

Anti-Atheist Bias in the United States: Testing Two Critical Assumptions

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ABSTRACT: Decades of opinion polling and empirical investigations have clearly demonstrated a pervasive anti-atheist prejudice in the United States. However, much of this scholarship relies on two critical and largely unaddressed assumptions: (a) that when people report negative attitudes toward atheists, they do so because they are reacting specifically to their lack of belief in God; and (b) that survey questions asking about attitudes toward atheists as a group yield reliable information about biases against individual atheist targets. To test these assumptions, an online survey asked a probability-based random sample of American adults (N = 618) to evaluate a fellow research participant (“Jordan”). Jordan garnered significantly more negative evaluations when identified as an atheist than when described as religious or when religiosity was not mentioned. This effect did not differ as a function of labeling (“atheist” versus “no belief in God”), or the amount of individuating information provided about Jordan. These data suggest that both assumptions are tenable: nonbelief—rather than extraneous connotations of the word “atheist”—seems to underlie the effect, and participants exhibited a marked bias even when confronted with an otherwise attractive individual.

KEYWORDS: ATHEISTS, ANTI-ATHEIST, BIAS, PREJUDICE, UNITED STATES

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Introduction

In the United States, where approximately 70% of the adult population affirms the existence of a personal God ([Kosmin & Keysar, 2009](#)), forthright disbelief appears to represent a robust social hazard. Public opinion surveys have estimated that more than half of Americans would refuse to vote any atheist into public office ([Jones, 2007](#)), disapprove of their children marrying an atheist ([Edgell, Gerteis, & Hartmann, 2006](#)), and disfavor those who identify with the label ([Pew Research Center, 2003](#)). The preponderance of social scientific research paints a congruent picture: samples of US college students and adults have exhibited strong anti-atheist biases in experimental studies (e.g., [Furnham, Meader, & McClelland, 1998](#); [Gervais, 2011](#); [Gervais, Shariff, & Norenzayan, 2011](#)), and many of the country's nonreligious citizens report experiencing some form of social exclusion, harassment, or stigmatization for their lack of belief ([Cragun et al., 2012](#); [Downey, 2004](#); [Hammer, Cragun, & Hwang, 2011](#); [Hunsberger & Altemeyer, 2006](#)). Presently, several theoretical models are emerging to answer the question of why nonbelief begets such hostility. These explanations include the notions that theistic belief may serve as a heuristic cue for moral trustworthiness in American society (see [Gervais et al., 2011](#)); that exposure to rejected religious beliefs may elicit disgust responses by symbolically violating spiritual purity (see [Ritter & Preston, 2011](#)); and that anti-atheist prejudice may serve as a protector of shared religious realities with one's parents (see [Magee & Hardin, 2010](#); [Magee, 2011](#)).

Implicit in each of these explanatory models is an assumption that seems perfectly reasonable: when people report negative attitudes toward atheists, they do so because they are reacting specifically to atheists' lack of belief in God. Our review of the literature frequently revealed a presumed isomorphic relationship between the word and its definition in assessing intergroup bias. However, several popular writers have suggested that the label itself may carry a unique negative connotation, dissociated from its meaning and akin to a vulgarity (e.g., [Dawkins, 2006](#); [Dennett, 2003](#); [Harris, 2007](#)). Just as the label of "feminist" has become an undesirable social designation in mainstream American culture (research has shown that many people who endorse feminist ideals nonetheless disfavor others who identify as feminists, and that women with a pro-feminist orientation often eschew the label; [Rowe-Finkbeinder, 2004](#); [Williams & Wittig, 1997](#)), these authors analogously proposed that "atheist" has become shorthand for a host of stereotypes and pejoratives that have little to do with nonbelief; that the word brings to mind for many a "cranky sub-culture...to be viewed as a marginal interest group that meets in hotel ballrooms" ([Harris, 2007](#)). Indeed, while only 0.7% of the population actually subscribes to "atheism" as their religious classification, more than three times that number maintains that God does not exist ([Kosmin & Keysar, 2009](#)). To test the assumption that nonbelief constitutes the source of anti-atheist prejudice, we asked a nationally-representative group of American adults to provide attitudinal evaluations of a target either identified as an Atheist or simply described as lacking belief in god. Our *labeling hypothesis* (Hypothesis 1) derived from the writings of Dawkins ([2006](#)), Dennett ([2003](#)) and Harris ([2007](#)) who have predicted that an Atheist target would garner significantly more negative evaluations than a nontheist counterpart without the label.

