Middle Eastern schools, whereas no biases emerged among lows. Altemeyer (1996) interpreted these results as consistent with the rigidity-of-the-right hypothesis (Tetlock, 1983), which holds that conservatives are more rigid, dogmatic, and intolerant of ambiguity than liberals. He thus concluded that people high in RWA are hypocritical and rigid, and people low in RWA are consistent and fair-minded. Others have relied on this evidence to make similar arguments (e.g., Peterson, Duncan, & Pang, 2002).

Lindner and Nosek (2009) recently interpreted *a diametrically opposite pattern as also reflecting rigidity among conservatives*. They found that liberals were more politically intolerant of an anti-Arab speaker than of an anti-American speaker, whereas conservatives expressed no bias against one target over another. In other words, *liberals* expressed a double standard that conservatives did not. Despite results starkly inconsistent with Altemeyer's (1996) conclusions, Lindner and Nosek (2009) interpreted their own findings as *also* consistent with the rigidity-of-the-right hypothesis, citing conservatives' greater "consistency" in their intolerance judgments.

Conservatives have thus been damned if they do, and damned if they don't. If they express bias, they are rigid (Altemeyer, 1988, 1996, 1998; Peterson et al., 2002), and if they do not express bias, they are also rigid (Lindner & Nosek, 2009). These conclusions about conservatives' supposed rigidity are logically incoherent. We suggest that these conclusions provide at least as much insight

into social psychologists' desire to conclude that conservatives are rigid as they do about conservatives' actual rigidity.

Avoiding double standards.   Researchers should articulate a priori criteria for reaching conclusions about the psychological characteristics of liberals and conservatives. Prior research should be interpreted in the context of such criteria. For example, logical incoherence could have been avoided had Lindner and Nosek (2009) declared, "Altemeyer misinterpreted his own data. The lack of bias on the part of liberals in his data shows that liberals were more rigid." Reasonable people could then discuss whether bias or lack of bias reflects more rigidity, but all would be precluded from declaring conservatives rigid *no matter what their responses*.

Risk Point 2: Mischaracterizing the traits and attributes of liberals and conservatives.   With Lindner and Nosek (2009) as an exception, there has been widespread adoption of the claim that conservatives hold more double standards than do liberals (Altemeyer, 1996, 1998; Hing, Bobocel, Zanna, & McBride, 2007; Peterson et al., 2002). This could be the case because: (1) the evidence is so overwhelming that it would be obdurate to believe otherwise (Gould's 1981 definition of "scientific fact"), or (2) the conclusion so flatters liberals and denigrates conservatives that it was not subjected to the type of skeptical scrutiny necessary to reach a different and more well-justified conclusion.

Recent evidence has provided considerable support for the latter explanation. The ideologically objectionable premise model (IOPM; Crawford, 2012) posits that biases in political judgment will emerge on both the left and right, but only when the judgment premise is acceptable to the perceiver. Objectionable premises short-circuit biases that might typically emerge.

For example, Crawford (2012) argued that for people low in RWA who value individual freedom and autonomy, mandatory school prayer is an objectionable premise. Therefore, the objectionable nature of mandating prayer in schools leads to strong opposition to mandating prayer for *any group*, thereby short-circuiting any biases in favor of one target group over the other. However, for people high in RWA who value conformity to traditional morals and values, mandatory school prayer is an acceptable premise. Such conditions should then allow them to more fully consider the judgment, and ultimately favor Christian over Muslim mandatory prayer. Crawford (2012, Study 1), however, reasoned that voluntary prayer would make the premise more acceptable to people low in RWA. Reasoning further that liberals favor low status over high status groups, the IOPM predicted the emergence of double standards among those low in RWA favoring a low status group (Muslims) over a high status group (Christians). In line with the IOPM, results showed that whereas people high in RWA were biased in favor of Christian over Muslim voluntary prayer, people low in RWA were biased in favor of Muslim over Christian voluntary prayer.

