

THE (NOT SO) ELUSIVE LIBERAL BIAS IN SOCIAL COGNITION

by

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## ABSTRACT OF THE DISSERTATION

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The extant literature on political ideology indicates that political conservatives tend to exhibit political biases more often than do political liberals. This conclusion is challenged in a series of studies based on the perspective of ideologically objectionable circumstances (IOC) theory, which states that ideological biases will not be observed if circumstances are ideologically objectionable to perceivers (liberals or conservatives). It is argued that previous studies have presented liberal participants with circumstances that are ideologically objectionable, but have presented conservatives with circumstances that are ideologically acceptable. This may account for the greater evidence of conservative bias than liberal bias in the extant literature. Study 1 replicated previous findings of asymmetrical conservative bias within the context of IOC. Study 2 further tested and found alternative patterns of bias predicted by IOC. Study 3 explored the nature of political intolerance among liberals and conservatives, as well as ideological biases in the application of democratic principles to specific groups. The results of these three studies indicate that bias among both liberals and conservatives can be observed if perceivers are not placed in circumstances that are objectionable to their respective ideological perspectives.

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## The (Not So) Elusive Liberal Bias in Social Cognition

“The old argument that the networks and other ‘media elites’ have a liberal bias is so blatantly true that it’s hardly worth discussing anymore.” -Bernard Goldberg (2002)

The above quotation reflects the perception among many conservatives of an omnipresent liberal bias in the media (Goldberg, 2002; Stossel, 2004), as well as in entertainment (O’Reilly, 2007) and academia (Fitzpatrick, 1975; Goldberg, 2005). These claims by Goldberg and his fellow conservative commentators are widely circulated and highly influential, and it appears that the public agrees: according to an October 2003 Gallup poll, almost half of Americans perceive the news media as being “too liberal” (Newport & Carroll, 2003).

However, the social science scholarship on ideological bias paints quite a different picture of ideological bias than that of conservative American media. In fact, a rich history of scholarship emphasizes conservative bias in social cognition. Beginning with *The Authoritarian Personality* (Adorno, Frenkel-Brunswick, Levinson & Sanford, 1950), and continuing through current research (Cohrs et al., 2005; Danso, Sedlovskaya, & Suanda, 2007; Duckitt, 2006; Jost et al., 2007), political conservatism has been characterized by rigid, inflexible and simplistic cognitive tendencies which can ultimately lead to a greater susceptibility to error and bias in judgment and perception (Altemeyer, 1996).

Decades of scholarship on political conservatism were recently summarized in a highly influential meta-analytic paper (Jost, Glaser, Kruglanski, & Sulloway, 2003a). Already, this paper has received a vast number of citations (170 citations as of February



18, 2008, according to Google Scholar) and has ushered in a resurgence of scholarship on political conservatism. Jost et al. (2003a) approach the study of political conservatism from the perspective of motivated social cognition. This theoretical framework assumes that the content of belief systems (i.e., ideologies) satisfies the psychological needs of the individual. For example, Jost et al. (2003a) suggest that the adoption of a politically conservative ideology satisfies one's motives for enhancing social and economic hierarchies and maintaining the status of dominant groups. Their meta-analysis identified other social cognitive motives associated with political conservatism, including dogmatism and intolerance of ambiguity (Wilson, 1973; Sidanius, 1978), cognitive rigidity and tough-mindedness (Tetlock, 1983), close-mindedness (van Hiel, Kossowska, & Mervielde, 2000), need for order, structure and cognitive closure (Kruglanski, Webster, & Klem, 1993; Webster & Kruglanski, 1994), and reactivity to social and economic threats (Doty, Peterson, & Winter, 1991; McCann, 1997; Sales, 1973).

Although political conservatism was the focus of this meta-analysis, motivated social cognition is not limited to political conservatism (Jost, 2006; Jost et al., 2003b; Jost, Nosek & Gosling, in press). Political liberalism has its own associated motivational components (hierarchy attenuation) and personality characteristics (openness to experience). Indeed, Jost speculates that liberals may allow their biases to influence their processing of political information: "Liberals...may be too quick to defy authority, flout conventions, and slay the 'sacred cows' of others" (Jost, 2006, p. 667).

However, as the present paper will argue, the study of political liberalism is not approached with the same attention and interest afforded to the study of political conservatism. Presently, our understanding of the psychology of political liberalism does

not approximate our understanding of political conservatism. Many of the conclusions drawn by scholars regarding political liberalism (Jost, Nosek & Gosling, in press) are based on studies using linear measures of ideology for which political conservatism was the primary scholarly subject. Indeed, as shall be demonstrated in the following section, political liberalism is somewhat of an afterthought in the social sciences' approach to political ideology.

#### Evidence of an Asymmetrical Emphasis on Political Conservatism in the Social Sciences

As past scholars have noted, the asymmetrical emphasis on political conservatism in the social sciences is evident in both social psychology and political psychology (Redding, 2001; 2004; Tetlock & Arkes, 2004). Suedfeld (2002) criticizes postmodernist and social constructionist influences in both social psychology and political science, and suggests that personal ideologies influence conclusions in support of the rigidity-of-the-right hypothesis.

Evidence of this asymmetrical emphasis on political conservatism is found in a variety of contexts. In political science, two of the primary textbooks used in Political Psychology courses (Political Psychology [Jost & Sidanius, 2004] and the Oxford Handbook of Political Psychology [Sears, Huddy, & Jervis, 2003]) contain chapters that emphasize studies of conservative personality. The titles of such classic works in political psychology as *The Authoritarian Personality* (Adorno et al., 1950), *The Psychology of Conservatism* (Wilson, 1973), *Right-Wing Authoritarianism* (Altemeyer, 1981), and *Social Dominance* (Sidanius & Pratto, 1999), make clear the primary emphasis on political conservatism in this area of scholarship. In psychology, a PsychINFO search for the keywords "Conservatism" or "Political Conservatism" registers 1264 hits; by

contrast, searches for “Liberalism” or “Political Liberalism” yield much less (742) (as of Feb 12, 2008). Perhaps most plainly, a comprehensive meta-analysis has been performed on political conservatism (Jost et al., 2003a). Given the scarcity of studies on political liberalism, no meta-analysis of this topic exists.

### Why the Asymmetrical Emphasis on Political Conservatism?

There are three primary explanations for the asymmetrical emphasis on political conservatism evident in the social sciences.

**Historical context.** One of the most influential works in the field, *The Authoritarian Personality* (1950), focused on the right-wing scourges of fascism, anti-Semitism, and ethnic and racial prejudice. Although totalitarianism was not limited to right-wing movements (as evidenced by Joseph Stalin’s Soviet Union), many American social scientists at the time were unsure of their position toward the Communist Soviet Union (Brown, 1965). This tradition of studying the content and motivation of right-wing ideologies has a deep history in the social sciences, and influences the perspectives of modern scholars (Cohrs et al., 2005; Duckitt, 2001; 2006; Jost et al., 2003a).

**Liberal influence in academia.** Although exaggerated, claims of a liberal Ivory Tower (Fitzpatrick, 1975; Goldberg, 2005; Limbaugh, 2004) are not without merit. Empirical evidence suggests that political liberals are over-represented in psychology (Redding, 2001; Redding, 2002; Tetlock & Arkes, 2004), and this over-representation may influence both the types of empirical questions asked by scholars, as well as the interpretation of data (Arkes & Tetlock, 2004; Redding, 2004; Tetlock, 1994). Suedfeld (2002) indicates that postmodernists and social constructionists carry sway in political psychology. In their response to Jost et al.’s (2003) meta-analysis, Greenberg and Jonas

(2003) argue that “psychological theorizing and research on political attitudes always run the risk of being guided by the motivated social cognition of the theorists and researchers on the basis of their own sociopolitical views” (p. 381).

Queasy feelings about the political right among some social scientists may also influence depictions of conservatives’ characteristics. Certainly, painting right-wing authoritarianism as a result of psychological conflict (Adorno et al., 1950; Crouse & Stalker, 2007) contains negative implications. In addition, terms used to characterize the cognitive style of political conservatives, such as “intolerance of ambiguity”, “cognitive rigidity”, and “close-mindedness”, appear quite pejorative. Presenting these attributes as “preference for clarity”, “cognitive firmness”, and “decisiveness” would conjure a more positive image of political conservatism.

The present argument is not claiming that social scientists manipulate their data or that they behave dishonestly in their capacities as scientists and scholars. However, one’s values do influence the types of research questions one asks (Myers, 2008). Indeed, there is a reason that “research” is occasionally referred to with tongue planted in cheek as “me-search”. Should it not be surprising that an individual who perceives prejudice and discrimination as harmfully prevalent would be inclined to study those who are prejudiced and do discriminate? This is not by necessity a negative consequence. Indeed, there are valid moral implications for such lines of inquiry. However, science should not be used to vilify, nor should it have a selective emphasis in order to support a political agenda (Arkes & Tetlock, 2004).

A focus on “abnormal” behavior. Another explanation for this asymmetrical focus on political conservatism is that political conservatism may be perceived as “abnormal”

by social scientists. A common theme in the social sciences is to investigate those behaviors that appear to deviate from accepted norms. Regarding the focus of aggression research, primatologist Frans de Waal states, “Psychologists tend to focus on abnormal or problematic behavior, such as bullying, so that we know startlingly little about the spontaneous, normal ways in which conflict is reduced or overcome” (de Waal, 2005; p. 146). The treatment of political conservatism in the social sciences is similar to the approach of aggression research described above. As the majority of social scientists lean to the political left, conservative thought or behavior may appear to deviate from acceptable positions. Thus, there emerges an asymmetrical focus on this alien ideology.

#### Problems with an Asymmetrical Approach to Political Ideology

This asymmetrical emphasis on political conservatism in the social sciences is problematic for a number of reasons.

The study of political liberalism is theoretically important. Belief systems provide motivation and justification for attitudes and behavior (Jost et al., 2003a). Political liberalism certainly qualifies as a belief system that provides a source for motivated social cognition. Political philosophers have identified personal freedom of choice and egalitarianism as the core tenets of political liberalism (Freedman, 2003). These social-cognitive motives have been largely left unstudied in the social sciences, however. Considering the omnipresent “culture wars” that have divided Americans in recent political discourse (Franken, 2003; O’Reilly, 2007) it is important to understand the motivations of both participating factions. The asymmetrical focus on political conservatism has created an enormous gap between our theoretical understanding of political conservatism and political liberalism as motivational agents.

Negative public perception. Emphasizing political conservatism in the social sciences may potentially create negative lay perceptions of the discipline. Considering the asymmetrical emphasis on conservatism and the disproportionate number of liberals in the social sciences, as well as the disproportionate number of scientific conclusions that support liberal beliefs and values (Redding, 2001), would it be surprising that a conservative critic would respond skeptically? In an exchange between John Jost and the conservative commentator Ben Stein, Stein characterized Jost et al.'s (2003) meta-analysis as “carrying more of your values than you could haul in a super tanker” (Stein & Jost, 2004). Conservative author George Will indicates a similar skepticism about Jost's conclusions: “Professors have reasons for their beliefs. Other people, particularly conservatives, have social and psychological explanations for their beliefs” (Will, 2003). Even if social scientists are honest in their approach to the politically charged issues they research, the asymmetrical emphasis on political conservatism provides ammunition for ideological critics. Might a more balanced treatment of ideology enhance the extent to which social science research is viewed as credible by intelligent people, regardless of their political persuasions?

False assumptions and hasty conclusions. One major theoretical problem with this asymmetrical focus on political conservatism is that inaccurate conclusions may be drawn about political conservatism because proper comparisons to political liberalism have not been drawn.

Recent evidence highlights this argument. Crawford, Jussim, Cohen, & Cain (under review) conducted a series of studies examining ideological bias in social cognition. Participants in these studies read two newspaper articles: one for which the

conclusions support liberal beliefs, and the other for which the conclusions supported conservative beliefs. Participants were asked to indicate the extent to which they perceived the articles to be accurate. The hypotheses for these studies were based on the rigidity-of-the-right hypothesis (RoR; Jost, 2003), which states that all things being equal, conservatives will be more rigid, dogmatic and inflexible than liberals. It was predicted that conservatives would display a greater bias in favor of the article that supported conservative beliefs, but that liberals' perceptions of the two articles would be more balanced. In fact, the opposite was true: across three studies, using a variety of political issues as stimuli, a pattern of bias was revealed in which conservatives perceived the two articles as equally accurate, but liberals were biased in favor of the articles that supported liberal beliefs.

Crawford et al. set out to confirm the rigidity-of-the-right hypothesis, but consistently found bias only among liberals. Why would this be? The present set of studies will attempt to offer an explanation for these results.

### Studying Political Ideology in the Social Sciences

Before describing the present set of studies, it is important to lay a foundation for the study of political ideology in the social sciences. There are various measures that past scholars have used to identify political conservatives and liberals. The American National Election Study (ANES) utilizes a 7-point Likert scale for self-reported ideology; feeling thermometer measures toward liberals and conservatives; and attitude assessments on an array of policy issues. Social scientists have introduced a variety of measures of political conservatism, including the F-Scale (Adorno et al., 1950), the C-Scale (Wilson & Patterson, 1968), the RWA scale (Altemeyer, 1981; 1998), and the SDO scale (Sidanius

& Pratto, 1999). Jost et al. (2003a) include studies that have used these measures as predictors in their political conservatism meta-analysis. The present series of studies used the RWA and SDO scales as the primary predictors of political ideology, for a variety of reasons, which are explained below.

The Right-Wing Authoritarianism (RWA) Scale (Altemeyer, 1981; 1998) measures three attitudinal components: authoritarian submission (respect for authority), authoritarian aggression (general aggressive tendencies), and general adherence to conventionalism. The Social Dominance Orientation (SDO) Scale (Pratto, Sidanius, Stallworth & Malle, 1994; Sidanius & Pratto, 1999) measures “general support for the domination of certain socially constructed groups over other socially constructed groups” (Sidanius & Pratto, p. 61).

The relationship between RWA, SDO, and political conservatism is well established (Altemeyer, 1998; Jost et al., 2003a). In fact, RWA and SDO additively explain 66% of the variance in predicting conservative beliefs (van Hiel & Mervielde, 2002). Thus, RWA and SDO are justifiably used as predictors of political ideology. Low scores on these measures are indicative of political liberalism; high scores are indicative of political conservatism. Thus, those who score low on these measures (i.e., Low RWAs and Low SDOs) are considered political liberals, while those who score high on these measures (i.e., High RWAs and High SDOs) are considered political conservatives.

There are two other important reasons why RWA and SDO were used as predictors of political ideology in the present studies.

Popular predictors. The scholarship on RWA and SDO is highly influential and heavily cited. Altemeyer’s three books on right-wing authoritarianism (Right-Wing



Authoritarianism, 1981; Enemies of Freedom, 1988; The Authoritarian Specter, 1996) have been cited over 1100 times since their publication (as of December 13, 2007, according to Google Scholar). Two key sources for social dominance orientation scholarship (Pratto, Sidanius, Stallworth & Malle, 1994; Sidanius & Pratto, 1999) have been cited almost 900 times since their publication (as of December 13, 2007, according to Google Scholar). Such well established and influential constructs are appropriate to use as predictors of political ideology.

Replication purposes. The present studies directly address the work of Bob Altemeyer (1988; 1996; 1998), which relied heavily on RWA (and to a lesser degree SDO) to draw conclusions in support of the rigidity-of-the-right hypothesis. Therefore, for replication purposes, the current studies employed the same predictors used in previous studies.

#### A New Understanding of Ideological Bias

The rigidity-of-the-right hypothesis (RoR), which states that political conservatives are more prone to rigid and dogmatic thinking than political liberals, has become a foregone conclusion among members of the scientific community (Jost, 2006; Jost et al., 2003a; Jost et al., 2003b; Jost et al., in press). Altemeyer (1988; 1996) has added to this scholarship with his research on the “double standards” held by right-wing authoritarians (High RWAs). In his studies, Altemeyer presents his participants with scenarios in which they must make judgments about targets. Important characteristics of these targets are varied in between-subjects designs.

For example, Altemeyer (1996) presented participants with a description of either Christian school prayer or Muslim school prayer being mandated in secular public

schools. Altemeyer found that whereas Low RWAs (i.e., liberals) did not support either type of school prayer, High RWAs (i.e., conservatives) supported Christian prayer more strongly than Muslim school prayer. He interpreted to as supporting RoR, in that the bias emerged among the conservative but not the liberal participants.

Like Altemeyer's study described above, the present set of studies explore double standards, which are specific forms of bias. A double standard occurs when an individual does not apply the same standard of judgment to two or more targets. Thus, in the above example, there was a double standard in regards to mandating school prayer in secular schools: High RWAs provided more support for a sympathetic group (Christians) than an unsympathetic group (Muslims). By not supporting either religious group's public school prayer, Low RWAs did not exhibit a double standard in judgment.

In the present manuscript, a new understanding of ideological bias is introduced. Unlike RoR, which places the weight of ideological bias among conservatives, this new perspective suggests that ideological bias exists among both liberals and conservatives in equal quantity and strength. This perspective is labeled the ideologically objectionable circumstances (IOC) theory of political ideology. According to IOC, both liberals and conservatives hold ideological commitments that may bias their judgment and behavior. In any given situation, however, the existence of ideologically objectionable circumstances will eliminate the emergence of ideological bias.

Ideologically objectionable circumstances are any situations that are inconsistent with the ideological content of political liberals (i.e., Low RWAs or Low SDOs) or political conservatives (i.e., High RWAs or High SDOs). For example, mandatory prayer

in public schools is ideologically objectionable to Low RWAs, while legal abortion is ideologically objectionable to High RWAs.

If individuals are placed in situations that they find objectionable, they should reject these situations outright. Low RWAs will not care about which religious groups' prayer is being enforced, and High RWAs will not care about the age of the fetus in question. In other words, nothing else about the judgment will matter—once they have rejected the premise of the circumstances, they will refuse to engage in double standards. However, ideological bias will emerge when the situations surrounding the judgment are ideologically acceptable.

The belief systems of both political conservatism and political liberalism consist of distinct ideological content. In the present set of studies, political ideology (conservatism and liberalism) is operationalized by scores on the right-wing authoritarianism (RWA; Altemeyer, 1998) scale and the social dominance orientation scale (SDO; Sidanius & Pratto, 1999). The ideological content of political conservatism and liberalism will be discussed within the context of these two primary predictors.

Right-wing authoritarianism. High RWAs (i.e., conservatives) are supportive of the established social order (and thus unsupportive of those who threaten or violate the social order) and tend to hold traditional social beliefs (Altemeyer, 1988; 1996; 1998; Stewart, Vassar, Sanchez, & David, 2000). They also place relatively high value on tradition, conformity, and security (Altemeyer, 1998; Cohrs et al. 2005; Duriez & van Hiel), and tend to be ethnocentric (Altemeyer, 1998; Jost & Thompson, 2000; van Hiel & Mervielde, 2005).

Low RWAs (i.e., liberals) tend to be relatively anti-Establishment, and more supportive of those who violate the established social order. They are more accepting of individuals or groups perceived as unconventional, and tend to hold unconventional beliefs themselves. They place relatively high value on personal freedom and self-direction, and are not nationalistic or ethnocentric (refer to Table 1 for a description of the ideological content and associated values of Low and High RWAs).

Social dominance orientation. High SDOs (i.e., conservatives) support policies, groups and individuals that maintain or enhance the existent social status hierarchies (Pratto & Cathey, 2002). They place relatively high value on social power (Altemeyer, 1998; Cohrs et al., 2005; Duriez & van Hiel, 2002), and tend to be ethnocentric (Altemeyer, 1998; Jost & Thompson, 2000; van Hiel & Mervielde, 2005).

Low SDOs (i.e., liberals) support policies, groups and individuals that eliminate or attenuate the existent social status hierarchies (Pratto & Cathey, 2002). They place relatively high value on universalism and benevolence, and are not nationalistic or ethnocentric (refer to Table 1 for a description of the ideological content and associated values of Low and High SDOs).

The previous example of the Christian or Muslim mandated school prayer will be used to illustrate the concept of ideologically objectionable circumstances, and their relationship to the emergence of ideological bias. Altemeyer (1996) found asymmetrical High RWA bias: High RWAs held a double standard on this issue, favoring Christian over Muslim school prayer, while Low RWAs were equally unsupportive of these two propositions. As stated above, Altemeyer interpreted these results as confirmation of the rigidity-of-the-right hypothesis.

However, consider these results from the perspective of ideologically objectionable circumstances (IOC) theory. Low RWAs value personal choice and freedom, which should lead them to reject the imposition of school prayer on individuals. Therefore, the scenario in Altemeyer's (1996) original study presents circumstances that are ideologically objectionable to Low RWAs, and as IOC predicts, Low RWAs did not commit double standards in this scenario. However, this circumstance is not objectionable to High RWAs: they favor adherence to social order (carried through by religious instruction). Therefore, double standards among High RWAs could, and did, emerge in this scenario.

#### The Present Studies

It is presently argued that previous studies may have constructed situations that, however unintentionally, were objectionable to political liberals but not to political conservatives. According to IOC, such circumstances would lead to patterns of asymmetrical conservative bias that would appear to confirm the predictions of RoR. However, if empirical scenarios were constructed that were unobjectionable to political liberals and ideological bias among political liberals emerged, this would serve as strong evidence for the predictions of IOC, and would disconfirm RoR.

The purpose of the present set of studies is to test these predictions. Study 1 presents an attempt to replicate Altemeyer's (1988; 1996) findings of asymmetrical conservative bias in various scenarios. While such patterns of bias would be consistent with RoR, IOC can also explain these patterns of bias. Study 2 will offer a more conclusive test of IOC: scenarios are constructed with the purpose of eliciting particular patterns of bias by making the circumstances of the scenarios ideologically

unobjectionable to both political conservatives and political liberals. Study 3 diverges from these double standards studies and explores another aspect of ideological bias: the relationship between political ideology and political tolerance (Sullivan, Marcus, Feldman, & Piereson, 1981).

A variety of patterns of ideological bias can emerge within the context of IOC, which are described below.

When conservative bias emerges but liberal bias does not, this pattern is referred to as asymmetrical conservative bias. This is the pattern of bias predicted by the rigidity-of-the-right hypothesis. For example, if Low RWAs equally oppose the school prayer laws, but High RWAs more strongly support the Christian school prayer law than the Muslim school prayer law, then asymmetrical conservative bias has emerged.

When liberal bias emerges but conservative bias does not, this pattern is referred to as asymmetrical liberal bias. If High RWAs equally oppose the school prayer laws, but Low RWAs more strongly support the Muslim school prayer law than the Christian school prayer law, then asymmetrical liberal bias has emerged.

When bias among both conservatives and liberals emerges in their own respective directions, this pattern is referred to as symmetrical bias. If Low RWAs more strongly support the Muslim school prayer law than the Christian school prayer law, but High RWAs more strongly support the Christian school prayer law than the Muslim school prayer law, then symmetrical bias has emerged.

When both liberals and conservatives favor one group over another group, this is referred to as general target bias. If both Low and High RWAs more strongly support the

Christian school prayer law than the Muslim school prayer law, then general target bias has emerged.

Finally, when no ideological or target biases emerge (i.e., both liberals and conservatives evaluate two targets equally), this pattern is indicative of zero bias in social cognition. If both Low and High RWAs equally support both religious groups, then zero bias has emerged.

### Study 1

Altemeyer has accumulated a host of data from which he concludes that High RWAs commit double standards in their reasoning about political information, but Low RWAs do not (recall the earlier discussion of the school prayer scenario). Altemeyer has replicated this pattern of bias in countless other studies, in a variety of scenarios (1988; 1996; 1998). Based on these results from these “double standards” studies, Altemeyer concludes that:

“Since High RWAs compartmentalize their thinking a lot, we can expect them to have lots of double standards” (Altemeyer, 1996, p. 115).

“Many High RWAs can speak out of both sides of their mouth on an issue, and perhaps they never notice they are doing so” (Altemeyer, 1996, p. 117).

“[High RWAs] do appear to have more than their share [of double standards], on quite a variety of topics. I think we can call it a feature of their thinking” (Altemeyer, 1996, p. 122, emphasis added).

“Lows in turn show more interconnectedness, consistency, and fairness” (Altemeyer, 1996, p. 122).

These statements suggest that Low and High RWAs are psychologically distinct from each other; namely, that High RWAs are more rigid, inflexible and dogmatic than Low RWAs. This interpretation is consistent with the rigidity-of-the-right hypothesis (Jost et al., 2003a).

Ideologically objectionable circumstances theory (IOC) predicts the same pattern of asymmetrical conservative bias found by Altemeyer (1988; 1996), but not because of the rigidity, inflexibility, and dogmatism typically associated with conservative social cognition. IOC predicts asymmetrical conservative bias because the circumstances presented in Altemeyer's (1988; 1996) original experimental scenarios were ideologically objectionable to political liberals, but ideologically acceptable to political conservatives. Thus, the primary objectives of the present set of studies are to replicate these findings of asymmetrical conservative bias, and to demonstrate that IOC offers an alternative to RoR in explaining this pattern of bias.

#### The Present Study

Below is a description of each of the scenarios used in Study 1, a summary of Altemeyer's findings, and a comparison of the hypotheses generated by RoR and IOC.

School prayer scenario. Altemeyer (1996) conducted a study in 1991 in which he described to participants a law being proposed to mandate school prayer in public schools. The type of prayer being mandated (Christian prayer in American schools; Muslim prayer in Arab schools) was varied in a between-subjects design. He asked his participants to indicate whether they thought this was a good law or a bad law. The results indicated asymmetrical conservative bias: whereas 48% of High RWAs thought the Christian prayer law was a good law, only 5% of High RWAs thought the Muslim



school prayer law was a good law. In contrast, 3% of Low RWAs thought the Christian school prayer law was a good law, and 7% of Low RWAs thought the Muslim school prayer law was a good law. He replicated these findings with other samples (i.e., the parents of his student participants), and altered target groups, replacing the Muslim school prayer scenario with a Jewish school prayer scenario.

Altemeyer (1996) interprets these findings as confirmation of the rigidity-of-the-right hypothesis. High RWAs are more compartmentalized and dogmatic, more cognitively rigid, and will thus perceive a sympathetic group (Christians) more favorably than an unsympathetic group (Muslims). Low RWAs, however, are more fair-minded and consistent, and thus offer no favoritism for one group over another. Thus, the RoR prediction of asymmetrical conservative bias was confirmed in this scenario.

Although IOC predicts the same pattern of results, this asymmetrical conservative bias emerges because the circumstances of the situation (mandated school prayer) are ideologically objectionable to Low RWAs, who reject the imposition of another's will (particularly that of the established order) on free individuals. Therefore, Low RWAs do not engage in a double standard not because of their cognitive characteristics (fair-mindedness and consistency), but because they object to mandated school prayer on ideological grounds.

In regards to High RWAs, IOC would predict a double standard, because mandated school prayer is ideologically acceptable to High RWAs. High RWAs support traditional institutions that support the social order, especially religious institutions (Altemeyer, 1996; Danso, Hunsberger, & Pratt, 1997). They also tend to be relatively unsupportive of democratic principles, including religious freedom (Altemeyer, 1996;

Canetti-Nisim, 2004; Moghaddam & Vuksanovic, 1990). Therefore, the circumstances presented in this scenario are ideologically acceptable to High RWAs. Considering the relatively ethnocentric beliefs held by High RWAs (Altemeyer, 1998; Jost & Thompson, 2000; van Hiel & Mervielde, 2005), they should more strongly support Christian school prayer than Muslim school prayer in secular schools.

It is therefore hypothesized that Altemeyer's (1996) finding of asymmetrical conservative bias will be replicated in the school prayer scenario. Although a pattern of asymmetrical conservative bias would support the predictions of RoR, IOC offers a viable alternative explanation for this pattern of bias.

Gay rights demonstration scenario. In this scenario, the leader of a political demonstration instigates a riot by encouraging his followers to attack an opposition group that has gathered at the demonstration. The leader is found guilty of inciting a riot, and participants must sentence him to a prison term ranging from 0 to 18 months. The political position of the demonstration leader (as well as of the opposition group) is varied in a between subjects design (pro-gay leader/anti-gay opposition group; anti-gay leader/pro-gay opposition group). Altemeyer (1988) conducted this study in 1985, and again found evidence of asymmetrical conservative bias: Low RWAs gave a slightly (though non-significantly) longer sentence to the anti-gay than pro-gay leader ( $M's = 11.1$  and  $9.8$ , respectively), while High RWAs gave longer prison sentences to the pro-gay leader than the anti-gay leader ( $M's = 12.8$  and  $9.2$ , respectively).

Again, Altemeyer (1988) interpreted these findings as confirmation of RoR. High RWAs are more rigid and dogmatic, and see the world in black and white. Therefore, they punish what is perceived as bad (pro-gay leader) more harshly than what is

perceived as good (anti-gay leader). Low RWAs, being fair-minded and consistent, do not allow their ideological preferences to influence their perceptions of this situation, and suggest comparable prison sentences for the anti-gay and pro-gay leaders.

Although IOC predicts the same pattern of results, this asymmetrical conservative bias emerges because the circumstances of the situation (an aggressive authoritarian leader) are ideologically objectionable to Low RWAs, who unlike their High RWA counterparts, object to committing violence in the name of authoritarian leaders. Indeed, the leader in Altemeyer's (1988) study is an authoritarian one: he identifies an enemy to his followers, and instructs them to carry out violence against them. From the perspective of IOC, Low RWAs do not engage in a double standard not because of their cognitive characteristics (fair-mindedness and consistency), but because they reject the tactics of intimidation and violence, especially when these tactics are espoused by an authoritarian!

In regards to High RWAs, IOC would predict a double standard, because aggression on the command of an authoritarian leader defines right-wing authoritarianism! Additionally, High RWAs are known to derogate those who are perceived to threaten or violate the social order (Duckitt, 2006). Because homosexuality violates normative scripts of human sexuality, homosexuals are perceived as social deviants who threaten the social order. High RWAs also tend to be fairly religious, a disposition typically associated with anti-gay attitudes (Olson, Cadge, & Harrison, 2006). Thus, there are a host of reasons that the circumstances presented in this scenario are ideologically acceptable to High RWAs.

It is therefore hypothesized that Altemeyer's (1996) finding of asymmetrical conservative bias will be replicated in the gay rights demonstration scenario. Although a

pattern of asymmetrical conservative bias would support the predictions of RoR, IOC offers a viable alternative explanation for this pattern of bias.

College admissions scenario. Altemeyer (1996) acknowledges that perhaps the reason he doesn't find bias among Low RWAs is because he's not putting them in situations that may lead to such biases: "To 'catch' Lows being more hypocritical than Highs, you have to turn the tables and put them in conflict over something they believe in. I have been searching for a situation that would do this" (Altemeyer, 1996, pg. 120). He reports attempts to find Low RWA double standards to two different scenarios: environmental protection and affirmative action. In both of these scenarios, he finds no evidence of double standards among either Low or High RWAs. Thus, Altemeyer (1996) searched for Low RWA bias, but it remained elusive.

However, the inability to detect ideological bias in this scenario may not have been due to a lack of ideological bias. Rather, RWA may not be the proper predictor for attitudes on the issue of affirmative action. RWA is associated with submission to and aggression in support of established authorities (Altemeyer, 1981), and is predictive of attitudes toward groups or individuals deemed socially deviant (Duckitt, 2006). Affirmative action policy, which entails breaking down the existing hierarchies of privilege by providing opportunity to those who historically have not had such opportunity, is unrelated to submission to or aggression in the name of any established authority, nor is it related to groups or individuals thought of as socially deviant.

On the other hand, social dominance orientation is closely related to attitudes toward affirmative action (Haley & Sidanius, 2006; Pratto & Cathey, 2002) because it is an issue related to social status hierarchies. At the heart of affirmative action programs is

hierarchy attenuation: recognizing past injustices and attempting to rectify them. Those motivated to attenuate hierarchies should support such policies; those motivated to enhance hierarchies should oppose such policies. Thus, the reason Altemeyer (1996) found no double standards on the issue of affirmative action may be that he used RWA, not SDO, as his predictor.

Unlike the school prayer and gay rights demonstration scenarios, Altemeyer did not provide the original script for his affirmative action study in his writings. Therefore, a novel scenario was created for the present study. In this scenario, the Supreme Court has upheld a college's admissions policy, which in a between subjects design is either race-based or legacy-based. Race-based admissions policies attenuate social hierarchies while legacy-based admissions policies maintain the existing social hierarchy. The circumstances presented in this scenario (group-based admissions policies) should not be ideologically objectionable to either political conservatives or political liberals, as they should respectively support legacy-based and race-based admissions (Haley & Sidanius, 2006; Pratto & Cathey, 2002). Therefore, double standards should emerge among both Low SDOs and High SDOs because they are motivated to attenuate or maintain social hierarchies, respectively (Pratto, Sidanius, Stallworth, & Malle, 1994; Sidanius & Pratto, 1999).

It is therefore hypothesized that Altemeyer's (1996) finding of no bias among Low and High RWAs will be replicated in the present study. However, this is because RWA is an inappropriate predictor for this scenario due to the ideological content addressed in the scenario. However, it is predicted that symmetrical bias will be observed in the college admissions scenario using SDO as the ideological predictor. Specifically,

Low SDOs should more strongly support the race-based than legacy-based admissions policy, while High SDOs should more strongly support the legacy-based than race-based admissions policy. This pattern of bias would offer support for the ideologically objectionable circumstances (IOC) theory of political ideology. This prediction is in stark contrast with RoR, which would predict that conservatives (High SDOs) would be more rigid and inflexible, and thus more likely to display a double standard than liberals (Low SDOs). Therefore, this scenario offers an opportunity to contrast the predictions of ideologically objectionable circumstances theory and the rigidity-of-the-right hypothesis.

### Method

#### Participants

356 Rutgers University students enrolled in social psychology undergraduate courses during the Fall 2007 semester completed the questionnaire packet for course credit (145 males, 199 females, 12 unreported; 188 White, 155 Non-White, 13 unreported; age  $M = 20$  years).

#### Materials and Procedures

Questionnaire packets were distributed to the undergraduate participants during a lecture session. Each packet included the following materials.

School prayer scenario. Participants read about a proposed law that would mandate school prayer in public schools (Christian prayer in American public schools or Muslim prayer in Arab public schools, varied in a between subjects design). After reading a description of the proposed law, participants indicated whether they thought this was a good law or a bad law (Altemeyer's [1996] original dependent measure). In addition, three other dependent measures were used to assess support for the proposed

law on a 6-point Likert scale (1= strongly disagree; 6= strongly agree) (see Appendix A for the scenario script and dependent measures).

Gay rights demonstration. This scenario involves a political demonstration (pro-gay or anti-gay, varied in a between subjects design) in which the leader of the demonstration implores his followers to show a group of counter-demonstrators that “we mean business”. A riot ensues between the opposing sides, and the demonstration leader is found guilty of inciting a riot. Participants must suggest a prison sentence for the demonstration leader within the range of 0 and 18 months (Altemeyer’s [1988] original dependent measure). In addition, three other dependent measures were used to assess support for the demonstration leader’s actions on a 6-point Likert scale (1= strongly disagree; 6= strongly agree) (see Appendix B for the scenario script and dependent measures).

Supreme Court scenario. Participants read about a Supreme Court decision in which either race-based college admissions policies or legacy-based college admissions policies (varied in a between subjects design) were upheld by the Court. Three dependent measures were used to assess support for the Court’s decision on a 6-point Likert scale (1= strongly disagree; 6= strongly agree) (see Appendix C for the scenario script and dependent measures).

The ordering of the scenarios was counterbalanced: half of the participants read the gay rights demonstration scenario first; the other half read the Supreme Court scenario first. The school prayer scenario was always the third and last scenario read.

There were two experimental conditions in Study 1. In Condition A, the proposed law mandates Christian school prayer, the demonstration leader is pro-gay, and the

Supreme Court upheld a race-based college admissions policy. In Condition B, the proposed law mandates Muslim school prayer, the demonstration leader is anti-gay, and the Supreme Court upheld a legacy-based college admissions policy.

Right-wing authoritarianism (RWA). Altemeyer's (1998) RWA scale consists of 30 items measured on a 9-point Likert scale (1= strongly disagree, 9= strongly agree) (see Appendix D).

Social dominance orientation (SDO). The SDO scale (Sidanius & Pratto, 1999) consists of 16 items measured on a 7-point Likert scale (1= strongly disagree, 7= strongly agree) (see Appendix E).

The presentation of the scenarios and the RWA and SDO scales were counterbalanced: half of the participants encountered the scenarios before the RWA and SDO scales; the other half encountered the RWA and SDO scales before the scenarios.

Political attitude measures. Participants responded to five attitudinal items (same-sex marriage, affirmative action, the war in Iraq, abortion, and racial profiling) on a 7-point Likert scale (1= Strongly disagree, 4= Neither agree nor disagree, 7= Strongly agree) (see Appendix F).

Demographic variables. Several demographic variables were assessed, including age, gender, English proficiency, country of origin, race/ethnicity, religious affiliation, and self-reported religiosity (measured on a 10-point Likert scale) (see Appendix G).

After participants completed these packets, they were thanked, debriefed, and excused.

## Results

### Preliminary Analyses



Characteristics of the RWA scale. The RWA scale has a possible range of 30 to 270, with an absolute middle of this distribution of 150. In this sample ( $N = 349$ ), scores ranged from 30-262 ( $M = 105.58$ ,  $s = 38.52$ ). Cronbach's alpha was .93, indicating strong internal reliability. Consistent with Altemeyer's (1988; 1996; 1998) procedures, the bottom quartile of RWA scorers are categorized as "Low RWAs", while the top quartile of RWA scorers are categorized as "High RWAs". Low RWAs were all those participants whose RWA score was less than or equal to 77 (25.5%). High RWAs were those whose RWA scores were greater than or equal to 131 (25.2%).

Characteristics of SDO scale. The SDO scale has a possible range of 16 to 112, with an absolute middle of this distribution of 64. In this sample ( $N = 348$ ), scores ranged from 16 to 95 ( $M = 42.84$ ,  $s = 16.78$ ). Cronbach's alpha was .90, indicating strong internal reliability. Consistent with Altemeyer's (1998) procedures, the bottom quartile of SDO scorers are categorized as "Low SDOs", while the top quartile of SDO scorers are categorized as "High SDOs". Low SDOs were all those participants whose SDO score was less than or equal to 29 (25.6%). High SDOs were those whose SDO scores were greater than or equal to 53 (25.6%).

Correlations between constructs. Self-report conservatism was correlated with both RWA,  $r(284) = .52$ ,  $p < .001$ , and SDO,  $r(282) = .30$ ,  $p < .001$ . RWA and SDO were also correlated,  $r(341) = .28$ ,  $p < .001$ . As expected, both RWA and SDO are related to political conservatism, but they each explain different aspects of political conservatism.

Gender differences. There were no gender differences in RWA,  $t(335) = .06$ , ns, which is consistent with previous research (Altemeyer, 1996). Men were higher in SDO

than women,  $t(334) = 3.84$ ,  $p < .001$ ,  $r = .20$ ,  $M's = 47.15$  and  $40.12$ , respectively, which is consistent with previous findings (Sidanius & Pratto, 1999).

Race differences. Non-Whites were marginally higher in RWA than Whites,  $t(334) = 1.80$ ,  $p = .07$ ,  $r = .10$ ,  $M's = 109.36$  and  $101.78$ , respectively. Whites were higher in SDO than Non-Whites,  $t(333) = 3.04$ ,  $p < .01$ ,  $r = .16$ ,  $M's = 45.59$  and  $40.00$ , respectively, which is consistent with previous findings that indicate majority group members are higher in SDO than minority group members (Sidanius & Pratto, 1999).

A series of 2 (Condition: A, B) X 2 (RWA: Low, High) X 2 (SDO: Low, High) X Race (White, Non-White) ANOVAs were performed on each of the dependent measures from all three scenarios. All interactions between race and the other variables were non-significant, all  $F's < 2.73$ , all  $p's > .11$ , except for a significant Target X SDO X race interaction on the number of months that the target was sentenced in the gay rights demonstration scenario,  $F(1,157) = 5.84$ ,  $p < .05$ ,  $r = .19$ . However, because this was the only significant result observed and it did not bear on the hypotheses, it will not be discussed further.

Religion differences. Christians were higher in RWA than Non-Christians,  $t(329) = 4.20$ ,  $p < .001$ ,  $r = .22$ ,  $M's = 112.86$  and  $95.28$ , respectively. This is not surprising, as several of the items on the RWA scale reference the Christian Bible. There were no differences between Christians and Non-Christians in SDO,  $t(328) = .70$ , ns.

Scenario ordering effects. In order to determine any effects of the ordering of the three scenarios, a series of 2 (Scenario: gay rights demonstration first, Supreme Court decision scenario first) X 2 (Condition: A, B) X 2 (RWA: Low, High) X 2 (SDO: Low, High) ANOVAs were performed on each of the dependent measures from all three

scenarios. All interactions between scenario order and the other variables were non-significant, all  $F$ 's  $< 3.00$ , all  $p$ 's  $> .09$ .

#### Double Standards in the School Prayer Scenario

It is hypothesized that Altemeyer's (1996) finding of asymmetrical conservative bias will be replicated in the school prayer scenario. Specifically, Low RWAs should oppose the Christian school prayer law and Muslim school prayer law equally. However, High RWAs should think that the Christian school prayer law is a better law than the Muslim school prayer law.

Judgment on the proposed law. After participants read the scenario, they indicated whether they thought this was a good law or a bad law. Table 2 presents the frequencies and percentages for Low and High RWAs' judgments of the proposed law. The asymmetrical conservative bias hypothesis was confirmed. Regardless of religious target group (Christian or Muslim), every single Low RWA participant determined that laws mandating school prayer were bad laws. Among High RWAs, 22% believed the Christian prayer law was a good law, while only 12% believed the Muslim prayer law was a good law. Thus, Altemeyer's (1996) original study was replicated using the same script and dependent measure. These differences were significant for judgments of Muslim school prayer ( $X^2 = 6.30$ ,  $p = .01$ ) as well as for judgments of Christian school prayer ( $X^2 = 8.93$ ,  $p < .001$ ).

Support for the proposed law. In addition to the above dependent variable, participants responded to three items measuring their general support for the law. These items were aggregated to form a composite support score (Cronbach's  $\alpha = .83$ ). A 2 (Religious target group: Christian, Muslim)  $\times$  2 (RWA: Low, High) ANOVA was

performed on this composite measure. This analysis revealed a main effect for RWA,  $F(1,176)= 76.48, p<.001, r= .55$ . Regardless of the religious target group, High RWAs more strongly supported school prayer in public schools than Low RWAs,  $M's= 8.41$  and  $3.97$ , respectively. There was no main effect for religious target group,  $F(1,176)= 1.35, ns$ .

The results of the Religious target group X RWA interaction indicate asymmetrical conservative bias,  $F(1,176)= 6.88, p<.01, r= .19$ . Table 3 presents the results of a set of contrasts comparing these means. The results confirmed the asymmetrical conservative bias hypothesis. High RWAs more strongly supported Christian school prayer than Muslim school prayer,  $t(176)= 2.68, p<.001, r= .20, M's= 9.17$  and  $7.30$ , respectively. Low RWAs did not differ in their support for Muslim or Christian school prayer,  $t(176)= 1.03, ns, M's= 4.27$  and  $3.55$ , respectively (see Table 4 for the ANOVA table for this dependent variable).

Gender effects. A 2 (Gender: male, female) X 2 (Religious target group: Christian, Muslim) X 2 (RWA: Low, High) ANOVA revealed several significant gender interactions, including a gender X religious target group interaction,  $F(1,166)= 4.02, p<.05, r= .15$ , on support for the proposed law. Contrasts revealed that whereas women did not differ in their support for Christian and Muslim school prayer,  $t(166)= .94, ns, M's= 6.59$  and  $6.00$ , respectively, men more strongly supported Christian school prayer than Muslim school prayer,  $t(166)= 3.35, p<.001, r= .25, M's= 7.28$  and  $4.67$ , respectively.

There was also a significant gender X RWA interaction,  $F(1,166)= 4.74, p<.05, r= .17$ . Contrasts revealed that regardless of religious target group, High RWA men more

strongly supported school prayer than Low RWA men,  $t(166)=4.49$ ,  $p<.001$ ,  $r=.33$ ,  $M's=7.71$  and  $4.21$ , respectively. Likewise, High RWA women more strongly supported school prayer than Low RWA women,  $t(166)=8.35$ ,  $p<.001$ ,  $r=.54$ ,  $M's=9.02$  and  $3.80$ , respectively.

A three way interaction was also revealed,  $F(1,166)=6.07$ ,  $p<.05$ ,  $r=.19$ . Table 5 presents these results. The most striking finding from these contrasts is among the High RWAs: there was no difference in High RWA women's support for Christian or Muslim school prayer,  $t(166)=.11$ , ns,  $M's=9.06$  and  $8.95$ , respectively. However, High RWA men more strongly supported Christian school prayer than Muslim school prayer,  $t(166)=4.16$ ,  $p<.001$ ,  $r=.31$ ,  $M's=9.45$  and  $4.77$ , respectively. There was slightly more support for Muslim school prayer than Christian school prayer among Low RWA men and women, but these differences did not approach significance,  $t's<.86$ . These results suggest that the observed asymmetrical conservative bias was driven by the male participants.