Another study (Crawford, 2012, Study 2) tested the predictions that double standards would emerge primarily among liberals when a premise would be objectionable only to conservatives. Crawford reasoned that criticizing authority

figures should be objectionable to those high in RWA, so that there should be little difference in their willingness to punish generals who criticize a sitting president, regardless of whether that president was Democrat or Republican. In contrast, liberals do not object to criticizing authority figures, so should be more willing to punish a general criticizing a Democratic than Republican president. Not only was this precisely the pattern obtained in Crawford (2012, Study 2), results from seven unique scenarios consistently support the IOPM's predictions (see Crawford, 2012; Crawford & Xhambazi, 2013). Thus, the emergence of biases in political judgment appears to be determined not by fundamental psychological differences between the left and right in rigidity or compartmentalization (as per Altemeyer), but, in large part, by the manner in which social psychologists *search for* evidence of such biases.

Fairly characterizing liberals' and conservatives' psychological characteristics.   The simplest recommendation is to remove pejorative, judgmental, "snarl" terms from descriptions of *people*, or to at least use equally flattering or unflattering terms for liberals and conservatives. If we have "rigid" conservatives, then perhaps we have "indecisive" liberals. Or, better yet, we might describe conservatives as less open to changing their minds on some issues whereas liberals could be described as more open to changing their minds. Another, even stronger recommendation is to consider whether one is standing in a glass house, preparing to throw a stone — is it *possible* that your ingroup displays the same types of behaviors as your outgroup? Have you sought for evidence of this possibility with the same enthusiasm as you have sought for evidence of bad behavior on the part of your outgroup? A heavy dose of Popper in our hypothesis testing – attempts to *disprove* our pet hypotheses – could go a long way to improving the validity of social psychological conclusions about the traits of liberals and conservatives.

Risk Point 3: Liberal values and assumptions of unestablished (or even unestablishable) scientific validity become embedded into theory and method.   Political values can become embedded into research questions such that constructs become unobservable and unmeasureable, and thus invalidate attempts at hypothesis testing (Sniderman & Tetlock, 1986; Tetlock, 1994; Tetlock & Mitchell, 1993). Embedded values bias occurs when values, opinions, and ideologies are treated as objective truth, and observed deviation from that "truth" is treated as error.

One example of this is a paper that sought to explain the tendency towards the "denial of environmental realities" using system justification theory (Feygina, Jost, & Goldsmith, 2010). Four constructs from that paper are listed below, with illustrative items in parentheses:

> Construct 1: Denial of the possibility of an ecological crisis ("If things continue on their present course, we will soon experience a major environmental catastrophe," reverse scored.)
> Construct 2: Denial of limits to growth ("The earth has plenty of natural resources if we just learn how to develop them.")

Construct 3: Denial of the need to abide by the constraints of nature ("Humans will eventually learn enough about how nature works to be able to control it.")

Construct 4: Denial of the danger of disrupting balance in nature ("The balance of nature is strong enough to cope with the impacts of modern industrial nations.")

All constructs are the "denial" of something. This phrasing imports two scientifically toxic implicit political assumptions: (1) the claim being denied is an environmental "reality" that has already been established as scientific truth; and (2) anyone who argues against these environmental realities is actively suppressing recognition of a psychologically or politically painful truth. We characterize both as "scientifically toxic" because, as demonstrated below, it is impossible to establish the "reality" of the environmental claims being "denied." Furthermore, although it might be possible to empirically demonstrate "denial" of some painful truth, there was no such demonstration in Feygina et al.'s (2010) studies.

First, there is no scientifically-established fact that "we will soon experience a major environmental crisis." Without defining "soon" or "major" or "crisis," such a fact cannot exist. There is also no scientific fact suggesting the Earth *does not* have plenty of resources, though, of course, absent a definition of "plenty" it is not clear how this claim could be either refuted or confirmed. Identical problems characterize Constructs 3 and 4. Thus, Feygina et al. (2010) never establish any of these alleged "environmental realities" as actual scientific realities, and instead simply import a "green" agenda into the research by *labeling* these unfalsifiable claims "realities." Through a stroke of rhetorical alchemy, mere disagreement with these vague and unfalsifiable "realities" is transformed into the supposedly psychologically scientific phenomenon of "denial" merely by labeling it as such.