Religion effects. A 2 (Religious affiliation: Christian, Non-Christian) X 2 (RWA: Low, High) X 2 (Religious target group: Christian, Muslim) ANOVA revealed a religious affiliation X religious target group interaction,  $F(1,164)=9.44$ ,  $p<.01$ ,  $r=.23$ . Contrasts revealed that while Non-Christians offered slightly more support for Muslim school prayer than Christian school prayer,  $t(164)=1.38$ ,  $p<.10$ ,  $r=.11$ ,  $M's=5.61$  and  $4.58$ , respectively, Christians more strongly supported Christian school prayer than Muslim school prayer,  $t(164)=4.11$ ,  $p<.001$ ,  $r=.30$ ,  $M's=8.08$  and  $5.37$ , respectively.

This relationship seemed to be influenced by RWA, as evidenced by a significant religious affiliation X RWA X religious target group interaction,  $F(1,164)=9.75$ ,  $p<.01$ ,

$r = .24$ . Table 6 presents the results from this three-way interaction. The most interesting finding from these contrasts is the large discrepancies between Christian and Non-Christian High RWAs: High RWA Christians more strongly supported Christian school prayer than Muslim school prayer,  $t(164) = 4.60$ ,  $p < .001$ ,  $r = .34$ ,  $M's = 10.07$  and  $6.00$ , respectively, whereas High RWA Non-Christians more strongly supported Muslim school prayer than Christian school prayer,  $t(164) = 1.86$ ,  $p < .05$ ,  $r = .14$ ,  $M's = 9.07$  and  $6.75$ , respectively.

Summary of results. Altemeyer's (1996) finding of asymmetrical conservative bias was clearly replicated. Whereas Low RWAs equally opposed Christian and Muslim school prayer, High RWAs more strongly supported Christian school prayer than Muslim school prayer.

The interactions between gender and religious affiliation provide further clarification of the patterns of bias. High RWA men displayed biases in favor of Christian school prayer, while High RWA women did not. Low RWA Christians and Non-Christians showed a slight favoring of Muslim school prayer, while High RWA Christians favored Christian school prayer, and High RWA Non-Christians favored Muslim school prayer. These results suggest a relationship between RWA and ingroup favoritism.

These results are also consistent with the predictions generated by IOC. A circumstance that was ideologically acceptable to High RWAs resulted in double standards among High RWAs. A circumstance that was ideologically objectionable to Low RWAs resulted in no double standards in social cognition. However, they are also

consistent with the predictions generated by RoR, as the bias emerged solely among the High RWAs.

#### Double Standards in the Gay Rights Demonstration Scenario

It is hypothesized that Altemeyer's (1996) finding of asymmetrical conservative bias will be replicated in the gay rights demonstration scenario. Specifically, Low RWAs should not differ in the prison sentences they give the pro-gay and anti-gay demonstration leaders. However, High RWAs should give a longer prison sentence to the pro-gay demonstration leader than to the anti-gay demonstration leader.

Length of prison sentence. After participants read the scenario, they were instructed to sentence the target to a prison term ranging from 0 to 18 months. A 2 (Target: pro-gay, anti-gay) X 2 (RWA: Low, High) ANOVA revealed a main effect for RWA,  $F(1, 164) = 4.83$ ,  $p < .05$ ,  $r = .17$ . Regardless of the target's views, Low RWAs suggested longer prison sentences than High RWAs,  $M's = 10.39$  and  $7.80$ , respectively. There was also a main effect for condition,  $F(1, 164) = 13.43$ ,  $p < .001$ ,  $r = .27$ . Regardless of RWA, the anti-gay target received a longer prison sentence than the pro-gay target,  $M's = 10.96$  and  $7.20$ , respectively.

Contrary to the hypothesis, the results of the Target X RWA interaction indicated asymmetrical liberal bias,  $F(1, 164) = 12.01$ ,  $p = .001$ ,  $r = .26$ . Table 7 presents the results of a set of contrasts comparing these means. No difference emerged between High RWAs' sentences for the pro-gay and anti-gay target,  $t(164) = .14$ , ns,  $M's = 7.72$  and  $7.90$ , respectively. However, Low RWAs gave the anti-gay target a longer sentence than the pro-gay target,  $t(164) = 5.09$ ,  $p < .001$ ,  $r = .37$ ,  $M's = 13.16$  and  $6.54$ , respectively (see Table 8 for the ANOVA table for this dependent variable).

Support for the demonstration leader. In addition to the prison sentence dependent variable, participants responded to three items assessing their general support for the target on a 6-point Likert scale (1= strongly disagree; 6= strongly agree). These three items were aggregated to form a composite measure of support for the target (Cronbach's  $\alpha = .77$ ). A 2 (Target: pro-gay, anti-gay) X 2 (RWA: Low, High) ANOVA was performed on this composite dependent variable. This analysis revealed a main effect for condition,  $F(1, 175) = 13.59, p < .001, r = .27$ . Regardless of RWA, the pro-gay leader received more support than the anti-gay leader,  $M's = 8.75$  and  $6.43$ , respectively. There was no main effect for RWA,  $F(1, 175) = 1.22, ns$ .

Contrary to the hypothesis, the results of the Target X RWA interaction indicated an asymmetrical liberal bias,  $F(1, 175) = 13.76, p < .001, r = .27$ . Table 7 presents the results of a set of contrasts comparing these means. No difference emerged between High RWAs' support for the target,  $t(175) = .02, ns, M's = 8.09$  and  $8.11$ , respectively. However, Low RWAs gave more support to the pro-gay target than the anti-gay target,  $t(175) = 5.24, p < .001, r = .37, M's = 9.66$  and  $5.21$ , respectively (see Table 9 for the ANOVA table for this dependent variable).

Gender effects. A 2 (Gender: male, female) X 2 (Target: pro-gay, anti-gay) X 2 (RWA: Low, High) ANOVA was performed on both dependent variables. Analyses indicated a significant target X gender interaction on the number of months sentenced,  $F(1, 154) = 9.35, p < .01, r = .24$ , as well as on the composite dependent measure,  $F(1, 165) = 7.61, p < .01, r = .21$ . Contrasts revealed that whereas men did not differ in the suggested prison sentences for the anti-gay or pro-gay targets,  $t(154) = .55, ns, M's = 9.18$  and  $8.37$ ,



respectively, women gave longer sentences to the anti-gay than pro-gay target,  $t(154)=5.32$ ,  $p<.001$ ,  $r=.39$ ,  $M's=12.68$  and  $6.46$ , respectively.

Likewise, contrasts revealed that whereas men did not differ in their support for the pro-gay or anti-gay targets,  $t(165)=.55$ , ns,  $M's=7.40$  and  $6.88$ , respectively, women more strongly supported the pro-gay than anti-gay target,  $t(165)=4.82$ ,  $p<.001$ ,  $r=.35$ ,  $M's=9.71$  and  $6.02$ , respectively. No other effects were significant, all  $F's < 2.06$ , all  $p's > .15$ .

Religion effects. There were no interactions between religious affiliation (Christian, Non-Christian), RWA (Low; High), and the target (pro-gay, anti-gay) on either of the dependent measures, all  $F's < 1.87$ , all  $p's > .17$ .

Summary of findings. Across two different dependent variables, a pattern of asymmetrical liberal bias emerged in this scenario. High RWAs were quite even-handed in their sentencing of the targets, while Low RWAs gave harsher punishments to the anti-gay target than to the pro-gay target. This pattern of bias is inconsistent both with Altemeyer's (1988) original findings, the rigidity-of-the-right hypothesis, and ideologically objectionable circumstances theory. According to IOC, violence in the name of an authority is ideologically objectionable to Low RWAs, but ideologically acceptable to High RWAs. Thus, Low RWAs should not display a double standard, but High RWAs should favor the pro-gay over the anti-gay demonstration leader. In fact, the opposite was true: Low RWAs gave more support to an authoritarian leader who supported their own ideological beliefs than to an authoritarian leader who opposed their ideological beliefs. High RWAs did not commit this double standard. The gender effects suggest that this pattern was most pronounced among female participants.

Another surprising finding in this study was the relative harshness of the punishments that Low RWAs leveled against the anti-gay leader. Typically, high scores on authoritarianism are associated with increased punitive attitudes (Altemeyer, 1996). These results may be due not only to the ideological leanings of Low RWAs (who support the rights of homosexuals) but can also be interpreted in light of hate crime legislation. Hate crime laws provide harsher punishments for illegal behavior that targets particular social groups. The Low RWAs in this study may be mindful of such legislation in their reactions to the anti-gay leader, who could certainly be considered as engaging in a hate crime.

#### Double Standards in the College Admissions Scenario

Altemeyer (1996) finds no evidence of double standards among either Low or High RWAs on the issue of affirmative action. However, it is presently hypothesized that attitudes regarding affirmative action are related to SDO, not RWA. Therefore, the following analyses test the hypothesis that RWA will not be related to double standards on the issue of affirmative action, but SDO will. Symmetrical bias is hypothesized for the present analyses. Specifically, Low SDOs should offer more support for a Supreme Court decision upholding race-based admissions policies than for a decision upholding legacy-based admissions policies. Conversely, High SDOs should offer more support for the legacy-based decision than the race-based decision.

RWA and support for the Court's decision. After participants read the scenario, they responded to three items assessing their general support for the Supreme Court decision on a 6-point Likert scale (1= strongly disagree; 6= strongly agree). These three

items were aggregated to form a composite measure of support for the target (Cronbach's  $\alpha = .88$ ).

Consistent with Altemeyer's (1996) earlier finding and the current hypothesis, a 2 (Policy: race-based, legacy-based) X 2 (RWA: Low, High) ANOVA revealed no significant main effect for the policy,  $F(1,174) = .34$ , ns, no main effect for RWA,  $F(1,174) = 1.09$ , ns, and no significant interaction between the policy and RWA,  $F(1,174) = .26$ , ns.

SDO and support for the Court's decision. A 2 (Policy: race-based, legacy-based) X 2 (SDO: Low, High) ANOVA revealed no significant main effects for policy,  $F(1,178) = .17$ , ns, or SDO,  $F(1,178) = .02$ , ns. However, the symmetrical bias hypothesis for SDO was confirmed by the Policy X SDO interaction,  $F(1,178) = 7.55$ ,  $p < .01$ ,  $r = .20$ . Table 10 presents the results of a set of contrasts comparing these means. Low SDOs more strongly supported the race-based than the legacy-based admissions policies,  $t(178) = 2.19$ ,  $p < .05$ ,  $r = .16$ ,  $M's = 9.51$  and  $7.59$ , respectively, while High SDOs offered marginally more support for the legacy-based than the race-based admissions policies,  $t(178) = 1.68$ ,  $p < .05$ ,  $r = .12$ ,  $M's = 9.35$  and  $7.94$ , respectively (see Table 11 for the ANOVA table for this dependent variable).

Gender effects. A 2 (Gender: male, female) X 2 (Policy: race-based, legacy-based) X 2 (RWA: Low, High) ANOVA revealed no interactions with gender, all  $F's < 2.32$ , all  $p's > .13$ . A 2 (Gender: male, female) X 2 (Policy: race-based, legacy-based) X 2 (SDO: Low, High) ANOVA revealed a significant Gender X Policy interaction,  $F(1,170) = 5.12$ ,  $p < .05$ ,  $r = .17$ . Contrasts revealed that men more strongly supported the legacy-based policy than the race-based policy,  $t(170) = 1.87$ ,  $p < .05$ ,  $r = .14$ ,  $M's = 9.58$

and 7.83, respectively. Conversely, women more strongly supported the race-based policy than the legacy-based policy,  $t(170) = 2.10$ ,  $p < .05$ ,  $r = .16$ ,  $M's = 9.14$  and  $7.42$ , respectively. This is consistent with findings that women tend to be hierarchy attenuating, while men tend to be hierarchy enhancing (Sidanius & Pratto, 1999). No other effects were significant, all  $F's < .03$ , all  $p's > .87$ .

Religion effects. There were no interactions between religious affiliation (Christian, Non-Christian) and policy (race-based, legacy-based), RWA, or SDO, on the composite dependent measure, all  $F's < 1.91$ , all  $p's > .17$ .

Summary of findings. The results offer strong confirmation for the hypothesis that double standards on the issue of affirmative action are related to SDO, not RWA. Altemeyer (1996) failed in his attempt to find liberal biases in a scenario regarding the issue of affirmative action not because liberals are not biased on this issue, but because Altemeyer used RWA as his predictor instead SDO, which should predict attitudes toward affirmative action program (Haley & Sidanius, 2006).

More importantly, these results offer support for ideologically objectionable circumstances theory, but no support for the rigidity-of-the-right hypothesis. Neither Low nor High SDOs were placed in a circumstance that was ideologically objectionable, enabling double standards to emerge among both groups.

#### Questionnaire Ordering Effects

In order to determine any effects of the order of the scenarios and the RWA/SDO scales, a series of 2 (Questionnaire order: scenarios first, scales first) X 2 (Condition: A, B) X 2 (RWA: Low, High) X 2 (SDO: Low, High) ANOVAs were performed on each of the dependent measures. Only significant results are reported below.

On the composite dependent variable measuring support for the Supreme Court decision, there was a significant interaction between questionnaire order and condition,  $F(1,80) = 3.95$ ,  $p = .05$ ,  $r = .22$ . Contrasts revealed that when the scales were presented first, participants more strongly supported the race-based than legacy-based decision,  $t(80) = 1.87$ ,  $p < .05$ ,  $r = .20$ ,  $M's = 8.68$  and  $6.61$ , respectively. However, when the scenarios were presented first, there was no difference in support for the race-based and legacy-based decisions,  $t(80) = .47$ , ns,  $M's = 7.70$  and  $8.17$ , respectively.

On the composite dependent variable measuring support for the gay rights demonstration target, there was a significant interaction between questionnaire order and condition,  $F(1,82) = 7.25$ ,  $p < .01$ ,  $r = .28$ . Contrasts revealed that when the scales were presented first, there was greater support for the pro-gay than the anti-gay target,  $t(82) = 4.16$ ,  $p < .001$ ,  $r = .42$ ,  $M's = 10.43$  and  $5.87$ , respectively. When the scenarios were presented first, the difference between support for the pro-gay and the anti-gay target was only marginally significant,  $t(82) = 1.34$ ,  $p < .10$ ,  $r = .15$ ,  $M's = 7.53$  and  $6.00$ , respectively.

On the other dependent variable for the length of sentence in the gay rights demonstration scenario, there was a significant interaction between questionnaire order and condition,  $F(1,76) = 7.07$ ,  $p = .01$ ,  $r = .29$ . When the scales were presented first, the anti-gay target received a longer sentence than the pro-gay target,  $t(76) = 3.09$ ,  $p < .001$ ,  $r = .33$ ,  $M's = 11.82$  and  $6.31$ , respectively. When the scenarios were presented first, the difference in sentencing between the anti-gay and the pro-gay target was not significant,  $t(76) = .97$ , ns,  $M's = 9.87$  and  $8.30$ , respectively.

On the composite dependent variable measuring support for the school prayer law, there was a significant interaction between questionnaire order and condition,

$F(1,82)= 6.24, p<.05, r= .26$ . When the scales were presented first, there was no difference in support for Christian school prayer and Muslim school prayer,  $t(82)= .58$ , ns,  $M's= 5.57$  and  $6.09$ , respectively. However, when the scenarios were first, there was more support for Christian school prayer than Muslim school prayer,  $t(82)= 4.05, p<.001, r= .41, M's= 7.33$  and  $4.00$ , respectively.

There was only one significant interaction between order and either of the ideology measures (a questionnaire order X condition X SDO interaction on the composite school prayer dependent variable). However, because this was the only significant effect, and because the N in each of these cases is so low, the results are not interpretable, and will not be discussed further.

Although not integral to any a priori hypotheses, these interactions between questionnaire order and condition indicate that participants, regardless of RWA or SDO levels, provided more “liberal” responses to the scenarios when the RWA and SDO scales were presented before the scenarios than when the scenarios were presented before the two scales. One possible explanation is that the RWA and SDO scales may have had reactance effects: the extreme nature of several of the items on the RWA and SDO scales may have primed participants to respond in a more liberal manner to the scenarios.

### Discussion

The primary objectives of Study 1 were to replicate findings of asymmetrical conservative bias among High RWAs in the work of Bob Altemeyer (1988; 1996), as well as to test both the rigidity-of-the-right hypothesis (RoR) and ideologically objectionable circumstances (IOC) theory. Altemeyer’s work suggests that whereas High RWAs exhibit double standards in their reasoning about politically-relevant information,

Low RWAs do not engage such biases. Two of the three scenarios in Study 1 (i.e., school prayer; gay rights demonstration) were used in Altemeyer's original work (1988; 1996). The third scenario (i.e., college admissions) attempted to identify symmetrical biases in political social cognition by replicating a failed attempt by Altemeyer (1996) to find Low RWA bias.

The results of Study 1 provide general support for the present hypotheses. As predicted, asymmetrical conservative bias was revealed in the school prayer scenario: Low RWAs equally opposed mandatory school prayer, while High RWAs were more supportive of Christian school prayer than Muslim school prayer. The present hypothesis was also confirmed in the Supreme Court scenario: symmetrical bias was observed by using SDO as a predictor, not RWA. These results suggest that Altemeyer's (1996) inability to detect liberal bias in his original study was not because liberals are not biased, but because he used the wrong predictor to identify such bias.

However, the results from the gay rights demonstration scenario were inconsistent with the hypothesis. Although asymmetrical conservative bias was predicted, asymmetrical liberal bias was observed on both dependent variables. This is quite a surprising result, as Altemeyer (1988) found asymmetrical conservative bias on this exact same scenario using one of the same dependent measures. In fact, Altemeyer continues to present the findings from his study using this scenario as evidence of the rigidity-of-the-right hypothesis: "Highs simply have a big fat double standard about homosexuals and punish the person as well as the crime. A jury composed of High RWAs would hardly administer 'blind justice'" (Altemeyer, 2007, p. 83).

There are several possible explanations for these results. First, in Altemeyer's (1988) original study, although the differences between Low RWAs' sentences for the pro-gay and anti-gay targets were not significant, they were in the expected direction, in that Low RWAs gave the anti-gay target a longer prison sentence than the pro-gay target. This suggests a tendency, however weak, for Low RWAs to favor the pro-gay target.

Second, Altemeyer (1996) acknowledges that double standards among Low RWAs were found in this scenario in a 1990 study at the University of Pittsburgh (although he does not indicate whether or not double standards were observed among High RWAs in this replication). However, Altemeyer (1996) questions the validity of these results because the sample was disproportionately female. Considering the weak Low RWA bias effects in his original study, the results from the Pittsburgh study, and the results of the present study, it appears that offering this scenario as evidence of asymmetrical conservative bias may not be appropriate.

Another possible explanation for the asymmetrical liberal bias results is that attitudes towards homosexuals and the stigma surrounding anti-gay attitudes have changed since Altemeyer conducted his original study in 1985. According to Gallup Polls, whereas 59% of Americans supported equal rights for homosexuals in 1982, this proportion had increased to 86% in 2002 (Avery et al., 2007).

Finally, another possible explanation is that perhaps the High RWAs in the present sample simply don't care as much about the issue of homosexual rights as much as Low RWAs. Along with various measures of political attitudes collected in Study 1 were attitudes on the legalization of same-sex marriage. Participants responded to this item on a 7-point Likert scale (with higher scores indicating more support for same-sex



marriage). On average, Low RWAs offered decisively strong support for same-sex marriage ( $M = 6.71$ ,  $s = .68$ ). However, whereas the average High RWAs' response was below the midpoint of 3.50 ( $M = 3.36$ ,  $s = 2.09$ ) this is a fairly moderate average attitude on this issue. Thus, the anomalous finding of asymmetrical liberal bias may be due to the fact that High RWAs simply are not as passionate as Low RWAs on the issue of homosexual rights, at least in the present sample.

Two important conclusions can be drawn from Study 1. First, IOC received generally strong confirmation in two of the three scenarios (school prayer; college admissions), while the evidence only supported RoR in one scenario. In the one scenario that did provide support for RoR (e.g., school prayer scenario), IOC can also be offered as an alternative explanation. The results of the gay rights demonstration scenario were inconsistent with the predictions of both RoR and IOC.

Second, and most theoretically important, liberal bias was not elusive. The rigidity-of-the-right hypothesis predicts overwhelming rigidity, inflexibility and bias on the political right. However, asymmetrical liberal bias in the gay rights demonstration scenario and symmetrical bias in the Supreme Court decision scenario indicate that political liberals may be as biased or even more biased than political conservatives. Ideological bias (at least in the form of double standards) may not be the hallmark of conservative social cognition as Altemeyer and others suggest (Altemeyer, 1988; 1996; 1998; Jost et al., 2003; Jost, 2006).

## Study 2

The objectives of Study 1 were to replicate Altemeyer's findings and to demonstrate that ideologically objectionable circumstances theory can be an alternative

explanation to the rigidity-of-the-right for these results. However, the results of Study 1 cannot decisively support IOC because RoR can still be considered an alternative explanation, particularly for the school prayer scenario, for which asymmetrical conservative bias was observed. Therefore, the purpose of Study 2 is to test IOC's predictions regarding the same scenarios used in Study 1, but to alter the original scenarios in a way that will test IOC's predictions regarding what patterns of ideological bias will emerge in particular situations.

**School prayer space scenario.** In the school prayer scenario in Study 2, the liberal ideologically objectionable circumstance of mandatory school prayer (Study 1) is eliminated. Instead, the proposed law would put aside physical space in American<sup>1</sup> public schools (Christian or Muslim, varied in a between subjects design). Giving opportunities for others to express their religious beliefs, as opposed to imposing religious beliefs on others, should not be ideologically objectionable to political liberals. Thus, because the circumstances in this scenario are ideologically acceptable to political liberals, ideological bias can emerge. In this particular case, because Christians represent the established social order, political liberals should more strongly support Muslim school prayer space than Christian school prayer space.

To political conservatives, there is nothing necessarily ideologically objectionable about these circumstances. In fact, conservatives tend to support prayer in public schools (Stenner, 2005). Thus, because this circumstance is ideologically acceptable to conservatives, ideological bias can emerge. In this case, conservatives should more strongly support Christian school prayer space than Muslim school prayer space for a variety of reasons (e.g., ethnocentrism; support for social order).

Thus, in the school prayer space scenario, ideologically objectionable circumstances theory would predict symmetrical bias. This is in stark contrast to the predictions generated by RoR. According to RoR, conservatives are more rigid and dogmatic, and thus more prone to biased social cognition. Therefore, liberals should be more even-handed and equally support Christian and Muslim school prayer space, while conservatives should more strongly support Christian school prayer space than Muslim school prayer space. Thus, in this case, IOC and RoR generate different hypotheses about the same scenario.

Gay rights counter-demonstration scenario. In the gay rights counter-demonstration scenario in Study 2, the liberal ideologically objectionable circumstance of an authoritarian leader inciting violence (Study 1) is eliminated. In this scenario, the counter-demonstrators are involved in a melee with police, and are arrested for inciting a riot. The participant must suggest a sentence<sup>2</sup> for the counter-demonstrators. In addition to removing the aspect of the authoritarian leader, this scenario was designed to be purposefully ambiguous. The scenario was constructed so that it would be unclear whether it was the actions of the police or the counter-demonstrators that precipitated the violent conflict. Thus, there is nothing ideologically objectionable to these circumstances for liberals, and their ideological biases in favor of the pro-gay counter-demonstrators should emerge. To political conservatives, there is nothing necessarily ideologically objectionable about these circumstances, so therefore ideological biases can emerge. Specifically, conservatives should more strongly support the anti-gay counter-demonstrators than the pro-gay counter-demonstrators (and conversely, more strongly punish the pro-gay counter-demonstrators than the anti-gay counter-demonstrators).

Thus, in the gay rights counter-demonstration scenario, ideologically objectionable circumstances theory would predict symmetrical bias. This is in stark contrast to the predictions generated by RoR. According to RoR, conservatives are more rigid and dogmatic, and thus more prone to biased social cognition. Therefore, liberals should be more even-handed and equally support the pro-gay and anti-gay counter-demonstrators, while conservatives should more strongly support the anti-gay than pro-gay counter-demonstrators. Thus, in this case, IOC and RoR generate different hypotheses about the same scenario.

POW mistreatment scenario. To provide further tests of IOC, a novel scenario was constructed for which asymmetrical conservative bias was predicted to emerge. Participants read about the mistreatment of a prison of war (an American soldier or Iraqi insurgent, varied in a between-subjects design). In this scenario, the mistreatment of another human being is considered ideologically objectionable to political liberals (particularly Low SDOs) because SDO is negatively correlated with values such as benevolence, universalism, and social justice (Altemeyer, 1998; Cohrs et al., 2005; Duriez & van Hiel, 2002; McFarland & Adelson, 1996). Therefore, ideological bias should not emerge, and political liberals should be equally opposed to the mistreatment of the American soldier and Iraqi insurgent.

In regards to conservatives, violence against perceived enemies is ideologically acceptable (Feldman, 2003). Therefore, ideological bias should emerge, and political conservatives should more strongly support the mistreatment of an Iraqi insurgent than an American soldier.

Thus, in the POW mistreatment scenario, ideologically objectionable circumstances theory would predict asymmetrical conservative bias. This is the same pattern of bias predicted by RoR; however, IOC does not assume that this bias is a result of the social-cognitive characteristics particular to political conservatives. Rather, this pattern of bias is due to the circumstances involved in the scenario, which are ideologically objectionable to political liberals, but not to political conservatives.

In sum, Study 2 seeks to accomplish several goals. First is an attempt to alter Altemeyer's (1988; 1996) original scenarios so that symmetrical ideological bias can emerge consistently with the predictions of IOC. This is accomplished by eliminating liberal ideologically objectionable circumstances and replacing them with circumstances that are ideologically acceptable to liberals and conservatives. In addition, the POW mistreatment scenario is an attempt to confirm IOC's predictions of when asymmetrical conservative bias will emerge in a novel scenario. Confirmation of the hypotheses should demonstrate that not only can IOC be used to generate hypotheses about ideological bias, but that it serves as an alternative to the rigidity-of-the-right hypothesis for patterns of ideological bias.

## Method

### Participants

354 Rutgers University students enrolled in a general psychology undergraduate course during the Fall 2007 semester completed the questionnaire packet for course credit (162 males, 192 females; 137 White, 215 Non-White, 2 unreported; age  $M = 18$  years).

### Materials and Procedures

Except for the content of the three scenarios, the procedures and materials for Study 2 were identical to those from Study 1. Each scenario is described below.

School prayer space scenario. Participants read about a proposed law that would place aside physical space for religious prayer in American public schools (Christian prayer or Muslim prayer, varied in a between-subjects design) and responded to three items measuring support for this law (see Appendix H).

Gay rights counter-demonstration scenario. Participants read about a melee that occurred between police officers and counter-demonstrators at a political demonstration. The position of the counter-demonstrators (pro-gay, anti-gay) was manipulated in a between-subjects design. The counter-demonstrators were arrested and found guilty of inciting a riot. Participants were asked to suggest a prison sentence for the counter-demonstrators (on a range from 0 to 30 days in prison). Participants also responded to three items measuring their general support for the counter-demonstrators (see IX).

POW mistreatment scenario. Participants read about the mistreatment of a prisoner of war (an American soldier or Iraqi insurgent, varied in a between-subjects design) and responded to three dependent measures assessing their general support for the treatment of the POW (see Appendix J).

## Results

### Preliminary Analyses

Characteristics of the RWA scale. The RWA scale has a possible range of 30 to 270, with an absolute middle of this distribution of 150. In this sample ( $N = 341$ ), scores ranged from 38-216 ( $M = 116.69$ ,  $s = 36.94$ ). Cronbach's alpha was .92, indicating strong internal reliability. Low RWAs were all those participants whose RWA score was less

than or equal to 90 (25.2%). High RWAs were those whose RWA scores were greater than or equal to 138 (24.6%).

Characteristics of SDO scale. The SDO scale has a possible range of 16 to 112, with an absolute middle of this distribution of 64. In this sample ( $N = 345$ ), scores ranged from 16 to 89 ( $M = 40.57$ ,  $s = 15.59$ ). Cronbach's alpha was .87, indicating strong internal reliability. Low SDOs were all those participants whose SDO score was less than or equal to 27 (22.9%). High SDOs were those whose SDO scores were greater than or equal to 52 (23.2%).

Correlations between constructs. Self-report conservatism was correlated with both RWA,  $r(254) = .50$ ,  $p < .001$ , and SDO,  $r(259) = .16$ ,  $p = .01$ . RWA and SDO were also correlated,  $r(332) = .13$ ,  $p < .05$ . As expected, both RWA and SDO are related to political conservatism, but they each explain different aspects of political conservatism.

Gender differences. There were no gender differences in RWA,  $t(339) = .20$ , ns. Men were higher in SDO than women,  $t(343) = 5.26$ ,  $p < .001$ ,  $r = .27$ ,  $M's = 45.25$  and  $36.70$ , respectively. These results are consistent with the findings of Study 1.

Race differences. Non-Whites were higher in RWA than Whites,  $t(337) = 3.27$ ,  $p = .001$ ,  $r = .17$ ,  $M's = 122.29$  and  $109.13$ , respectively. Whites were higher in SDO than Non-Whites,  $t(341) = 3.26$ ,  $p = .001$ ,  $r = .17$ ,  $M's = 44.06$  and  $38.51$ , respectively. These results are consistent with the findings of Study 1.

A series of 2 (Race: White, Non-White) X 2 (Condition: A, B) X 2 (RWA: Low, High) X 2 (SDO: Low, High) ANOVAs were performed on each of the dependent variables for each scenario. There were only two significant interactions between race and either RWA or SDO, both  $p's < .02$ . However, there were no interactions between race

and Condition, and therefore no results that bear on any of the hypotheses. These results will not be discussed further.

Religion differences. Christians were higher in RWA than Non-Christians,  $t(333) = 4.99$ ,  $p < .001$ ,  $r = .26$ ,  $M's = 124.71$  and  $104.81$ , respectively. There were no differences between Christians and Non-Christians in SDO,  $t(338) = .37$ , ns. These results are consistent with the findings of Study 1.

Scenario ordering effects. A series of 2 (Scenario order: gay rights demonstration first, Supreme Court decision scenario first) X 2 (Condition: A, B) X 2 (RWA: Low, High) ANOVAs and 2 (Scenario: gay rights demonstration first, Supreme Court decision scenario first) X 2 (Condition: A, B) X 2 (SDO: Low, High) ANOVAs were conducted on the dependent variables for each scenario. There were no significant interactions between scenario order and any of the other variables on any of the dependent variables, all  $F's < 2.81$ , all  $p's > .10$ .

Questionnaire ordering effects. A series of 2 (Questionnaire order: scenarios first, scales first) X 2 (Condition: A, B) X 2 (RWA: Low, High) ANOVAs and 2 (Questionnaire order: scenarios first, scales first) X 2 (Condition: A, B) X 2 (SDO: Low, High) ANOVAs were conducted on the dependent variables for each scenario. There was one marginally significant interaction between questionnaire order and SDO on the number of days that the counter-demonstrators were sentenced,  $p = .07$ . However, this result is not theoretically relevant. Importantly, there were no significant interactions between questionnaire order, condition, SDO, or RWA, indicating that the ordering of the scales or scenarios did not matter in Study 2, all  $F's < 2.39$ , all  $p's > .12$ .

Double Standards in the School Prayer Space Scenario



It is hypothesized that symmetrical bias will be observed in the school prayer space scenario. Specifically, Low RWAs should more strongly support the Muslim school prayer space law than the Christian school prayer space law. Conversely, High RWAs should more strongly support the Christian school prayer space law than the Muslim school prayer space law.

Judgment of the proposed law. Participants responded to the dependent variable, “This is a good law and should be passed” on a 6-point Likert scale (1= Strongly disagree; 6= Strongly agree). From this measure, a dichotomous dependent variable was created, for which all responses greater than or equal to 4 were coded as “good law”, while responses less than or equal to 3 were coded as “bad law”. This treatment of the data was intended to present a dependent variable that approximated the dichotomous dependent variable analyzed in Study 1. Table 12 presents the frequencies and percentages for Low and High RWAs judgments of the proposed law. The symmetrical bias hypothesis was confirmed. Among Low RWAs, 18.4% believed the Christian school prayer space law was a good law, while 43.2% believed the Muslim school prayer space law was a good law. Among High RWAs, 58.3% believed the Christian school prayer space law was a good law, while 42.6% believed the Muslim school prayer space law was a good law. These differences were not significant for judgments of Muslim school prayer space ( $X^2 = .01$ , ns) but were significant for judgments of Christian school prayer space ( $X^2 = 14.51$ ,  $p < .001$ ).

Support for the proposed law. After participants read the scenario, they responded to three items assessing their general support for the school prayer space law on a 6-point Likert scale (1= strongly disagree; 6= strongly agree). These three items were aggregated

to form a composite measure of support for the law (Cronbach's  $\alpha = .92$ ). A 2 (Religious target group: Christian, Muslim) X 2 (RWA: Low High) ANOVA revealed a main effect for RWA,  $F(1,172) = 7.50$ ,  $p < .01$ ,  $r = .20$ . Regardless of religious target group, High RWAs more strongly supported the school prayer space law than Low RWAs,  $M's = 10.61$  and  $8.66$ , respectively. There was no main effect for religious target group,  $F(1,172) = .01$ , ns.

The results of the Religious target group X RWA interaction indicate a symmetrical bias,  $F(1,172) = 17.54$ ,  $p < .001$ ,  $r = .30$ . Table 13 presents the results of a set of contrasts comparing these means. Low RWAs more strongly supported the Muslim school prayer space law than for the Christian school prayer space law,  $t(172) = 2.85$ ,  $p < .001$ ,  $r = .21$ ,  $M's = 10.40$  and  $7.35$ , respectively. High RWAs more strongly supported the Christian school prayer space law than for the Muslim school prayer space law,  $t(172) = 3.06$ ,  $p < .001$ ,  $r = .23$ ,  $M's = 12.55$  and  $9.31$ , respectively (see Table 14 for the ANOVA table for this dependent variable).

Gender effects. A 2 (Gender: male, female) X 2 (Religious target group: Christian, Muslim) X 2 (RWA: Low, High) ANOVA was performed on the composite dependent variable. This analysis revealed no significant interactions between gender, the religious target group or RWA, all  $F's < .40$ , all  $p's > .53$ .

Religion effects. A 2 (Religious affiliation: Christian, Non-Christian) X 2 (Religious target group: Christian, Muslim) X 2 (RWA: Low, High) ANOVA performed on the composite measure revealed a significant interaction between religious affiliation and religious target group,  $F(1,164) = 9.53$ ,  $p < .01$ ,  $r = .23$ . Contrasts revealed that Christians more strongly supported the Christian school prayer space law than the

Muslim school prayer space law,  $t(164) = 2.68$ ,  $p < .001$ ,  $r = .20$ ,  $M's = 11.91$  and  $9.40$ , respectively. Non-Christians more strongly supported the Muslim school prayer space law than the Christian school prayer space law,  $t(164) = 2.86$ ,  $p < .001$ ,  $r = .22$ ,  $M's = 10.22$  and  $7.00$ , respectively. No other interactions with religious affiliation were statistically significant, all  $F's < 2.87$ , all  $p's > .09$ .

Summary of findings. The symmetrical ideological bias hypothesis was strongly confirmed in this scenario. Based on ideologically objectionable circumstances theory, it was argued that Altemeyer (1996) obtained asymmetrical conservative bias in his original school prayer study because liberals find the mandatory nature of school prayer ideologically objectionable. The replication of that study in Study 1 confirmed that prediction. Study 2 sought to alter the original scenario by eliminating the mandatory nature of school prayer. By doing so and creating circumstances that were ideologically acceptable to either liberals or conservatives, the hypothesized symmetrical ideological bias was observed: Low RWAs more strongly supported Muslim school prayer space than Christian school prayer space, while High RWAs more strongly supported Christian school prayer space than Muslim school prayer space. Thus, the results from Studies 1 and 2 on the issue of school prayer in public schools offer strong support for the predictions of IOC. Importantly, the predictions generated by RoR for this scenario were not confirmed in Study 2.

#### Double Standards in the Gay Rights Counter-Demonstration Scenario

It is hypothesized that symmetrical ideological bias will be observed in the gay rights counter-demonstration scenario. Specifically, Low RWAs should offer more support for the pro-gay counter-demonstrators than the anti-gay counter-demonstrators.

Conversely, High RWAs should offer more support for the anti-gay counter-demonstrators than the pro-gay counter-demonstrators.

Length of prison sentence. After participants read the scenario, they were instructed to sentence the targets to a prison term ranging from 0 to 30 days. A 2 (Targets: pro-gay, anti-gay) X 2 (RWA: Low, High) ANOVA revealed a main effect for the targets,  $F(1, 148) = 8.62$ ,  $p < .01$ ,  $r = .23$ . Regardless of RWA, a longer prison sentence was given to the anti-gay than pro-gay targets,  $M's = 13.36$  and  $9.23$ , respectively. There was no main effect for RWA,  $F(1, 148) = 1.13$ , ns.

Contrary to the hypothesis, the results of the Target X RWA interaction indicate asymmetrical liberal bias,  $F(1, 148) = 13.17$ ,  $p < .001$ ,  $r = .28$ . Table 15 presents the results of a set of contrasts comparing these means. No difference emerged between High RWAs' sentences for the anti-gay and pro-gay targets,  $t(148) = .49$ , ns,  $M's = 12.11$  and  $11.06$ , respectively. However, Low RWAs gave the anti-gay targets a longer sentence than the pro-gay targets,  $t(148) = 4.62$ ,  $p < .001$ ,  $r = .35$ ,  $M's = 14.96$  and  $5.00$ , respectively (see Table 16 for the ANOVA table for this dependent variable).

Support for the counter-demonstrators. Participants also responded to three items assessing their general support for the school prayer space law on a 6-point Likert scale (1= strongly disagree; 6= strongly agree). These three items were aggregated to form a composite measure of support for the law (Cronbach's  $\alpha = .67$ ). A 2 (Targets: pro-gay, anti-gay) X 2 (RWA: Low, High) ANOVA revealed a main effect for targets,  $F(1, 171) = 20.55$ ,  $p < .001$ ,  $r = .33$ . Regardless of RWA, participants more strongly supported the pro-gay than anti-gay counter-demonstrators,  $M's = 9.33$  and  $7.03$ , respectively. There was no main effect for RWA,  $F(1, 171) = .29$ , ns.

Contrary to the hypothesis, the results of the Target X RWA interaction indicate asymmetrical liberal bias,  $F(1,171)= 19.09$ ,  $p<.001$ ,  $r= .32$ . Table 15 presents the results of a set of contrasts comparing these means. No difference emerged between High RWAs' support for the pro-gay and anti-gay targets,  $t(171)= .11$ , ns,  $M's= 8.55$  and  $8.47$ , respectively. However, Low RWAs more strongly supported the pro-gay than anti-gay targets,  $t(171)= 6.23$ ,  $p<.001$ ,  $r= .43$ ,  $M's= 10.50$  and  $5.98$ , respectively (see Table 17 for the ANOVA table for this dependent variable).

Gender effects. A 2 (Gender: male, female) X 2 (Targets: pro-gay, anti-gay) X 2 (RWA: Low, High) ANOVA was performed on both dependent variables. The only significant gender interaction was between gender and targets on the composite measure,  $F(1,167)= 6.03$ ,  $p<.05$ ,  $r= .19$ . Contrasts revealed that men did not differ in their support for the pro-gay and anti-gay counter-demonstrators,  $t(167)= 1.02$ , ns,  $M's= 8.03$  and  $7.27$ , respectively. Women offered more support to the pro-gay than anti-gay counter-demonstrators,  $t(167)= 4.85$ ,  $p<.001$ ,  $r= .35$ ,  $M's= 10.05$  and  $6.73$ , respectively. All other gender interactions did not approach significance, all  $F's < 1.39$ , all  $p's > .24$ .

Religion effects. A 2 (Religious affiliation: Christian, Non-Christian) X 2 (Targets: pro-gay, anti-gay) X 2 (RWA: Low, High) ANOVA revealed a marginally significant religious affiliation X Targets X RWA interaction on the number of days sentenced,  $F(1,140)= 3.25$ ,  $p= .07$ ,  $r= .15$ . Table 18 presents the three-way interaction. Although the three-way interaction is marginally significant, it is nevertheless interesting.

Contrasts revealed that High RWA Christians more harshly punished the pro-gay than anti-gay targets,  $t(140)= 1.39$ ,  $p<.10$ ,  $r= .12$ ,  $M's= 12.23$  and  $8.77$ , respectively. Although High RWA Non-Christians tended to more harshly punish the anti-gay than

pro-gay targets, this difference did not reach significance,  $t(140) = 1.12$ ,  $p > .10$ ,  $r = .09$ ,  $M's = 16.10$  and  $11.25$ , respectively.

Contrasts revealed that Low RWAs, regardless of religious affiliation, more harshly punished the anti-gay than pro-gay targets (Low RWA Christians:  $t(140) = 3.79$ ,  $p < .001$ ,  $r = .30$ ,  $M's = 16.04$  and  $3.36$ , respectively; Low RWA Non-Christians:  $t(140) = 3.05$ ,  $p < .001$ ,  $r = .25$ ,  $M's = 15.05$  and  $6.11$ , respectively). All other interactions with religious affiliation interactions were not significant, all  $F's < 2.75$ , all  $p's > .10$ .

Summary of findings. The symmetrical bias hypothesis was disconfirmed in this scenario. As in Study 1, asymmetrical conservative bias was predicted, but asymmetrical liberal bias was observed. Specifically, Low RWAs more strongly supported the pro-gay than anti-gay targets, while High RWAs did not differ in their support for the two target groups.

Across Studies 1 and 2, the predictions of IOC (as well as RoR) failed for this scenario. According to the predictions generated by IOC, Study 1 should have revealed asymmetrical conservative bias because of the presence of an authoritarian leader who incites his followers to violence, which is ideologically objectionable to liberals. Study 2 should have revealed symmetrical bias because of the absence of this violent authoritarian leader, as well as the presence of a relatively ambiguous situation that was ideologically acceptable to liberals. In both studies, however, asymmetrical liberal bias was observed. The same possible explanations described in the discussion of Study 1 apply to this scenario (i.e., changing attitudes about gay rights, stigmatization of anti-gay attitudes). Another possible explanation was again supported: that High RWAs don't care as much about the issue of gay rights than do Low RWAs. As in Study 1, Low RWAs

offered decisively strong support for same-sex marriage ( $M = 6.28$ ,  $s = 1.55$ ). However, whereas the average High RWAs' response was below the midpoint of 3.50 ( $M = 3.04$ ,  $s = 2.18$ ), this average attitude on this issue is fairly moderate.

However, the interaction between religious affiliation, RWA and target group may qualify these findings. High RWA Christians exhibited a bias in favor of the anti-gay counter-demonstrators (while Low RWA Christians favor the pro-gay counter-demonstrators). Thus, the symmetrical bias hypothesis receives confirmation among Christian participants. This was not the case for Study 1: when the participant pool was limited to Christians, a strong asymmetrical liberal bias was still observed.

Although the predictions generated by IOC failed, the present results offer convincing evidence that liberal (i.e., Low RWA) bias is not elusive. In fact, liberal bias was observed without trying to even find it!

#### Double Standards in the POW Mistreatment Scenario

It is hypothesized that asymmetrical conservative bias will be observed in the POW mistreatment scenario. Specifically, liberals should equally oppose the mistreatment of an Iraqi insurgent and an American soldier. Conservatives should offer more support for the mistreatment of an Iraqi insurgent than of an American soldier.

RWA and POW mistreatment. After participants read the scenario, they responded to three items assessing their general support for the POW mistreatment on a 6-point Likert scale (1 = strongly disagree; 6 = strongly agree). These three items were aggregated to form a composite measure of support for the law (Cronbach's  $\alpha = .74$ ). The results of a 2 (Target: American, Iraq) X 2 (RWA: Low, High) ANOVA did not support the asymmetrical conservative bias hypothesis. There was no significant Target X

RWA interaction,  $F(1,171) = .46$ , ns, and also no main effect for RWA,  $F(1,171) = 1.29$ , ns. There was a main effect for target,  $F(1,171) = 13.77$ ,  $p < .001$ ,  $r = .27$ . Regardless of RWA, participants more strongly supported mistreatment of the Iraqi insurgent than of the American soldier,  $M's = 6.23$  and  $4.49$ , respectively.