Denial is only possible when there is a reality to be denied. One might assess "environmental denial" by showing people a time-lapse video taken over several years showing ocean levels rising over an island, and asking people if sea levels were rising. There might be at least a prima facie case for identifying those who answered "no" to such a question as "denying environmental realities." However, Feygina et al. (2010) did not do this, and simply performed a series of correlational and structural equation analyses using scores on the system justification scale (and other measures) to predict responses on the so-called "denial of environmental realities" scale (a third study did not assess "denial"). Thus, in a paper titled, "System justification, the denial of global warming, and the possibility of 'system-sanctioned change'," there was no scientific evidence of "denial" of environmental realities. The implicit importation of a scientifically untestable political view creates the false and misleading impression that people high in system justification (which is positively correlated with conservatism at about $r = 0.46$; Feygina et al., 2010) "deny" environmental realities despite the absence of evidence of denial of any scientific reality.

Although our example of embedded values involved the use of labeling disagreement as "denial," thereby unjustifiably and implicitly elevating the set of values being "denied" to the level of "facts," embedded values bias can take many other forms. Treating opposition to liberal social welfare policies as racism

would be one contender (e.g., Kinder, 1986; Tetlock & Mitchell, 1993). Another might be declarations of stereotype inaccuracy (which implicitly communicate the egalitarian bona fides of the declarer) made without citation to a single article providing evidence of stereotype inaccuracy (e.g., APA, 1991; Bargh & Chartrand, 1999; Miller & Turnbull, 1986).

How to recognize and avoid embedded values bias. Consider a turnabout test (e.g., Tetlock, 1994), which involves treating as "scientific fact" some politically conservative value. Would opposition to free markets constitute "denial of the benefits of free market capitalism"? Would support for higher taxes constitute "symbolic Marxism"? Would a claim that "stereotypes are accurate" not need empirical support? Scholarship assuming so would be similarly guilty of embedding political values into science and leading to equally false and misleading conclusions.

CONCLUSION

This chapter has reviewed evidence regarding three primary issues: (1) the seemingly extreme and still growing left-wing ideological homogeneity among social psychologists; (2) pernicious sources of that homogeneity (hostile environment, political prejudice); and (3) political risk factors that threaten the validity of social psychological science. A current unknown is the extent to which particular aspects of left-wing worldviews among social psychologists constitute sacred values (e.g., Chapter 3, this volume). It is possible that some of the difficulty in refuting left-wing narratives with data is that some sacralize aspects of those narratives (some contenders include: environmental protection; egalitarianism that manifests as equality of outcomes, abilities, and interests; stereotype inaccuracy; the pervasiveness of racism; the moral inferiority of conservatives).

In our view, the most important threats posed by political homogeneity and discrimination are to creating a robust, valid, and generalizable social psychology. Nonetheless, regardless of researchers' personal ideological beliefs, there are steps they can take to minimize the risk of political biases distorting their conclusions. The research reviewed by Dovidio, Saguy, Ufkes, Scheepers, and Gaertner (Chapter 17, this volume) can be viewed as constituting yet another reason to call for greater ideological diversity within social psychology: promoting harmony by reserving social psychology for those with left-wing views and excluding others will likely maintain a scientific status quo within social psychology that enables continued misrepresentations of research findings that flatter left-wing beliefs and values, and also overstate support for narratives emphasizing oppression and injustice (see also Duarte et al., 2014; Eagly, 1995; Jussim et al., 2014; Redding, 2013).

Inasmuch as political bias is fundamentally a *scientific problem*, one route to reducing it is better training in fundamental aspects of methodology, research design, statistics, and the logic of science. Enhancing awareness of incomplete designs or imbalanced theories offers promise of elevating the quality of scientific research in many ways – including but not restricted to limiting political

biases. In addition to the various individual and micro-level steps we have scribed herein to reduce political distortion (a priori articulation of grounds for reaching conclusions; Popperian emphasis on *disconfirmation* of scientific claims, *especially* ones anchored in sacred political beliefs; widespread use of turnabout tests in political research), we also recommend one larger, macro-level step: Embracing and encouraging ideological diversity in social psychology. We hope most choose to take those steps.

NOTES

1. We thank Yoel Inbar for providing the raw data on which Inbar and Lammers (2012) was based.

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