SDO and POW mistreatment. The results of a 2 (Target: American, Iraq) X 2 (SDO: Low, High) ANOVA on the composite measure did not support the asymmetrical conservative bias hypothesis. There was no significant Target X SDO interaction,  $F(1,157) = 1.47$ , ns. There was a main effect for target,  $F(1,157) = 7.51$ ,  $p < .01$ ,  $r = .21$ . Regardless of RWA, participants more strongly supported mistreatment of the Iraqi insurgent than the American soldier,  $M's = 6.38$  and  $5.13$ , respectively. There was also a main effect for SDO,  $F(1,157) = 11.92$ ,  $p = .001$ ,  $r = .26$ . Regardless of the target, High SDOs more strongly supported POW mistreatment than Low SDOs,  $M's = 6.47$  and  $4.92$ , respectively.

Because of the strength of the effects of SDO on POW mistreatment judgments, this relationship was further explored. The participant pool was limited to only those participants who indicated that they were born in the United States. It was predicted that the asymmetrical conservative bias hypothesis might be revealed among these participants in a Target X SDO interaction, which was confirmed by a marginally significant interaction,  $F(1,131) = 2.76$ ,  $p = .10$ ,  $r = .14$ . Table 19 presents the results of a set of contrasts comparing these means. American-born Low SDOs did not differ in their opposition to the mistreatment of the Iraqi insurgent and American soldier,  $t(131) = .85$ , ns,  $M's = 5.21$  and  $4.62$ , respectively. However, American-born High SDOs more



strongly supported the mistreatment of the Iraqi insurgent than the American soldier,  $t(131) = 3.21$ ,  $p < .001$ ,  $r = .27$ ,  $M's = 7.70$  and  $5.47$ , respectively.

Gender effects. A 2 (Gender: male, female) X 2 (Target: American, Iraqi) X 2 (RWA: Low, High) ANOVA, as well as a 2 (Gender: male, female) X 2 (Target: American, Iraqi) X 2 (SDO: Low, High) ANOVA revealed no gender interactions on the dependent variable, all  $F's < .57$ , all  $p's > .45$ .

Religion effects. A 2 (Religious affiliation: Christian, Non-Christian) X 2 (Target: American, Iraqi) X 2 (RWA: Low, High) ANOVA revealed a significant religious affiliation X RWA interaction,  $F(1,163) = 5.57$ ,  $p < .05$ ,  $r = .18$ . Likewise, a 2 (Religion: Christian, Non-Christian) X 2 (Target: American, Iraqi) X 2 (SDO: Low, High) ANOVA revealed a religious affiliation X SDO interaction,  $F(1,149) = 4.39$ ,  $p < .05$ ,  $r = .17$ . However, these results do not bear on any hypotheses, and will not be discussed further. All other religion interactions were not significant, all  $F's < 1.04$ , all  $p's > .31$ .

Summary of findings. The asymmetrical conservative bias hypothesis was not confirmed while using RWA as the predictor, or by using SDO as the predictor with the entire data set. However, by using SDO as the predictor and limiting the participant pool to those born in the United States, the hypothesized asymmetrical conservative bias was observed. Specifically, American-born Low SDOs did not differ significantly in their opposition to the mistreatment of the American soldier and Iraqi insurgent. However, American-born High SDOs more strongly supported the mistreatment of the Iraqi insurgent than of the American soldier. These results are consistent with the predictions generated by IOC. Although the asymmetrical conservative bias results are consistent with predictions of RoR, they do indicate that biased social cognition is not generally

characteristic of conservative (High RWA; High SDO) thought. When all High RWAs and High SDOs were included in the analysis, asymmetrical conservative bias was not observed. The fact that asymmetrical conservative bias was observed only among American-born individuals indicates that ethnocentrism or nationalism may moderate these biased judgments.

### Discussion

The results of Study 2 offer relatively strong support for the hypotheses generated by ideologically objectionable circumstances theory. The predictions for the school prayer space scenario were confirmed: by eliminating the mandatory nature of school prayer in Altemeyer's (1996) original study, symmetrical bias was observed. Low RWAs more strongly supported the Muslim school prayer space law than the Christian school prayer space law, while High RWAs more strongly supported the Christian school prayer space law than the Muslim school prayer space law. These results, especially when considered with the results of Study 1 on the school prayer scenario, are more consistent with the predictions of IOC than RoR.

The asymmetrical conservative bias hypothesis was supported in the POW mistreatment scenario, but only when the participant pool was limited to American-born participants. American-born Low SDOs equally opposed the mistreatment of an Iraqi insurgent and an American soldier, while American-born High SDOs more strongly supported the mistreatment of an Iraqi insurgent than that of an American soldier. These results, as well as the results from the college admissions scenario in Study 1, suggest that IOC can be used to generate hypotheses about novel scenarios.

Although symmetrical bias was predicted, the gay rights counter-demonstration scenario resulted in asymmetrical liberal bias. However, symmetrical bias was observed among Christian participants: whereas Low RWA Christians more strongly supported the pro-gay than anti-gay counter-demonstrators, High RWA Christians more strongly supported the anti-gay than pro-gay counter-demonstrators. Thus, although dependent upon the religious affiliation of the participant, the symmetrical bias hypothesis for this scenario did receive qualified empirical support.

### Study 3

Rokeach (1973) identified freedom and equality as two important values that predict political ideology identification. He subsequently placed fascists low on both, socialists high on both, communists high on equality but low on freedom, and conservatives low on equality but high on freedom. It is no surprise that democracies function best when both individual freedoms and equality are protected and encouraged. However, the balance between these two ideals is not always easy. In fact, this balance between freedom and equality has become a primary dilemma that democracies face (Janda, Berry, & Goldman, 1992).

The adherence to democratic principles entails the endorsement of individual freedom as well as equality for all under the law. Such sentiments reflect political tolerance (Sullivan et al., 1981), and are necessary for any stable democracy. However, some individuals are motivated to restrict individual freedom and equality. These individuals are politically intolerant, as they refuse to bestow basic democratic rights upon particular groups or individuals. Not surprisingly, authoritarians tend to be lower in political tolerance (Altemeyer, 1996; Canetti-Nisim, 2004; Moghaddam & Vuksanovic,

1990; Sullivan et al., 1981). Typically, this relationship has been cast as originating in heightened threat perception: authoritarians perceive the world as a dangerous place (Altemeyer, 1988; Jost, Nosek & Gosling, in press) and seek to suppress groups or individuals that threaten the establishment social order. Likewise, there is evidence that increased societal threat leads to increases in authoritarianism (Doty, Peterson, & Winter, 1991; Sales, 1973).

These findings are amenable to the predictions of ideologically objectionable circumstances theory. If High RWAs value conformity, security, and tradition (Altemeyer, 1998; Cohrs et al., 2005; McFarland & Adelson, 1996; Rohan & Zanna, 1996), then they should concern themselves with restricting groups or individuals that threaten these traditional and established institutions.

However, IOC suggests that there is another group who may be politically intolerant: Low SDOs, who are motivated to reduce existing social hierarchies (Pratto, Sidanius, Stallworth & Malle, 1994; Sidanius & Pratto, 1999). Such a motivation may lead these individuals to grant greater favor to lower status groups or individuals than higher status groups or individuals. For example, for the sake of reducing existing hierarchies, Low SDOs may more strongly support the rights of an organization that advocates for a minority group (e.g., Atheists) than for an organization that advocates for a majority group (e.g., Christians). Such a double standard would be considered an example of liberal bias, but also political intolerance, especially to the extent to which Low SDOs would prevent this organization from influencing policy.

The Present Study

Study 3 attempts to examine political intolerance among both conservatives and liberals. In this study, abstract democratic principles (e.g., the right of minorities to organize to influence policy) are placed in conflict with either conservative ideological content (e.g., allowing a group to organize to legalize same-sex marriage) or liberal ideological content (i.e., allowing a group to organize to ban same-sex marriage).

This study is based on the classic study by Prothro and Grigg (1960), who evaluated people's support for abstract democratic principles (e.g., "Public officials should be chosen by a majority vote"), as well as support for the application of those principles to specific situations (e.g., "If a Negro were legally elected mayor of this city, the white people should not allow him to take office."). Prothro & Grigg (1960) found that participants typically gave more support for democratic principles in the abstract than for specific applications of those principles. However, they did not include any measures of individual differences in these levels of support. The present study addresses that limitation by investigating the role that political ideology plays in the endorsement of abstract democratic principles and the application of those principles to specific individuals and groups.

Additionally, Prothro & Grigg (1960) examined the evaluation of mostly left-wing targets, which may have located political intolerance predominantly in more conservative individuals (Sullivan et al., 1981). Study 3 maintains the Sullivan et al. (1981) methodology by examining evaluations of both left-wing and right-wing targets.

The following hypotheses regarding political intolerance will be tested in Study 3:

Conservative political intolerance. Conservatives (i.e., High RWAs and SDOs) should express more political intolerance than liberals (i.e., Low RWAs and SDOs) when

the intolerant response supports conservative beliefs (e.g., “Members of Lambda Legal should not be allowed to organize in order to pass laws legalize gay marriage”).

Liberal political intolerance. Liberals should express more political intolerance than conservatives when the intolerant response supports liberal beliefs (e.g., “Members of Focus on the Family should not be allowed to organize in order to pass laws banning gay marriage”).

Liberals are more supportive than conservatives of abstract democratic principles. Liberals should express stronger support for abstract democratic principles (e.g., “Every citizen should have an equal change to influence government policy) than conservatives.

Symmetrical double standards in political social cognition. The items on the questionnaire were parallel constructed. That is, participants evaluated targets that either support or oppose certain policies or movements (i.e., legalization of same-sex marriages). By favoring sympathetic groups over unsympathetic groups, double standards in judgments may be observed. Liberals should support the rights of liberal groups over conservative groups, while conservatives should support the rights of conservative groups over liberal groups.

Conservatives are more likely than liberals to suppress the democratic rights of others. Whereas liberals might differ in their support for one target over another, conservatives may be more likely to actually suppress the rights of certain targets. This will be demonstrated by examining the mean rating of support participants give to the target individuals and groups. It is hypothesized that although liberals may more strongly support sympathetic than unsympathetic targets, their support for unsympathetic targets will be above the midpoint of the rating scale. In other words, they will support the rights

of unsympathetic targets, just not as strongly as they will support sympathetic targets. However, not only will conservatives more strongly support sympathetic targets than unsympathetic targets, their support for unsympathetic targets will be below the midpoint of the rating scale, indicating a suppression of that target's rights.

## Method

### Participants

285 Rutgers University students enrolled in general psychology undergraduate courses during the Spring 2007 semester completed the questionnaire packet for course credit (151 males, 134 females; 97 White, 184 Non-White, 4 unreported; age  $M = 18$  years).

### Materials and Procedures

Questionnaire packets were distributed to the undergraduate participants during a lecture session. Each packet included the basic measures used in Studies 1 and 2 (the RWA and SDO scales [for which the order of presentation was counterbalanced in a between subjects design], the political attitude measures, and the demographic measures).

The critical dependent measure introduced in Study 3 was the Democratic Beliefs Scale. Participants encountered 15 questions to which they responded on a 6-point Likert scale (1= strongly disagree, 6= strongly agree). Five of these questions assessed support for abstract democratic principles (e.g., public officials should be chosen by majority vote). Another five questions were framed in such a way that an intolerant response would support conservative beliefs (e.g., If a homosexual were legally elected mayor, he should not be allowed to take office). For another five questions, an intolerant response would support liberal beliefs (e.g., If a member of the Ku Klux Klan (KKK) is legally

elected mayor, he should not be allowed to take office) (see Appendix K for the Democratic Beliefs Scale). After participants completed these packets, they were thanked, debriefed, and excused.

## Results

### Preliminary Analyses

Characteristics of the RWA scale. The RWA scale has a possible range of 30 to 270, with an absolute middle of this distribution of 150. In this sample ( $N = 277$ ), scores ranged from 30-229 ( $M = 120.46$ ,  $s = 36.28$ ). Cronbach's alpha was .92, indicating strong internal reliability. Low RWAs were those whose scores were less than or equal to 98 (24.9%). High RWAs were those whose scores were greater than or equal to 146 (24.9%).

Characteristics of SDO scale. The SDO scale has a possible range of 16 to 112, with an absolute middle of this distribution of 64. In this sample ( $N = 278$ ), scores ranged from 16 to 100 ( $M = 43.67$ ,  $s = 17.95$ ). Cronbach's alpha was .91, indicating strong internal reliability. Low SDOs were those whose scores were less than or equal to 28 (24.5%). High SDOs were those whose scores were greater than or equal to 57 (25.9%).

Correlations between constructs. Self-report conservatism was correlated with both RWA,  $r(237) = .40$ ,  $p < .001$ , and SDO,  $r(239) = .19$ ,  $p < .01$ . RWA and SDO were also correlated,  $r(270) = .32$ ,  $p < .001$ .

Gender differences. There were no gender differences in RWA,  $t(275) = .58$ , ns. Men were higher in SDO than women,  $t(276) = 3.62$ ,  $p < .001$ ,  $r = .21$ ,  $M$ 's = 47.27 and 39.63, respectively. These results are consistent with the results from Studies 1 and 2.



Race differences. Non-Whites were higher in RWA than Whites,  $t(271) = 2.98$ ,  $p < .01$ ,  $r = .18$ ,  $M's = 125.04$  and  $111.49$ , respectively. Whites were higher in SDO than Non-Whites,  $t(272) = 2.48$ ,  $p < .05$ ,  $r = .15$ ,  $M's = 47.53$  and  $41.92$ , respectively. These results are consistent with the results from Studies 1 and 2.

Religion differences. Christians were higher in RWA than Non-Christians,  $t(269) = 4.14$ ,  $p < .001$ ,  $r = .24$ ,  $M's = 128.62$  and  $110.86$ , respectively. There were no differences between Christians and Non-Christians in SDO,  $t(270) = .23$ , ns. These results are also consistent with the results from Studies 1 and 2.

#### Conservative Political Intolerance

The first hypothesis predicts that conservatives should express more political intolerance than liberals when the intolerant response supports conservative beliefs. Five dependent variables tested this prediction: suppressing Islamic Fundamentalist speech; suppressing a liberal college professor's speech; suppressing the rights of an atheist group to organize; suppressing the rights of a gay advocacy group to organize; and suppressing the right of a legally elected homosexual mayor to assume office (see Table 21 for the correlation coefficients for these dependent variables).

Right-wing authoritarianism. A negative correlation between RWA and the dependent variable indicates an intolerant response (e.g., the higher the RWA score, the more support was expressed for suppressing democratic rights). The hypothesis was confirmed on all five dependent measures. RWA was negatively correlated with Islamic Fundamentalist free speech,  $r(277) = -.30$ ,  $p < .001$ ; liberal college professor free speech,  $r(277) = -.13$ ,  $p < .05$ ; the atheist group's right to organize,  $r(277) = -.35$ ,  $p < .001$ ; the gay

advocacy group's right to organize,  $r(277) = -.49, p < .001$ ; and the legally elected homosexual mayor's right to assume office,  $r(276) = -.42, p < .001$ .

Social dominance orientation. A negative correlation between SDO and the dependent variable indicates an intolerant response (e.g., the higher the SDO score, the more support was expressed for suppressing democratic rights). The hypothesis was confirmed on two of the five dependent measures. SDO was negatively correlated with the gay advocacy group's right to organize,  $r(278) = -.17, p < .01$ , and the legally elected homosexual mayor's right to assume office,  $r(277) = -.24, p < .001$ . All other relationships did not reach significance, all  $p's > .10$ .

The results generally confirm the prediction that RWA is related to intolerant responses that would support conservative beliefs. SDO was not a strong predictor of political intolerance on these five issues; however, even for those relationships between SDO and the dependent variables that did not approach significance, the coefficients were always negative, indicating a relationship between high SDO scores and political intolerance.

#### Liberal Political Intolerance

The second hypothesis predicts that liberals should express more political intolerance than conservatives when the intolerant response supports liberal beliefs. Five dependent variables tested this prediction: suppressing White Supremacist speech; suppressing a Homeland Security official's speech; suppressing the rights of an Evangelical Christian group to organize; suppressing the rights of a group opposing gay rights to organize; and suppressing the right of a legally elected Ku Klux Klan member to

assume office (see Table 21 for the correlation coefficients for these dependent variables).

Right-wing authoritarianism. A positive correlation between RWA and the dependent variable indicates an intolerant response (e.g., the lower the RWA score, the more support was expressed for suppressing democratic rights). The hypothesis was confirmed on two of the five dependent measures. RWA was positively correlated with the Evangelical Christian group's right to organize,  $r(277) = .24$ ,  $p < .001$ , and the group opposing gay rights right to organize,  $r(277) = .19$ ,  $p < .01$ . Contrary to predictions, RWA was negatively correlated with the Homeland Security official's free speech,  $r(277) = -.18$ ,  $p < .01$ , and the legally elected KKK member's right to assume mayoral office,  $r(277) = -.13$ ,  $p < .05$ . All other relationships did not reach significance, all  $p$ 's  $> .11$ .

Social dominance orientation. A positive correlation between SDO and the dependent variable indicates an intolerant response (e.g., the lower the SDO score, the more support was expressed for suppressing democratic rights). The hypothesis was confirmed on one of the five dependent measures. SDO was positively correlated with the legally elected KKK member's right to assume mayoral office,  $r(278) = .15$ ,  $p < .05$ . All other relationships did not approach significance, all  $p$ 's  $> .10$ .

Support for the second hypothesis is mixed. While low scores on the RWA scale were related to political intolerance on two of the liberal issues (the rights of an Evangelical Christian group; the rights of a group opposing same-sex marriage), low scores on the RWA scale were related to tolerance on two of the liberal issues (Homeland security official's rights; KKK mayor's rights). Again, the relationship between SDO and political intolerance was weak.

Thus, the results regarding the first two hypotheses indicate a relationship between RWA and political intolerance in specific contexts. When an intolerant response supports conservative beliefs, RWA is strongly predictive of intolerant responses. When an intolerant response supports liberal beliefs, the evidence is mixed. Low scores on the RWA scale are related to restricting the rights of an Evangelical Christian group and a group opposing same-sex marriage. However, high scores on the RWA scale were related to restricting the rights of a Homeland Security official and a mayor who is a member of the KKK. Thus, although RWA is related to political conservatism, RWA was also related to restricting the rights of conservative groups!

#### Liberals are more Supportive than Conservatives of Abstract Democratic Principles

The third hypothesis predicts that political intolerance to abstract principles will be strongest among conservatives (e.g., those high in RWA and SDO). Participants indicated their agreement with abstract democratic principles (e.g., minority rights, majority rule). Support for such principles is hypothesized to be negatively correlated with RWA and SDO. In other words, conservatives should be less supportive of abstract democratic principles than liberals (see Table 21 for the correlation coefficients for these dependent variables).

Right-wing authoritarianism. The hypothesis was confirmed between RWA and all five dependent measures of abstract democratic principles. RWA was negatively correlated with support for majority rule by vote,  $r(277) = -.19$ ,  $p = .001$ ; the right of all citizens to influence government policy,  $r(277) = -.18$ ,  $p < .01$ ; the right of the minority to criticize majority decisions,  $r(277) = -.28$ ,  $p < .001$ ; the right of the minority to win the

majority's support for their opinions,  $r(277) = -.28, p < .001$ ; and the belief in representative democracy,  $r(276) = -.14, p < .05$ .

Social dominance orientation. The hypothesis was confirmed between SDO and four of the five dependent measures of abstract democratic principles. SDO was negatively correlated with the right of all citizens to influence government policy,  $r(278) = -.31, p < .001$ ; the right of the minority to criticize majority decisions,  $r(278) = -.21, p < .001$ ; the right of the minority to win the majority's support for their opinions,  $r(278) = -.27, p < .001$ ; and the belief in representative democracy,  $r(277) = -.12, p < .05$ .

These results suggest that both RWA and SDO are associated with decreased support for some of the basic tenets of democratic government.

#### Symmetrical Double Standards in Political Social Cognition

The fourth hypothesis predicts that both liberals and conservatives will engage in double standards in their reasoning about the rights of sympathetic and unsympathetic targets. For example, liberals should support the rights of pro-gay groups over anti-gay targets, while conservatives should support the rights of anti-gay groups over pro-gay targets.

Free speech: Islamic Fundamentalist or White Supremacist. All participants responded to two statements of whether an Islamic Fundamentalist could give a speech deriding America, or whether a White Supremacist could give a speech deriding Blacks. The pattern of results is consistent with asymmetrical liberal bias. Paired-samples t-tests revealed that Low RWAs more strongly supported the Islamic Fundamentalist's rights than the White Supremacist's rights,  $t(68) = 3.66, p < .001, d = .47, M's = 4.48$  and  $3.67$ , respectively. High RWAs equally opposed free speech rights for both groups,  $t(69) = .05$ ,

ns,  $M's = 3.01$  and  $3.03$ , respectively. Paired-samples  $t$ -tests did not reveal double standards among Low SDOs,  $t(67) = 1.27$ , ns,  $M's = 3.84$  and  $3.53$ , respectively, or among High SDOs,  $t(73) = .57$ , ns,  $M's = 3.63$  and  $3.77$ , respectively.

Free speech: Liberal professor or conservative official. All participants responded to two statements of whether a liberal college professor could give a speech justifying the September 11 attacks, or whether a conservative Homeland Security official could give a speech justifying religious and racial profiling of possible terrorists. The pattern of results did not indicate any ideological biases. Paired-samples  $t$ -tests did not reveal double standards among Low RWAs,  $t(68) = .61$ , ns,  $M's = 3.98$  and  $4.16$ , respectively, or among High RWAs,  $t(69) = .10$ , ns,  $M's = 3.33$  and  $3.30$ , respectively. Paired-samples  $t$ -tests did not reveal double standards among Low SDOs,  $t(67) = .49$ , ns,  $M's = 3.68$  and  $3.53$ , respectively, or among High SDOs,  $t(73) = .66$ , ns,  $M's = 3.65$  and  $3.81$ , respectively.

Organize and influence: Atheist or Christian group. All participants responded to two statements of whether an Atheist group could organize to influence Congress to remove "under God" from the Pledge of Allegiance, or whether an Evangelical Christian group could organize to influence Congress to have Creationism taught in public schools. The pattern of results is consistent with symmetrical bias. Paired-samples  $t$ -tests revealed that Low RWAs more strongly supported the Atheist group than the Christian group,  $t(68) = 4.99$ ,  $p < .001$ ,  $d = .73$ ,  $M's = 4.19$  and  $2.87$ , respectively. However, High RWAs more strongly supported the Christian group than the Atheist group,  $t(69) = 3.29$ ,  $p < .01$ ,  $d = .50$ ,  $M's = 3.56$  and  $2.66$ , respectively. Paired-samples  $t$ -tests did not reveal double

standards among Low SDOs,  $t(67) = 1.41$ , ns,  $M's = 3.70$  and  $3.28$ , respectively, or among High SDOs,  $t(73) = .92$ , ns,  $M's = 3.27$  and  $3.01$ , respectively.

Organize and influence: Lambda Legal or Focus on the Family. All participants responded to two statements of whether Lambda Legal could organize to influence Congress to legalize gay marriage, or whether Focus on the Family could organize to influence Congress to ban gay marriage. The pattern of results for RWA is consistent with symmetrical bias. Paired-samples t-tests revealed that Low RWAs more strongly supported Lambda Legal than Focus on the Family,  $t(68) = 7.30$ ,  $p < .001$ ,  $d = 1.16$ ,  $M's = 5.20$  and  $3.33$ , respectively. However, High RWAs more strongly supported Focus on the Family than Lambda Legal,  $t(69) = 2.19$ ,  $p < .05$ ,  $d = .29$ ,  $M's = 4.01$  and  $3.36$ , respectively.

However, the pattern of results for SDO is consistent with asymmetrical liberal bias. Paired-samples t-tests revealed that Low SDOs more strongly supported Lambda Legal than Focus on the Family,  $t(67) = 3.25$ ,  $p < .05$ ,  $d = .55$ ,  $M's = 4.50$  and  $3.59$ , respectively, whereas High SDOs did not differ in their support for Lambda Legal or Focus on the Family,  $t(73) = 1.32$ , ns,  $M's = 3.97$  and  $3.57$ , respectively.

Majority rules: Homosexual or KKK mayor. All participants responded to two statements of whether a homosexual man legally elected mayor could assume his office, or whether a KKK member legally elected mayor could assume his office. The pattern of results was consistent with a general bias in favor of the homosexual mayor. Paired-samples t-tests revealed that Low RWAs more strongly supported the homosexual mayor than the KKK mayor,  $t(68) = 10.26$ ,  $p < .001$ ,  $d = 1.74$ ,  $M's = 5.72$  and  $3.09$ , respectively. High RWAs also more strongly supported the homosexual mayor than the KKK mayor,  $t(68) = 8.15$ ,  $p < .001$ ,  $d = 1.13$ ,  $M's = 4.33$  and  $2.40$ , respectively.

Paired-samples t-tests revealed that Low SDOs more strongly supported the homosexual mayor than the KKK mayor,  $t(67) = 10.14$ ,  $p < .001$ ,  $d = 1.72$ ,  $M's = 5.31$  and  $2.57$ , respectively. High SDOs also more strongly supported the homosexual mayor than the KKK mayor,  $t(72) = 5.26$ ,  $p < .001$ ,  $d = .84$ ,  $M's = 4.59$  and  $3.11$ , respectively.

It was hypothesized that symmetrical biases would be revealed in these five comparison situations. The evidence for this hypothesis is clearly mixed. The predicted symmetrical bias was observed on the issue of an Atheist or Christian groups' rights to organize, and on the issue of a pro-gay or anti-gay groups' rights to organize. Asymmetrical liberal bias was observed on the issue of free speech for an Islamic Fundamentalist or White Supremacist. There was a general bias in favor of the homosexual mayor (as opposed to the KKK mayor), and there was no evidence of bias on the issue of free speech for the liberal professor or conservative Homeland Security official.

Most of this bias was observed using RWA as a predictor. Thus, SDO does not seem to be a great predictor for observing ideological double standards, at least when dealing with democratic principles. This is consistent with the findings from Studies 1 and 2, as well as Altemeyer's (1998) conclusion that RWA is more related to double standards than SDO. However, this may be due to a stronger relationship between political intolerance and RWA. Conservatives are more Likely than Liberals to Suppress the Democratic Rights of Others

The fifth hypothesis states that whereas liberals might differ in their support for one group or individual over another, conservatives will be more likely to actually suppress the rights of certain groups or individuals. This hypothesis can be confirmed by



examining the means of Low and High RWAs and SDOs, to determine whether there is actual suppression of both abstract and applied democratic principles. Participants evaluated the items on a 6-point Likert scale. Therefore, all group means that fall below 3.5 might be considered actual suppression of such rights, while scores above 3.5 might be considered support for such rights.

Abstract democratic principles: RWA. Table 22 presents the results of independent samples t-tests for differences between Low and High RWAs on each dependent measure of abstract democratic principles. In no case did High RWAs disagree with these statements; Low RWAs simply more strongly supported each of these statements.

Abstract democratic principles: SDO. Table 22 presents the results of independent samples t-tests for differences between Low and High SDOs on each dependent measure of abstract democratic principles. In no case did High SDOs disagree with these statements; Low SDOs simply more strongly supported each of these statements.

Thus, it appears that High RWAs and SDOs support abstract democratic principles, just not as strongly as do Low RWAs and SDOs.

Conservative belief items: RWA. Table 23 presents the results of independent samples t-tests for differences between Low and High RWAs on each dependent measure for which an anti-democratic response supported conservative beliefs. There was general confirmation for the hypothesis of conservative suppression of rights. On all but one of the dependent measures (homosexual mayor's rights to take office), High RWAs' mean score fell below 3.5, indicating a tendency to actually suppress these groups' or

individuals' democratic rights. There were no circumstances under which Low RWAs suppressed the rights of any groups or individuals.

Conservative belief items: SDO. Table 23 presents the results of independent samples t-tests for differences between Low and High SDOs on each dependent measure for which an anti-democratic response supported conservative beliefs. There was little confirmation of the hypothesis of conservative suppression of rights. There was only one issue (restricting an Atheist group's right to organize and influence policy) for which High SDOs actually suppressed a group's rights. On all other issues, the means were above 3.5. There were no circumstances under which Low SDOs suppressed the rights of any groups or individuals.

Thus, these results confirm the hypothesis that High RWAs will actually suppress the democratic rights of other groups, particularly unsympathetic groups.

Liberal belief items: RWA. Table 24 presents the results of independent samples t-tests for differences between Low and High RWAs on each dependent measure for which an anti-democratic response supported liberal beliefs. There was evidence of suppression of democratic rights among both High and Low RWAs. High RWAs suppressed the rights of all of the target groups except the anti-gay group. Low RWAs suppressed the rights of a Christian group, an anti-gay group, and a member of the KKK. Thus, evidence indicates that when Low RWAs disagreed with the viewpoints of individuals and groups, they would actually suppress the rights of those groups or individuals. For High RWAs, however, the ideological content does not necessarily seem to matter; even when these groups and individuals supported conservative beliefs, High RWAs would suppress their rights. This is consistent with Altemeyer's (1996) findings

that High RWAs report a greater willingness than Low RWAs to suppress the rights of right-wing authoritarians!

Liberal belief items: SDO. Table 24 presents the results of independent samples t-tests for differences between Low and High SDOs on each dependent measure for which an anti-democratic response supported liberal beliefs. Both Low and High SDOs suppressed the rights of the Christian group and of the KKK mayor.

These results offer a good deal of support for the hypothesis that conservatives will suppress the rights of groups and individuals, but the results also indicate that liberals may suppress the rights of unsympathetic targets.

#### Additional Analyses

RWA and SDO order effects. The presentation of the RWA and SDO scales was counterbalanced. First, independent samples t-tests revealed no effect of order on responses to the RWA or SDO scales, all  $t$ 's < .43, all  $p$ 's > .66. A series of 2 (order: RWA first, SDO first) X 2 (RWA: Low, High) ANOVAS tested for any order effects on the dependent variables. There was a significant order by RWA interaction on the dependent variable about the liberal college professor's free speech rights,  $F(1,135) = 4.44$ ,  $p < .05$ ,  $r = .18$ . When RWA was presented first, Low RWAs were more supportive of his rights than High RWAs,  $t(135) = 3.24$ ,  $p < .001$ ,  $r = .27$ ,  $M$ 's = 4.45 and 3.06, respectively whereas there was no difference between Low and High RWAs when SDO was presented first,  $t(135) = .19$ , ns,  $M$ 's = 3.65 and 3.57, respectively. All other main effects and interactions between RWA and order did not approach significance, all  $F$ 's < 2.31, all  $p$ 's > .13.

Additionally, a series of 2 (order: RWA first, SDO first) X 2 (SDO: Low, High) ANOVAS tested for any order effects on the dependent variables. There was a significant

interaction between order and SDO on the dependent variable related to Evangelical Christians' rights to organize and influence policy,  $F(1,138)= 3.79$ ,  $p= .05$ ,  $r= .16$ . When SDO was presented first, Low SDOs gave more democratic responses than High SDOs,  $t(138)= 2.09$ ,  $p<.05$ ,  $r= .17$ ,  $M's= 3.55$  and  $2.70$ , respectively, whereas there was no difference between Low and High SDOs when RWA was presented first,  $t(138)= .60$ , ns,  $M's= 3.05$  and  $3.27$ , respectively. All other main effects and interactions between SDO and order did not approach significance, all  $F's<1.75$ , all  $p's>.19$ . In sum, it does not appear that the ordering of the RWA and SDO scales affected responses to the dependent variables.

Gender effects. A series of 2 (Gender: male, female) X 2 (RWA: Low, High) X 2 (SDO: Low, High) ANOVAs were performed on all fifteen dependent variables. There was a significant interaction between gender and RWA on only one dependent variable (anti-gay group),  $F(1,62)= 6.13$ ,  $p<.05$ ,  $r= .30$ . However, because this was the only significant interaction between gender and either RWA or SDO, it appears that gender had little effect on responses to the dependent variables in Study 3, all other  $p's>.09$ .

Race effects. A series of 2 (Race: White, Non-White) X 2 (RWA: Low, High) X 2 (SDO: Low, High) ANOVAs were performed on all fifteen dependent variables. On the dependent variable regarding the rights of the minority to win support for their opinion, there was a significant interaction between race and RWA,  $F(1,61)= 6.52$ ,  $p<.05$ ,  $r= .31$ , as well as between race and SDO,  $F(1,61)= 5.76$ ,  $p<.05$ ,  $r= .29$ . These were the only significant interactions, all  $p's>.08$ . Therefore, no pattern of interactions between race and the ideological predictors emerged. All other interactions between race, RWA and SDO on the remainder of the dependent variables were not significant, all  $p's>.08$ .

Religion effects. A series of 2 (Religion: Christian, Non-Christian) X 2 (RWA: Low, High) X 2 (SDO: Low, High) ANOVAs were performed on all fifteen dependent variables. On the dependent variable regarding the rights of the minority to win support for their opinion, there was a significant interaction between religion and RWA,  $F(1,60)=6.91$ ,  $p<.05$ ,  $r^2=.10$ , as well as between race and SDO,  $F(1,60)=15.40$ ,  $p<.001$ ,  $r^2=.20$ . These were the only significant interactions, all  $p$ 's  $> .15$ . Therefore, no pattern of interactions between religion and the ideological predictors emerged.

### Discussion

In Study 3, participants indicated their support for democratic rights: in some cases those rights were framed as abstract principles; in other cases, the rights of conservative groups or individuals were evaluated; in others, the rights of liberal groups or individuals were evaluated. Several hypotheses regarding how liberals and conservatives would respond in these situations were tested.

There was strong confirmation of the conservative political intolerance hypothesis: High RWAs provided more political intolerance than Low RWAs when political intolerance supported conservative beliefs. However, the second hypothesis, that liberals would provide more political intolerance than conservatives when political intolerance supported liberal beliefs received mixed support. On only two of the five items was this hypothesis confirmed. In fact, High RWAs were actually more intolerant on two liberal belief items! In addition, both High RWAs and High SDOs were less supportive of abstract democratic principles than Low RWAs and SDOs. Thus, there is strong evidence in Study 3 that conservatives (particularly High RWAs) are less

politically tolerant than liberals, both in terms of abstract democratic principles as well as the application of these principles to specific groups.

The double standards results paint an interesting picture. It was hypothesized that symmetrical biases would be observed in these five comparison situations. In fact, a variety of biases emerged: symmetrical bias (the Christian/Atheist group rights, as well as the pro-gay/anti-gay group rights); asymmetrical liberal bias (free speech for Islamic Fundamentalist/White Supremacist); a general bias in favor of the homosexual mayor in comparison to the KKK mayor; and an absence of bias in responses to the liberal professor/conservative Homeland Security official.

In retrospect, perhaps it was unrealistic to believe that bias in favor of White Supremacists and members of the KKK would be revealed among political conservatives. These are groups for which favorable attitudes are highly stigmatized. Thus, this may be why there was general bias in favor of the homosexual mayor, and asymmetrical liberal bias in the free speech of the Islamic Fundamentalist/White Supremacist. The same may be said for the lack of bias found for the free speech of the liberal college professor compared to the conservative Homeland Security officials. The professor offers a position (blaming the US for the September 11, 2001 attacks) that may be wildly unpopular and stigmatized, even among political leftists.

Although not measured in the present study, the level of perceived threat from these groups may have offered an alternative explanation for these results. Perceived threat mediates the relationship between political beliefs and political tolerance (Sullivan et al., 1981). Thus, if High RWAs perceive White Supremacists and KKK members as

threats to the social order, they may experience less compunction in barring them from the democratic process (Feldman, 2003).

A few broad and important conclusions can be drawn from the results of Study 3. First, conservatism, in particular right-wing authoritarianism, is strongly related to political intolerance, whether framed in the abstract form of the principle or applied to specific groups or individuals. In fact, the ideological goals of the group did not seem to matter: RWA was even related to political intolerance toward conservative groups and individuals! Although SDO showed some relationship with political intolerance, it was not as strongly related to political intolerance as RWA.

Second, there was some evidence that low scores on the RWA scale are related to political intolerance that supports more “liberal” beliefs. Therefore, although most of the evidence supports the notion that RWA is related to political intolerance, there are those on the left who would reduce the rights of individuals whose goals oppose liberal beliefs.

Third, and perhaps most important, there is evidence that individuals may actually suppress the basic democratic rights for unfavorable groups. Unsettlingly, individuals were ready to bar certain groups from their basic rights in a representative democracy.

Finally, consistent with the findings of Studies 1 and 2, these results provide evidence that political liberals do engage in social cognitive biases regarding political information. Symmetrical bias and asymmetrical liberal bias are indicative of liberal bias in social cognition. Although there was little predictability as to when these particular varieties of bias would emerge, the evidence indicates that both liberals and conservatives commit double standards in social cognition.

## General Discussion

These three studies represent an empirical attempt to find what past scholars have had difficulty finding: the elusive liberal bias in social cognition. Ideologically objectionable circumstances (IOC) theory was developed in order to predict the situations that would lead to various patterns of ideological bias, including those that are typically reported in the literature (asymmetrical conservative bias), as well as other alternative patterns (asymmetrical liberal bias; symmetrical bias).

It was presently argued that previous studies had not placed political liberals in situations that would lead to biased responses because these studies contained circumstances that were ideologically objectionable to political liberals. According to IOC, when ideologically objectionable circumstances are present, perceivers will refuse to engage in double standards. Study 1 attempted to replicate previous findings of asymmetrical conservative bias (Altemeyer, 1988; 1996) that IOC would suggest presented ideologically objectionable circumstances to liberals. Study 2 attempted to remove these circumstances so that liberal bias could emerge. Finally, Study 3 attempted to clarify the relationship between political conservatism (particularly RWA) and political intolerance, and to explore double standards in the application of democratic principles.

In general, the results from all three studies represent a successful endeavor. Excluding the contradictory results of the gay rights demonstration scenario in Studies 1 and 2, the hypotheses generated by IOC received strong support. In Study 1, asymmetrical conservative bias was predicted and observed in the school prayer scenario, and symmetrical bias was predicted and observed in the college admissions scenario. In Study 2, symmetrical bias was predicted and observed in the school prayer space



scenario, and asymmetrical conservative bias was predicted and observed among American-born High SDOs in the POW mistreatment scenario. In Study 2, symmetrical bias was predicted and observed in the gay rights counter-demonstration scenario, but only among Christian participants.

Study 3 found that RWA was a better predictor of political intolerance than SDO, and that while liberals were intolerant of some political groups, conservatives (particularly High RWAs) were on average more politically intolerant. Study 3 was not as successful in predicting the conditions under which various patterns of double standards would emerge. Although symmetrical bias was predicted in five within-subjects comparisons, other patterns of bias emerged in addition to symmetrical bias.

#### Revisiting Claims of Overwhelming Asymmetrical Conservative Bias

The impetus for these studies was the claims in the extant political ideology literature that political conservatives are overwhelmingly more cognitive rigid, inflexible, and dogmatic than are political liberals. This “rigidity-of-the-right” (RoR) hypothesis is supported by a host of data, which was summarized most recently by Jost (2006):

“...Conservatives are, on average, more rigid and close-minded than liberals” (Jost, 2006, p. 661).

“...Much evidence upholds the Adorno et al. (1950) rigidity-of-the-right hypothesis and contradicts persistent claims that liberals and conservatives are equally rigid and dogmatic” (Jost, 2006, p. 662).

Based on his research on double standards in political social cognition, Altemeyer (1996) has reached conclusions that are consistent with RoR:

“Since High RWAs compartmentalize their thinking a lot, we can expect them to have lots of double standards” (Altemeyer, 1996, p. 115).

“[High RWAs] do appear to have more than their share [of double standards], on quite a variety of topics. I think we can call it a feature of their thinking” (Altemeyer, 1996, p. 122, emphasis added).

“Lows in turn show more interconnectedness, consistency, and fairness” (Altemeyer, 1996, p. 122).

Altemeyer reports trying to find double standards among Low RWAs:

“To ‘catch’ Lows [RWAs] being more hypocritical than Highs, you have to turn the tables and put them in conflict over something they believe in. I have been searching for a situation that would do this. For a while, I thought I had found it in the environmental movement” (Altemeyer, 1996, p. 120).

However, after attempting to find such double standards among Low RWAs regarding the environmental movement (as well as affirmative action), he reports that no such double standards could be found.

But, as the adage goes, absence of evidence is not evidence of absence. The present research represents an effort to locate this elusive liberal bias. Contrary to Altemeyer’s (1996) hypothesis, it is not that one needs to identify an issue that is important to political liberals (environmental issues; affirmative action). As the present studies demonstrate, not only must the issue be one that liberals care about, but there cannot be circumstances surrounding this issue that are ideologically objectionable.

Comparing Traditional and New Approaches to Political Ideology

The present studies compared and contrasted the rigidity-of-the-right hypothesis and ideologically objectionable circumstances (IOC) theory. Based on the results, it appears that IOC has greater explanatory power for political biases than RoR. When RoR did receive empirical support in patterns of asymmetrical conservative bias (school prayer in Study 1; POW mistreatment in Study 2), these patterns of bias were still compatible with the predictions generated by IOC. Importantly, IOC predicted observed patterns of bias (symmetrical bias in college admissions in Study 1; symmetrical bias in school prayer space in Study 2; qualified symmetrical bias in gay rights demonstrator support in Study 2; symmetrical bias in political tolerance in Study 3) that cannot be explained by the rigidity-of-the-right hypothesis. Furthermore, although there were several instances in which IOC failed in its predictions (asymmetrical liberal bias in gay rights in Studies 1 and 2; other patterns of double standards in political tolerance in Study 3), the RoR hypothesis still could not account for these results.

Fundamentally, the problem with the rigidity-of-the-right hypothesis is that it ignores the power of the situation. As a host of studies argue, human behavior is a product of both our dispositions (such as a rigid outlook) and the situations we find ourselves in (Fleeson, 2004). IOC, on the other hand, emphasizes the interaction between the person and the situation. As individuals, we are predisposed to our personal political beliefs. However, whether these beliefs will affect our perceptions, judgments or behavior depends on the situational context. IOC recognizes this interaction and predicts that the reliance on personal political ideologies in social perception and judgment is constrained by situational forces.

Are Conservatives Unbiased?

The present research does not suggest that conservatives are unbiased. It should be quite clear based on the data from these studies that this is not the case. For example:

1. Conservatives hold double standards in regards to school prayer in secular schools: they favor Christian school prayer to Muslim school prayer (Study 1) and Christian school prayer space to Muslim school prayer space (Study 2). The results from Study 1 cast conservatives in a particularly negative light: they are not only more likely to support mandatory school prayer than liberals (a decisively anti-democratic sentiment) but their responses are evidence of knee-jerk ethnocentrism.
2. Conservatives (High SDOs) hold double standards in regards to college admissions policies: they are more likely to support legacy-based than race-based admissions policies.
3. Conservatives (High SDOs) hold double standards in regards to the humane treatment of POWs: not only are they generally more supportive of POW abuse than Low SDOs, but they are more supportive of the mistreatment of an Iraqi than of an American.
4. Conservatives (particularly High RWAs) are quite politically intolerant. They seem to want to restrict the rights of others independent of the ideological goals of these other groups or individuals!

Thus, conservatives in the present studies are in no way exempt from criticism. They regularly exhibit biases in social cognition, and hold politically intolerant and other morally or ethically questionable positions on a number of issues.

That being said, political liberals are not exempt from criticism, either. This is the most important theoretical contribution that this present research makes: contrary to the conclusions of a broad swath of the extant literature (see Jost et al., 2003a for a review), political liberals are sometimes equally or more biased than conservatives. For example:

1. Liberals hold double standards in regards to school prayer in secular schools, favoring Muslim school prayer space to Christian school prayer space (Study 2).
2. Liberals hold double standards in regards to equality under the law, providing harsher prison sentences to anti-gay leaders (Study 1) and counter-demonstrators (Study 2) than to their pro-gay counterparts.
3. Liberals hold double standards in regards to college admissions policies (Study 1), supporting race-based college admissions policies over legacy-based admissions policies.
4. Liberals are politically intolerant of particular political groups (Study 3).

One possible explanation for the findings of liberal biases is that the samples simply had an inordinate proportion of liberals. If there were very few “real” conservatives, then the failure to find evidence of conservative bias is not because conservatives are unbiased, but because the sample did not include conservatives.

This possibility, however, is not very plausible for the following reasons. The same method employed by Altemeyer (1988; 1996; 1998) of selecting High and Low RWAs was used in the present studies. Additionally, the samples were not decisively more liberal than those that Altemeyer has reported. Across a vast number of studies, Altemeyer (1996) reports an average RWA score of 120. In the present studies, the means

were similar to what Altemeyer reports (Study 1  $M = 105.58$ ; Study 2  $M = 116.69$ ; Study 3  $M = 120.46$ ). Although Studies 1 and 2 are certainly lower than Altemeyer's (1996) reported average of 120, this should not be alarming. As Altemeyer has noted, scores on the RWA have been declining—in 1988, the average score was 150; in 1996, the average score was 120. Thus, in less than a decade, the average score had dropped by 30 points. It is not unreasonable to imagine that since 1996, the average score on the RWA scale may have declined further.

Thus, the results of these studies paint a more nuanced picture of ideological bias than suggested by the extant literature. However, the general theme of these studies is fairly simple: ideological bias exists on both ends of the political spectrum—you just need to know how to look for it.

#### The Role of Belief in Distorting Social Perception

Although the IOC primarily attempts to explain how political beliefs can distort the perception of political information, its principles can be applied to non-political beliefs and information. According to the IOC, when circumstances are ideologically objectionable, perceivers will refuse to engage their ideological biases. However, a political ideology can operate quite similarly to any other kind of belief system. Thus, if a particular circumstance is objectionable to one's religious ideology, then no further consideration of the situation will be given. If however the circumstances are acceptable to one's religious ideology, then motivated reasoning should occur.

For example, to a Catholic who believes in the "pro-life" doctrine, abortion at any stage or under any circumstance is morally abhorrent. Thus, it will not matter to this perceiver whether the fetus is 4 weeks old or 4 months old—it is wrong to terminate this

pregnancy. No further consideration will be given to the situation, and the age of the fetus will not have any weight in the judgment. To an individual who perceives abortion as a moral issue, but whose beliefs are less doctrinal, the age of the fetus (as well as other considerations such as the mother's health or other circumstances) will factor in the judgment.

Thus, although IOC was developed to primarily explore political social cognition, its principles can be applied to other systems of belief. Importantly, if the circumstances surrounding a judgment are repugnant to the perceiver for any reason, further reasoning about the issue will not occur. However, if the circumstance is acceptable (or at least not outright objectionable), then further consideration can be given, and biases can emerge. The engagement of any set of beliefs can distort social perception in ways that the IOC would predict.

#### Limitations and Future Directions

Several possible future directions are suggested by the limitations to the present studies. Most prominent is the need to further explore the predictions generated by IOC. The predictions of IOC received a fair amount of support. However, its predictions unquestionably failed in the gay rights demonstration scenarios. Asymmetrical conservative bias was predicted in Study 1, and symmetrical bias was predicted in Study 2. Instead, asymmetrical liberal bias was observed in both studies (though in Study 2, limiting the participant pool to Christians revealed the predicted symmetrical bias).

This issue should be further explored. As has been previously argued, attitudes toward gay rights have changed since Altemeyer (1988) conducted his research, and at least in the present samples, even High RWAs are not passionately opposed to gay rights.

Another possible explanation for the asymmetrical liberal bias observed in these studies is that Low RWAs categorize the actions of the anti-gay leader and anti-gay counter-protestors as hate crimes. Hate crimes themselves are predicated on a double standard: one receives a harsher punishment for the same crime if the victim's group membership motivated the offender. Thus, perhaps Low RWAs are aware of these laws and responded accordingly, providing harsher punishment for anti-gay than pro-gay targets.

Increased predictive power of IOC. The double standards scenarios were designed to elicit only two possible patterns of ideological bias (i.e., symmetrical bias and asymmetrical conservative bias). However, IOC indicates that several possible patterns of bias may emerge, depending on the situation. One particular limitation to the present set of studies is that no scenarios were intentionally designed to observe a refusal among political conservatives to engage in biased political cognition. IOC predicts that when ideologically objectionable circumstances are present, perceivers will refuse to process the political information in an ideologically biased manner. None of the present scenarios were crafted to be ideologically objectionable to conservatives. In fact, biased conservative social cognition was predicted (although not always observed) in each scenario. In order to fully test IOC's predictions, and to determine whether conservatives would refuse to engage in double standards, scenarios would need to be crafted that were ideologically objectionable to political conservatives.

A scenario that might elicit this conservative refusal to engage in biased reasoning is the revocation of government funds from faith-based initiatives (Christian funds or Jewish funds, varied in a between-subjects design). For High RWAs who value social tradition and order, the removal of such funds would be ideologically objectionable.



However, Low RWAs seek to reform these social traditions and order, so revocations of faith-based initiatives would be ideologically acceptable to them. Thus, the IOC would predict asymmetrical liberal bias: High RWAs would reject these fund revocations outright. Low RWAs would more strongly support the revocation of Christian funds than Jewish funds because Christians represent the social order of American religious life.

In the present studies, a variety of issues (e.g., gay rights, freedom from religion, selective admissions policies, equal treatment under the law) were addressed, and various patterns of bias emerged. One possible future study would be to select one issue (e.g., gay rights) and to create various scenarios that would lead to various patterns of bias based on the predictions of IOC. For example, could a scenario be constructed on the issue of gay rights that would lead to asymmetrical conservative bias? Furthermore, could another scenario be constructed on this issue that would lead to symmetrical bias? Could yet another be constructed that would lead to asymmetrical liberal bias? This would be a powerful test of the predictive power of IOC.

The scope of the present studies. There are many studies that attest to the rigidity, inflexibility and dogmatism associated with politically conservative thought (see Jost et al., 2003a for a review). The present studies did not address the entirety of the literature, only Altemeyer's work. Thus, a possible goal of future research would be to revisit past studies that have reached similar conclusions to determine whether or not they present circumstances that are ideologically objectionable to liberal participants. Such circumstances would call for the same treatment that Altemeyer's (1988; 1996) work received in the present studies.

Much of the supportive evidence for the rigidity-of-the-right hypothesis in the extant literature is based on correlations between political conservatism and measures of rigidity, dogmatism, and inflexibility (Jost et al., 2003a). The present studies do not address, nor do they dispute, these claims. However, it appears that many times, conservatives' responses on other dependent measures (such as Altemeyer's work) are interpreted in light of these conclusions, and as confirmation for these conclusions. The results of the present studies suggest that more prudence is needed in reaching these conclusions.

The role of perceived threat. According to a host of theoretical frameworks (Duckitt, 2001; Feldman, 2003; Sullivan et al., 1981), perceived threat plays a mediating role in prejudice, authoritarianism, and political intolerance. The present studies neglected to assess participants' perceptions of threat from the various target groups and individuals. Future studies could redress this omission by incorporating measures of perceived threat into further tests of IOC predictions.

From social cognition to behavior. The present studies dealt exclusively with social cognitive biases in a political context. However, the predictions of IOC could be used to generate hypotheses regarding behavioral outcomes associated with political ideology. For example, Low SDOs are motivated to attenuate social hierarchies while High SDOs are motivated to maintain or enhance these hierarchies (Pratto, Sidanius, Stallworth & Malle, 1994; Sidanius & Pratto, 1999). The results regarding the college admissions scenario confirm this prediction. However, might such motivations influence how one interacts with others based on their social status? Would Low SDOs discriminate against a high status individual? Would High SDOs discriminate against a

low status individual? These are important questions and deserve to be addressed by future research.

Double standards and SDO. Though not central to these arguments, this data reveals an additional limitation to the work of Altemeyer (1998). He reports not being able to find double standards using SDO as a predictor, and concludes that such reasoning is part of the thinking of High RWAs, not High SDOs. In the present studies, although double standards were revealed among Low and High SDOs, they were more associated with RWA than SDO. However, this may be due to the relationship between the issues involved in the scenarios and political tolerance. Most of the issues used in the scenarios were related to democratic principles (religious freedom; equal protection under the law; freedom of speech; freedom of assembly), and as Study 3 indicates, RWA is more closely linked to political tolerance than SDO. Thus, testing double standards on issues that were not particularly associated with political tolerance might be more likely to reveal double standards associated with SDO.

Sampling. The psychological literature relies a great deal on the use of college students as participants in experimental research (Sherman et al., 1999), and the present studies, as well as the original studies that were replicated in Study 1, are no exception. However, as Sears (1986) points out in his extensive review on this topic, college student samples provide known limitations to the generalizability of experimental research (e.g., that participants in student samples typically have less-crystallized attitudes than those in non-college student samples). Future studies could include samples from a non-college sample to determine whether the results generalize to greater populations.

## Conclusion

In some regards, the results from this set of studies are consistent with previous findings (asymmetrical conservative bias in particular situations [Altemeyer, 1988; 1996; 1998; Jost et al., 2003a]; the relationship between RWA and political intolerance [Altemeyer, 1996; Canetti-Nisim, 2004; Moghaddam & Vuksanovic, 1990]). However, findings of asymmetrical liberal bias and symmetrical bias, as well as liberal political intolerance, are inconsistent with the conclusions of the extant literature (rigidity-of-the-right hypothesis; Jost, 2006; Jost et al., 2003a).

Why is this so? Why are these results so different from previous findings? One obvious explanation promoted presently is that previous research did not provide the opportunity to observe such biases among political liberals. The present studies demonstrated that ideological bias can emerge when the situation allows.

However, a deeper explanation may rest in the history and demography of the social sciences, particularly social psychology. The social sciences have historically concerned themselves with the evils associated with the political right. While the majority of social psychologists themselves are political liberals, the present argument is not that these politically liberal social scientists misrepresent their findings regarding ideological bias. However, it is argued that the research questions that these scholars ask are influenced by their own ideological perspective, and that ad hoc hypotheses may likely coincide with individual proclivities.

There is no doubt that humans are pattern-seeking beings (Pinker, 1997). Scholars of human psychology are no exception. When we make discoveries in the lab, we attempt to fit those results into pre-existing theoretical frameworks. There is reason to suspect that this has occurred in the discourse on the psychology of political ideology. After a

half century of scholarship, Jost et al. (2003a, p. 353) conclude that “more support exists for the rigidity-of-the-right hypothesis than for its alternatives”. This rigidity-of-the-right hypothesis is an old idea with deep roots in the social sciences (Adorno et al., 1950; Rokeach, 1960). As scholars began to study political ideology, they most certainly approached the subject through the rubric of this hypothesis. Such a powerful theoretical framework could be resistant to alternative hypotheses.

Altemeyer’s conclusions regarding double standards may illustrate this point. High RWA biases (with an absence of Low RWA biases) were interpreted in terms of conservative inflexibility and liberal fair-mindedness. The inability to detect Low RWA bias even when he tried (affirmative action and environmental issues; Altemeyer, 1996) further supported this hypothesis. However, as the present research indicates, the most plausible explanation for Altemeyer’s (1988; 1996) findings is that the scenarios he described were not sufficient to tap into the ideological biases of political liberals. Had he approached double standards in political social cognition from a paradigm either diametrically opposed to or neutral to the rigidity-of-the-right hypothesis, might his studies (and conclusions) have been different?

Social scientists must be cognizant of the influences of their own beliefs on their scholarly efforts. A true science of social issues is a difficult one to attain, as we are not objective observers of our worlds. We must be vigilant in designing our studies so as to reject our most prized hypotheses and theories (Popper, 1934). In doing so, a more faithful and objective science of political ideology can emerge, free from our cherished theories and personal beliefs and rich in truth.

Table 1

Ideological content of Low and High RWA and SDO

Ideological Type	Ideological Content	Associated Values
Low RWA	Not Ethnocentric Individual freedom and liberty	Personal Freedom Choosing Own Goals Openness to Change
High RWA	Ethnocentric Upholding social traditions Uphold social order	Tradition Conformity Security
Low SDO	Not Ethnocentric Social Equality Hierarchy Attenuation	Universalism Equality Social Justice
High SDO	Ethnocentric Hierarchy Maintenance Hierarchy Enhancement	Social Power Wealth

Table 2

Study 1: Influence of RWA and religious target groups on judgments of the proposed law

	Low RWA		High RWA	
	Christian	Muslim	Christian	Muslim
Good Law	0 (0%)	0 (0%)	11 (22%)	4 (12%)
Bad Law	37 (100%)	51 (100%)	41 (78%)	30 (88%)

Notes:

Within each cell, the total number of participants is reported, and the percentages of participants in each category are reported in parentheses.

Table 3

Study 1: Influence of RWA and religious target group on support for proposed law

	Christian	Muslim	t	r
Low RWAs	3.55(1.20)	4.27(2.25)	1.03	.08
High RWAs	9.17(4.07)	7.30(4.38)	2.68***	.20

Notes:

\*\*\* $p < .001$

df= 176

Higher scores indicate increased support for the proposed law. The possible range of scores is 3-21.



Table 4

Study 1: School prayer ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	2.40	1	2.40	0.26
RWA	464.44	1	464.44	49.67***
gender	36.88	1	36.88	3.94*
Religion	17.27	1	17.27	1.85
Condition * RWA	41.88	1	41.88	4.48*
Condition * gender	31.12	1	31.12	3.33†
RWA * gender	63.34	1	63.34	6.77**
Condition * RWA * gender	44.35	1	44.35	4.74*
Condition * Religion	74.87	1	74.87	8.01**
RWA * Religion	0.00	1	0.00	0.00
Condition * RWA * Religion	75.42	1	75.42	8.07**
gender * Religion	25.30	1	25.30	2.71
Condition * gender * Religion	2.09	1	2.09	0.22
RWA * gender * Religion	34.81	1	34.81	3.72*
Condition * RWA * gender * Religion	5.85	1	5.85	0.63
Error	1458.60	156	9.35	
Total	2827.60	171		

Notes:

\*p&lt;.05

\*\*p&lt;.01

\*\*\*p&lt;.001

Condition refers to the experimental condition (Christian or Muslim school prayer).

Table 5

Study 1: Influence of gender, RWA, and religious target group on support for the proposed law

	Men		Women	
	Low RWA	High RWA	Low RWA	High RWA
Christian	3.61(1.04)	9.45(4.76)	3.52(1.29)	9.06(3.60)
Muslim	4.60(2.83)	4.77(2.24)	4.03(1.83)	8.95(5.06)

Notes:

Higher scores indicate increased support for the proposed law. The possible range of scores is 3-21.

Table 6

Study 1: Influence of religious affiliation, RWA, and religious target group on support for the proposed law

	Christian Participants		Non-Christian Participants	
	Low RWA	High RWA	Low RWA	High RWA
Christian Target	3.89(1.52)	10.07(3.65)	3.21(.63)	6.75(4.53)
Muslim Target	4.74(2.35)	6.00(3.64)	4.00(2.24)	9.07(5.34)

Notes:

Higher scores indicate increased support for the proposed law. The possible range of scores is 3-21.

Table 7

Study 1: Influence of RWA and counter-demonstrator's opinion on the gay rights

demonstration dependent variables

	Pro-Gay	Anti-Gay	t	r
Prison Sentence				
Low RWAs	6.54(6.25)	13.16(5.41)	5.09***	.37
High RWAs	7.72(5.83)	7.90(6.49)	.14	.01
Support for Target				
Low RWAs	9.66(5.01)	5.21(3.61)	5.24***	.37
High RWAs	8.09(3.12)	8.11(4.28)	.002	.01

Notes:

\*\*\* $p < .001$

df=164 for prison sentence dependent variable.

df= 175 for support for target dependent variable.

Prison sentence scores indicate the number of months sentenced to prison (possible range from 0 to 18 months).

Support for target scores indicate support for the counter-demonstrators, based on the aggregated measure of support (possible range from 3 to 21).

Table 8

Study 1: Gay rights months sentenced ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	312.94	1	312.94	9.26**
RWA	204.46	1	204.46	6.05*
gender	44.92	1	44.92	1.33
Condition * RWA	372.31	1	372.31	11.02***
Condition * gender	316.06	1	316.06	9.35**
RWA * gender	64.54	1	64.54	1.91
Condition * RWA * gender	31.91	1	31.91	0.94
Error	5,203.66	154	33.79	
Total	6,800.00	161		

Notes:

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

Condition refers to the experimental condition (pro-gay or anti-gay demonstration leader).

Table 9

Study 1: Gay rights support ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	137.19	1	137.19	8.94**
RWA	34.96	1	34.96	2.28
gender	13.73	1	13.73	0.89
Condition * RWA	171.98	1	171.98	11.21***
Condition * gender	116.73	1	116.73	7.61***
RWA * gender	31.58	1	31.58	2.06
Condition * RWA * gender	4.44	1	4.44	0.29
Error	2531.74	165	15.34	
Total	3144.06	172		

Notes:

\*\* $p < .01$ \*\*\* $p < .001$ 

Condition refers to the experimental condition (pro-gay or anti-gay demonstration leader).

Table 10

Study 1: Influence of SDO and college admissions policy on support for the Supreme Court decision

	Race-based	Legacy-based	t	r
Low SDOs	9.51(4.30)	7.59(4.21)	2.19*	.16
High SDOs	7.94(3.51)	9.35(4.35)	1.68*	.12

Notes:

\* $p < .05$

df= 178

High scores indicate support for the Court's decision, based on the composite measure of support (possible range from 3 to 21).

Table 11

Study 1: College admissions ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	0.87	1	0.87	0.06
RWA	31.14	1	31.14	2.03
SDO	14.24	1	14.24	0.93
gender	1.86	1	1.86	0.12
Condition * RWA	8.82	1	8.82	0.58
Condition * SDO	22.06	1	22.06	1.44
RWA * SDO	42.05	1	42.05	2.74
Condition * RWA * SDO	0.70	1	0.70	0.05
Condition * gender	15.17	1	15.17	0.99
RWA * gender	12.93	1	12.93	0.84
Condition * RWA * gender	8.58	1	8.58	0.56
SDO * gender	13.15	1	13.15	0.86
Condition * SDO * gender	9.44	1	9.44	0.62
RWA * SDO * gender	4.12	1	4.12	0.27
Condition * RWA * SDO * gender	0.00	0		
Error	1,180.09	77	15.33	
Total	1,447.48	91		

Notes:

Condition refers to the experimental condition (race-based or legacy-based admissions policy).



Table 12

Study 2: Influence of RWA and religious target group on judgments of the proposed law

	Low RWAs		High RWAs	
	Christian	Muslim	Christian	Muslim
Good Law	9 (18.4%)	16 (43.2%)	21 (58.3%)	23 (42.6%)
Bad Law	40 (81.6%)	21 (56.8%)	15 (41.7%)	31 (57.4%)

Notes:

Within each cell, the total number of participants is reported, and the percentages of participants in each category are reported in parentheses.

Participants responded to the dependent measure “This is a good law and should be passed” on a 6-point Likert scale (1= Strongly disagree; 6= Strongly agree). All those responses less than or equal to 3 were considered a response of “bad law”. All those responses greater than or equal to 4 were considered a response of “good law”.

Table 13

Study 2: Influence of RWA and religious target group on support for the proposed law

	Christian	Muslim	t	r
Low RWAs	7.35(4.73)	10.40(5.02)	2.85***	.21
High RWAs	12.55(4.88)	9.31(5.02)	3.06***	.23

Notes:

\*\*\* $p < .001$

df= 172

Higher scores indicate increased support for the proposed law. The possible range of scores is 3-21.

Table 14

Study 2: School prayer space ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	12.16	1	12.16	0.55
RWA	141.73	1	141.73	6.42*
Religion	145.35	1	145.35	6.58*
Condition * RWA	236.56	1	236.56	10.72***
Condition * Religion	210.27	1	210.27	9.53**
RWA * Religion	34.21	1	34.21	1.55
Condition * RWA * Religion	63.40	1	63.40	2.87†
Error	3,619.90	164	22.07	
Total	4,661.41	171		

Notes:

†p&lt;.10

\*p&lt;.05

\*\*p&lt;.01

\*\*\*p&lt;.001

Condition refers to the experimental condition (Christian or Muslim school prayer space).

Table 15

Study 2: Influence of RWA and counter-demonstrator's opinion on the gay rights

demonstration dependent variables

	Pro-Gay	Anti-Gay	t	r
Prison Sentence				
Low RWAs	5.00(5.63)	14.96(11.00)	4.62***	.35
High RWAs	12.11(8.58)	11.06(9.76)	.49	.04
Support for Target				
Low RWAs	10.50(3.81)	5.98(2.76)	6.23***	.43
High RWAs	8.55(3.44)	8.47(3.23)	.11	.01

Notes:

\*\*\* $p < .001$

df= 148 for prison sentence dependent variable.

df= 171 for support for target dependent variable.

Prison sentence scores indicate the number of days sentenced to prison (possible range from 0 to 30 days).

Support for target scores indicate support for the counter-demonstrators, based on the aggregated measure of support (possible range from 3 to 21).

Table 16

Study 2: Gay rights days sentenced ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	705.81	1	705.81	8.44**
RWA	64.05	1	64.05	0.77
gender	53.83	1	53.83	0.64
Religion	102.10	1	102.10	1.22
Condition * RWA	705.39	1	705.39	8.43**
Condition * gender	7.59	1	7.59	0.09
RWA * gender	38.56	1	38.56	0.46
Condition * RWA * gender	29.56	1	29.56	0.35
Condition * Religion	3.63	1	3.63	0.04
RWA * Religion	120.26	1	120.26	1.44
Condition * RWA * Religion	55.63	1	55.63	0.66
gender * Religion	78.66	1	78.66	0.94
Condition * gender * Religion	24.76	1	24.76	0.30
RWA * gender * Religion	144.09	1	144.09	1.72
Condition * RWA * gender * Religion	0.00	0		
Error	11,124.92	133	83.65	
Total	14,036.97	147		

Notes:

\*\* $p < .01$ 

Condition refers to the experimental condition (pro-gay or anti-gay counter-demonstrators).

Table 17

Study 2: Gay rights support ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	207.046	1	207.046	19.74***
RWA	18.281	1	18.281	1.740
gender	5.418	1	5.418	0.520
Religion	28.659	1	28.659	2.730
Condition * RWA	74.590	1	74.590	7.11**
Condition * gender	16.011	1	16.011	1.530
RWA * gender	6.913	1	6.913	0.660
Condition * RWA * gender	5.276	1	5.276	0.500
Condition * Religion	27.777	1	27.777	2.650
RWA * Religion	19.696	1	19.696	1.880
Condition * RWA * Religion	10.273	1	10.273	0.980
gender * Religion	34.491	1	34.491	3.29†
Condition * gender * Religion	8.228	1	8.228	0.780
RWA * gender * Religion	6.077	1	6.077	0.580
Condition * RWA * gender * Religion	0.439	1	0.439	0.040
Error	1,625.608	155	10.488	
Total	2,263.626	170		

Notes:

\*\*p&lt;.01

\*\*\*p&lt;.001

Condition refers to the experimental condition (pro-gay or anti-gay counter-demonstrators).

Table 18

Study 2: Influence of religious affiliation, RWA, and counter-demonstrator's opinion on the length of sentence suggested for counter-demonstrators

	Christian Participants		Non-Christian Participants	
	Low RWA	High RWA	Low RWA	High RWA
Anti-gay Targets	16.04(10.86)	8.77(8.83)	15.05(11.09)	16.10(10.27)
Pro-gay Targets	3.36(3.64)	12.23(8.41)	6.11(6.55)	11.25(10.32)

Notes:

High scores indicate support for the counter-demonstrators, based on the aggregated measure of support (possible range from 3 to 21).

Table 19

Study 2: American-born Low and High SDOs support for the mistreatment of Iraqi and American POWs

	Iraqi POW	American POW	t	r
Low SDOs	5.21(2.89)	4.62(2.16)	0.85	.07
High SDOs	7.70(2.85)	5.47(3.29)	3.21***	.27

Notes:

\*\*\* $p < .001$

df= 131

High scores indicate support for mistreatment of the POW, based on the aggregated measure (possible range from 3 to 21).



Table 20

Study 2: POW mistreatment ANOVA table

Source	Sum of Squares	df	Mean Square	F
Condition	26.90	1	26.90	3.35†
RWA	0.19	1	0.19	0.02
SDO	7.83	1	7.83	0.98
Religion	1.37	1	1.37	0.17
Condition * RWA	0.89	1	0.89	0.11
Condition * SDO	9.61	1	9.61	1.20
RWA * SDO	44.05	1	44.05	5.49*
Condition * RWA * SDO	6.64	1	6.64	0.83
Condition * Religion	26.83	1	26.83	3.34†
RWA * Religion	6.96	1	6.96	0.87
Condition * RWA * Religion	1.59	1	1.59	0.20
SDO * Religion	22.99	1	22.99	2.86†
Condition * SDO * Religion	1.22	1	1.22	0.15
RWA * SDO * Religion	9.59	1	9.59	1.19
Condition * RWA * SDO * Religion	6.81	1	6.81	0.85
Error	497.53	62	8.02	
Total	799.45	77		

Notes:

†p&lt;.10

\*p&lt;.05

Condition refers to the experimental condition (American or Iraqi POW).

Table 21

## RWA and SDO as Predictors of Political Intolerance

Target	RWA	SDO
Abstract Democratic Principle		
Majority vote	-.19***	-.10
Minority can influence policy	-.18**	-.31***
Minority can criticize majority	-.28***	-.21***
Minority can win majority support	-.28***	-.27***
Representative democracy is best	-.14*	-.12*
Intolerance of "Liberal" Targets		
Islamic free speech	-.30***	-.03
Liberal professor free speech	-.13*	-.01
Atheists right to organize & influence	-.35***	-.10
Gay advocate right to organize & influence	-.49***	-.17*
Homosexual mayor right to take office	-.42***	-.24***
Intolerance of "Conservative" Targets		
White Supremacist free speech	-.01	.01
Conservative official free speech	-.18**	.09
Christians right to organize & influence	<b>.24***</b>	-.07
Gay opponent right to organize & influence	<b>.19**</b>	.07
KKK mayor right to take office	-.13*	<b>.15*</b>

Notes:

\*p&lt;.05

\*\*p&lt;.01

\*\*\*p&lt;.001

Negative coefficients correspond to political intolerance among conservatives (High RWAs and High SDOs). Positive coefficients correspond to political intolerance among liberals (Low RWAs and Low SDOs). These coefficients are in bold font.

Table 22

## Study 3: Abstract democratic principles

Abstract Democratic Principle	Low RWA M(SD)	High RWA M(SD)	t	Low SDO M(SD)	High SDO M(SD)	t
Majority vote	5.26(1.02)	4.67(1.21)	3.09**	5.13(1.16)	4.84(1.14)	1.53
Minority can influence policy	5.11(1.49)	4.20(1.69)	3.39**	5.43(1.17)	4.27(1.63)	4.80***
Minority can criticize majority	5.51(.88)	4.46(1.57)	4.86***	5.01(1.38)	4.40(1.45)	2.56*
Minority can win support	5.52(1.01)	4.66(1.27)	4.43***	5.34(1.07)	4.54(1.39)	3.81***
Representative democracy is best	4.66(1.67)	4.13(1.40)	2.42*	4.60(1.23)	4.24(1.39)	1.59

Notes:

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

For majority vote, minority can influence policy, minority and criticize majority, and minority can win majority's support, there were  $N = 69$  Low RWAs and  $N = 70$  High RWAs in each analysis ( $df = 137$ ). For representative democracy is best and aggregated scale, there were  $N = 68$  Low RWAs and  $N = 70$  High RWAs in each analysis ( $df = 136$ ).

For majority vote, minority can influence policy, minority and criticize majority, and minority can win majority's support, there were  $N = 68$  Low SDOs and  $N = 74$  High SDOs in each analysis ( $df = 140$ ). For representative democracy is best and aggregated scale, there were  $N = 67$  Low SDOs and  $N = 74$  High SDOs in each analysis ( $df = 139$ ).

Table 23

Study 3: When anti-democratic response supports conservative beliefs

	Low RWA	High RWA		Low SDO	High SDO	
Conservative Intolerance	M(SD)	M(SD)	t	M(SD)	M(SD)	t
Islamic speech	4.47(1.55)	3.01(1.59)	5.49***	3.84(1.68)	3.63(1.73)	0.71
Liberal professor speech	3.98(1.93)	3.33(1.72)	2.12*	3.68(1.84)	3.65(1.84)	0.09
Atheists rights	4.19(1.78)	2.66(1.48)	5.52***	3.70(1.85)	3.27(1.78)	1.43
Gay advocate rights	5.20(1.21)	3.36(1.43)	8.20***	4.50(1.45)	3.97(1.61)	2.04*
Homosexual mayor rights	5.72(.92)	4.33(1.53)	6.47***	5.31(1.24)	4.59(1.65)	2.92**

Notes:

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

There were N= 69 Low RWAs in each analysis. For the homosexual mayor right to take office and aggregated score, there were N= 69 High RWAs. For all other analyses, there were N= 70 High RWAs.

There were N= 68 Low SDOs in each analysis. For the homosexual mayor right to take office and aggregated score, there were N= 73 High SDOs. For all other analyses, there were N= 74 High SDOs.

Table 24

Study 3: When anti-democratic response supports liberal beliefs

Liberal Intolerance	Low RWA M(SD)	High RWA M(SD)	t	Low SDO M(SD)	High SDO M(SD)	t
White Supremacist speech	3.67(1.86)	3.03(1.72)	2.10*	3.53(2.00)	3.77(1.72)	0.77
Conservative official speech	4.16(1.56)	3.30(1.45)	3.37**	3.53(1.77)	3.81(1.57)	1
Christians rights	2.87(1.81)	3.56(1.48)	2.45*	3.28(1.77)	3.01(1.49)	0.97
Gay opponent rights	3.33(1.91)	4.01(1.58)	2.29*	3.59(1.80)	3.57(1.71)	0.07
KKK mayor rights	3.09(1.92)	2.46(1.56)	2.12*	2.57(1.87)	3.15(1.89)	1.82†

Notes:

†p&lt;.10

\*p&lt;.05

\*\*p&lt;.01

There were N= 68 Low RWAs, and N= 74 High RWAs in each analysis (all df's=140).

There were N= 69 Low RWAs, and N= 70 High RWAs in each analysis (all df's=137).

## Appendix A

### Study 1: School prayer scenario scripts and dependent measures

#### Christian prayer condition

Suppose a law were passed requiring the strenuous teaching of religion in public schools.

Beginning in kindergarten, all children would be taught to believe in God, pray together in school several times a day, memorize the Ten Commandments and other parts of the Bible, learn the principles of Christian morality, and eventually be encouraged to accept Jesus Christ as their personal savior.

#### Muslim prayer condition

Suppose you were living in a modern Arab democracy, whose constitution stated there could be NO state religion—even though the vast majority of the people were Muslims. Then a fundamentalist Islamic movement was elected to power, and passed a law requiring the strenuous teaching of religion in public schools. Beginning in kindergarten, all children would be taught to believe in Allah, pray together facing Mecca several times each day, memorize important parts of the Koran, learn the principles of Islamic morality, and eventually be encouraged to declare their allegiance to Muhammad and become a Muslim.

#### Dependent measures

This is a good law, and should be passed.

If I had the chance to vote on this law, I would vote against it.

I would vote for representatives who voted in favor of this law.

Note: Dependent measures were responded to on a 6-point Likert scale (1= Strongly disagree; 6= strongly agree).

## Appendix B

### Study 1: Gay rights demonstration scenario script and dependent measures

Imagine that you are the judge presiding over the trial of Mr. William Langley. Mr. Langley is a 44-year old civil servant who is also the founder and president of the New Jersey chapter of Americans for Gay Rights (*Americans Against Perversion*), a noted pro-homosexual (*anti-homosexual*) organization. A few years ago, Mr. Langley was leading a demonstration on the steps of the New Jersey Legislature, supporting a proposed law which would have prohibited (supported) discrimination against homosexuals in housing and certain fields of employment. A crowd of approximately 100, mainly members of Mr. Langley's organization, had gathered around his speaker's stand. A large banner which read "GAY POWER" ("*THE FAMILY IS SACRED*") was tied between two columns immediately behind Mr. Langley, and some of his supporters were passing out literature to adults passing by.

About half an hour after the rally began, a group of about 30 counter-demonstrators appeared and began to walk slowly and silently around the outside of Mr. Langley's audience. They carried signs which read "THE FAMILY IS SACRED" ("*GAY POWER*") and "NO GAY RIGHTS" ("*RIGHTS FOR GAYS*"). At first Mr. Langley did not seem to notice the counter-demonstrators, but when he did, he stopped his speech and, according to several witnesses, said, "There are some of the people who are trying to keep this bill from passing. I say we run them out of here right now. Let's show everybody we mean business."

Upon hearing this, many members of Mr. Langley's audience turned upon the counter-demonstrators and began physically to attack them. By the time the police restored order, many of the counter-demonstrators had been injured, and one person had to be taken to hospital for overnight observation.

A jury has found Mr. Langley guilty of inciting a riot, and it is your task to sentence him. The minimum sentence possible is 0 months; the maximum possible is 18 months.

Dependent measures

As the presiding judge, how many months in prison is an appropriate sentence for Mr. Langley?

(write your answer) \_\_\_\_\_

It is wrong to punish Mr. Langley for his actions.

The counter-demonstrators are more responsible for the riot than Mr. Langley.

Mr. Langley is more responsible for the riot than the counter-demonstrators.

Note: Dependent measures were responded to on a 6-point Likert scale (1= Strongly disagree; 6= strongly agree). Italicized script indicates the anti-gay version script.



## Appendix C

### Study 1: Supreme Court decision scenario script and dependent measures

#### Race-based admissions policy condition

A Supreme Court ruling has upheld the rights of a major University to use race as a factor in determining university admissions. Although some argue that this practice of “affirmative action” is unfair to equally qualified students, the University argues that these practices make up for past discrimination and other disadvantages. The justices in the majority offered the following opinion: “Academic merit has to be everything a student has achieved, measured against the opportunities and circumstances that that student has faced.” This rationale was used to support the Court’s decision to allow the University to continue its race-based admissions policy.

#### Legacy-based admissions policy condition

A Supreme Court ruling has upheld the rights of a major University to use one’s status as a so-called “legacy” as a factor in determining university admissions. “Legacies” are the relatives (like sons or daughters) of wealthy and powerful graduates and alumni. Although some argue that this practice is unfair to other equally qualified students, the University argues that these practices are the right of the University to use admissions criteria that they believe are appropriate. The justices in the majority offered the following opinion: “Academic merit can include a host of personal information that the University decides is appropriate and relevant to their admissions decisions.” This rationale was used to support the Court’s decision to allow the University to continue its legacy-based admissions policy.

Dependent measures

The Supreme Court made the right decision.

If I were a justice on the Supreme Court, I would rule against the University's legacy-based (race-based) admissions policy.

There are no problems with the University's legacy-based (race-based) admissions policy.

Note: Dependent measures were responded to on a 6-point Likert scale (1= Strongly disagree; 6= strongly agree).

## Appendix D

### Right-wing authoritarianism (RWA) scale

1. The established authorities generally turn out to be right about things, while the radicals and protestors are usually just “loud mouths” showing off their ignorance.
2. Women should have to promise to obey their husbands when they get married.
3. Our country desperately needs to might leader who will do what has to be done to destroy the radical new ways and sinfulness that are ruining us.
4. Gays and lesbians are just as healthy and moral as anybody else. \*
5. It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people’s minds.
6. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend church regularly. \*
7. The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leaders in power, and silence the troublemakers spreading bad ideas.
8. There is absolutely nothing wrong with nudist camps. \*
9. Our country needs free thinkers who will have the courage to defy traditional ways, even if this upsets many people. \*
10. Our country will be destroyed someday if we do not smash the perversions eating away at our moral fiber and traditional beliefs.
11. Everyone should have their own life-style, religious beliefs, and sexual preferences, even if it makes them different from everyone else. \*

12. The “old-fashioned way” and “old-fashioned values” still show the best way to live.
13. You have to admire those who challenged the law and the majority’s view by protesting for women’s abortion rights, for animal rights, or to abolish school prayer. \*
14. What our country really needs is a strong, determined leader who will crush evil, and take us back to our true path.
15. Some of the best people in our country are those who are challenging our government, criticizing religion, and ignoring the “normal way things are supposed to be done.”\*
16. God’s laws about abortion, pornography, and marriage must be strictly followed before it is too late, and those who break them must be strongly punished.
17. It would be best for everyone if the proper authorities censored magazines so that people could not get their hands on trashy and disgusting material.
18. There is nothing wrong with premarital sexual intercourse.\*
19. Our country will be great if we honor the ways of our forefathers, do what the authorities tell us to do, and get rid of the “rotten apples” who are ruining everything.
20. There is no “ONE right way” to live life; everybody has to create their own way.\*
21. Homosexuals and feminists should be praised for being brave enough to defy “traditional family values.”\*
22. This country would work a lot better if certain groups of troublemakers would just shut up and accept their group’s traditional place in society.
23. There are many radical, immoral people in our country today, who are trying to ruin it for their own godless purposes, whom the authorities should put out of action.

24. People should pay less attention to the Bible and the other old forms of religious guidance, and instead develop their own personal standards for what is moral and immoral.\*
25. What our country needs most is discipline, with everyone following our leaders in unity.
26. It's better to have trashy magazines and radical pamphlets in our communities than to let the government have the power to censor them.\*
27. The facts on crime, sexual immorality, and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.
28. A lot of our rules regarding modesty and sexual behavior are just customs which are not necessarily any better or holier than those which other people follow.\*
29. The situation in our country is getting so serious, the strongest methods would be justified if they eliminated the troublemakers and got us back to our true path.
30. A "woman's place" should be wherever she wants to be. The days when women are submissive to their husbands and social conventions belong strictly in the past.\*
31. It is wonderful that young people today have greater freedom to protest against things they don't like, and to make their own "rules" to govern their behavior.\*
32. Once our government leaders give us the "go ahead", it will be the duty of every patriotic citizen to help stomp out the rot that is poisoning our country from within.

Note: Items with an asterisk (\*) are reverse coded. The response scale is: -4 (very strongly disagree); -3 (strongly disagree); -2 (moderately disagree); -1 (slightly disagree); 0 (neutral); +1 (slightly agree); +2 (moderately agree); +3 (strongly agree); +4 (very strongly agree).

## Appendix E

### Social dominance orientation scale

1. Some groups of people are simply inferior to other groups.
2. In getting what you want, it is sometimes necessary to use force against other groups.
3. It's OK if some groups have more of a chance in life than others.
4. To get ahead in life, it is sometimes necessary to step on other groups.
5. If certain groups stayed in their place, we would have fewer problems.
6. It's probably a good thing that certain groups are at the top and other groups are at the bottom.
7. Inferior groups should stay in their place.
8. Sometimes other groups must be kept in their place.
9. It would be good if all groups could be equal
10. Group equality should be our ideal.
11. All groups should be given an equal chance in life.
12. We should do whatever we can to equalize conditions for different groups.
13. Increased social equality.
14. We would have fewer problems if we treated people more equally.
15. We should strive to make incomes as equal as possible.
16. No one group should dominate in society.

Note: Items 9-16 should be reverse coded. The response scale is 1= very negative to 7= very positive.

## Appendix F

### Political attitude measures

Same-sex couples should be allowed to marry.

Affirmative action is an appropriate program to level the playing field for disadvantaged minorities.

The current war in Iraq is necessary for American security and freedom.

The federal government should be able to place restrictions on abortion

Racial profiling is simply a tool for law enforcement to properly and effectively do their job.

Note: Responses to these five items were based on a 7-point Likert scale

## Appendix G

## Demographic information

1. GENDER (please circle): MALE    FEMALE
2. AGE: \_\_\_\_\_
3. Is English your FIRST language (please circle)? YES    NO
4. Is English your BEST language (please circle)? YES    NO
5. Where were you born? Country: \_\_\_\_\_ State/Province: \_\_\_\_\_
6. What race/ethnicity bests describe you (please circle)?  
White    African-American    Latino    Asian  
Other \_\_\_\_\_ (please specify)
7. What religion best describes you (please circle)?  
Christian    Catholic    Jewish    Muslim    Hindu    Buddhist    Agnostic    Atheist  
Other \_\_\_\_\_ (please specify)
8. On a scale of 1 to 10 (1= not at all, 10= completely), how religious are you? \_\_\_\_\_
9. In your own words, what do you think this study is about?



## Appendix H

### Study 2: School prayer space scenario and dependent measures

Suppose that a law was passed that allowed public schools in New Jersey to designate special areas of the school for *Christian* (Muslim) student worship. If a *Christian* (Muslim) student desired to enter this space during the day, he or she would be allowed to.

#### Dependent measures

This is a good law, and should be passed.

If I had the chance to vote on this law, I would vote against it.

I would vote for representatives who voted in favor of this law.

Note: Dependent measures were responded to on a 6-point Likert scale (1= Strongly disagree; 6= strongly agree).

Italicized text indicates the Christian Condition.

## Appendix I

### Study 2: Gay rights counter-demonstration scenario and dependent measures

Imagine that you are the judge presiding over a highly controversial trial. Recently, a demonstration was held in front of the New Jersey Legislature by the organization Americans for Gay Rights (*Americans Against Perversion*), a pro-gay (*anti-gay*) rights organization. The speaker for Americans for Gay Rights (*Americans Against Perversion*) was giving a speech which supported a proposed law which would have opposed (*supported*) discrimination against homosexuals in housing and certain fields of employment. A crowd of approximately 100, mainly members of American for Gay Rights (*Americans Against Perversion*), had gathered around the speaker's stand. A large banner which read "GAY PRIDE" ("*THE FAMILY IS SACRED*") was tied between two columns immediately behind the speaker, and some supporters were passing out literature to adults passing by.

About half an hour after the rally began, a group of about 30 counter-demonstrators appeared and began to walk slowly and silently around the demonstration. They carried signs which read "THE FAMILY IS SACRED" ("*GAY PRIDE*") and "NO GAY RIGHTS" ("*GAY RIGHTS NOW!*"). New Jersey state troopers, who were providing security for the event, began to push the counter-demonstrators back. The counter-demonstrators did not back down, and began hurling insults at the police. As the troopers attempted to disburse the crowd of counter-demonstrators, a melee ensued, with counter-demonstrators throwing bottles, and troopers using mace and batons. By the time order was restored, many of those involved had been injured, and one person had to be taken to hospital for overnight observation.

A jury has found the counter-demonstrators guilty of inciting a riot. Your task, as the judge in this case, is to sentence them. The minimum sentence possible is 0 days in jail; the maximum possible is 30 days.

### Dependent measures

As the presiding judge, how many days in prison is an appropriate sentence for the counter-demonstrators? (write your answer) \_\_\_\_\_

It is wrong to punish the counter-demonstrators for their actions

Americans for Gay Rights (*Americans Against Perversion*) are more responsible for the riot than the counter-demonstrators

The counter-demonstrators are more responsible for the riot than Americans for Gay Rights (*Americans Against Perversion*).

Note: Dependent measures were responded to on a 6-point Likert scale (1= Strongly disagree; 6= strongly agree). Italicized text indicates the anti-gay condition.

## Appendix J

### Study 2: POW mistreatment scenario and dependent measures

A report was released today detailing the mistreatment of an Iraqi insurgent by American soldiers (*an American soldier by Iraqi insurgents*). The recently released Iraqi insurgent (*American soldier*) claims that the American soldiers (*Iraqi insurgents*) used tactics that were “basically torture”, including keeping him awake all night, making him stand in his own urine, and depriving him of light by making him wear a sack over his head for several days. The American forces (*Iraqi insurgent forces*) have denied the allegations.

#### Dependent measures

The treatment of this Iraqi insurgent (*American soldier*) was justified.

The treatment of this Iraqi insurgent (*American soldier*) was moral.

The treatment of this Iraqi insurgent (*American soldier*) was basically torture.

#### Notes:

Dependent measures were responded to on a 6-point Likert scale (1= Strongly disagree; 6= strongly agree).

Italicized text indicates the American soldier condition.

## Appendix K

### Study 3: The democratic beliefs scale

#### Abstract democratic principles

Representative democracy is the best form of government that I know of.

Every citizen **should not** have an equal chance to influence government policy.

The minority **should** be free to criticize majority decisions.

People in the minority **should not** be free to try to win majority support for their opinions.

Public officials **should** be chosen by majority vote.

#### Conservative political intolerance

If a member of a radical Islamic group wanted to give a public speech entitled “America, the Great Satan”, he **should** be allowed to speak.

A liberal college professor **should not** be allowed to deliver a lecture justifying the attacks of September 11, 2001.

The political group Atheists for America **should not** be allowed to organize to remove “Under God” from the Pledge of Allegiance.

Members of Lamda Legal **should not** be allowed to organize in order to pass laws legalizing gay marriage.

If a homosexual were legally elected mayor, he **should not** be allowed to take office.

#### Liberal political intolerance

A member of a White Supremacist group **should not** be allowed to give a speech entitled “On the Genetic Inferiority of Blacks”.

A conservative Homeland Security official **should** be allowed to deliver a lecture justifying religious and racial profiling of possible terrorists.

An Evangelical Christian church organization **should** be allowed to organize to have Creationism taught in public schools.

Members of Focus on the Family **should** be allowed to organize in order to pass laws banning gay marriage.

If a member of the Ku Klux Klan (KKK) is legally elected mayor, he **should not** be allowed to take office.

## Footnotes

<sup>1</sup>In Altemeyer's (1996) original study, and in Study 1, the Christian prayer law was in American public schools, and the Muslim prayer law was in Arabic public schools. Therefore, in addition to changing the mandatory nature of school prayer, Study 2 also changed the previous studies by locating the school prayer space within the same country (The United States).

<sup>2</sup>In Altemeyer's (1988) original study, and in Study 1, the range for the prison sentence was framed within months. In Study 2, the range for the prison sentence was framed within days. This change was made because the ambiguous nature of the circumstances in Study 2 may have made it unrealistic that participants would send targets away for months at a time. Therefore, using a measure of days sentenced seemed appropriate.

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