A second assumption often made by researchers of this topic concerns the generalizability of findings from studies asking participants to consider atheists—whether identified by label or in more general terms, as people who do not believe in God—as a *group*. Much of the burgeoning empirical scholarship on anti-atheist prejudice has employed relatively transparent survey methods, such as simply asking participants to report their perceptions and tolerance of Atheists relative to other out-groups. Do these negative attitudes toward Atheists in general equate to biases against *individual* athe-

ists as people experience them in the world? This distinction is not trivial; social scientists have long recognized the importance of separating prejudicial attitudes from context-dependent biases (e.g., [Dockery & Bedeian, 1989](#); [Firmin, 2010](#); [LaPierre, 1934](#)). Atheists are rarely encountered in the world *solely* as atheists, and people may respond more negatively to the unknown and hypothetical atheist typically presented in questionnaire-based studies than they would toward an ostensibly real person, with other salient qualities and characteristics and who happens to be a nonbeliever. For instance, Hilton and Fein ([1989](#)) described a “dilution” effect such that people’s stereotypes about a group can be weakened by the inclusion of unrelated but otherwise diagnostic information about the target (such as their college major or hobbies). Researchers have yet to address this methodological issue in anti-atheist bias research, leaving a gap in the literature concerning whether and how anti-atheist prejudice is affected by such dilution. That is, does the anti-atheist prejudice effect hold when atheism is revealed amidst a welter of other individuating information? To test the common assumption that survey items presumably tapping group-level attitudes can yield reliable information about attitudes toward individuals, we asked our sample to evaluate an “atheist” target under two different conditions—a minimal information condition (containing only the target’s name and information about religious beliefs) and an individuated condition containing an additional brief personal description. Grounded by research and theory on the dilution effect (e.g., [Hilton & Fein, 1989](#); [Nisbett, Zukier, & Lemley, 1981](#)), we predicted that individuation would increase the positivity of participants’ evaluations of the atheist target in a between-participant design (Hypothesis 2). Finding a substantial attenuation would suggest that this assumption may be faulty when considering anti-atheist prejudice. Although self-report survey research cannot measure real-world behaviors, asking people to evaluate a fictional character presented as a real human being might stimulate a response more similar to genuine social interaction than questions used for opinion polling, and provide valuable information about the utility of current label-only measurement strategies. More broadly, varying atheism in person perception research represents an important preliminary step in determining whether anti-atheist prejudice is something that people practice as well as preach.

Method

Procedure and Participants

Time-sharing Experiments for the Social Sciences (TESS) facilitated data collection for this study. Through a National Science Foundation grant, TESS contracts with Knowledge Networks, Inc. to field general population survey experiments using a probability-based, non-volunteer online panel. Members of this panel, which includes more than 50,000 US adults in households with and without Internet access, complete surveys in exchange for either (a) points that can be redeemed for cash or gift cards (typically four to six dollars per month), or (b) the use of free hardware and Internet access for households without an existing connection. Recruitment for this panel combines invitations via the random-digit dialing of telephone numbers and paper mailings through address-based sampling.²

Using formulae designed to ensure that each sample from the panel mirrored characteristics of the general population (US Patent No. 7,269,570), Knowledge Networks selected 988 panelists to participate in our study. A total of 618 individuals responded to the invitation between November 30 and December 15, 2010, yielding a final stage completion rate of 62.3%. Approximately 3% of

2 More information about the panel and the sampling methods employed by Knowledge Networks can be found at <http://www.knowledgenetworks.com>, and in [Dennis, 2010](#).

Table 1. Characteristics of the Unweighted National Sample (N = 618).

Measure	%	n	Measure	%	n
Age			Region		
18-24	9.2	57	Northeast	17.8	110
25-34	15.9	98	Midwest	20.1	124
35-44	18.1	112	South	38.7	239
45-54	20.1	124	West	23.5	145
55-64	18.6	115	Home Internet access		
65-74	13.3	82	No	21.2	131
75+	4.9	30	Yes	78.8	487
Education			Religious Affiliation		
8th grade or less	2.3	14	Baptist	15.9	98
9th to 12th grade	8.9	55	Protestant	20.7	128
High school graduate	32.5	201	Catholic	24.9	154
Some college	15.7	97	Mormon	2.1	13
Associate degree	8.4	52	Jewish	1.1	7
College graduate	21.2	131	Muslim	0.2	1
Postgraduate work/degree	11	68	Buddhist	0.2	1
Race/Ethnicity			Pentecostal	2.1	13
White, non-Hispanic	76.4	472	Other Christian	13.9	86
Black, non-Hispanic	10	62	Other non-Christian	4.2	26
Other, non-Hispanic	3.7	23	None	13.9	86
Hispanic	7.3	45	Missing	0.8	5
2+ races, non-Hispanic	2.6	16	Political Ideology		
Gender			Extremely liberal	3.4	21
Male	47.1	291	Liberal	11.5	71
Female	52.9	327	Slightly liberal	11	68
Household income			Moderate	34.3	212
Less than \$9,999	7.3	45	Slightly conservative	11.3	70
\$10,000-\$19,999	11.5	71	Conservative	21.4	132
\$20,000-\$34,999	18	112	Extremely conservative	4.2	26
\$35,000-\$49,999	15.4	95	Missing	2.9	18
\$50,000-\$99,999	33.2	205	Church Attendance		
\$100,000-\$149,999	9.7	60	Never	12	74
\$150,000+	4.9	30	Once a year or less	14.9	92
Marital Status			A few times a year	17.2	106
Married	57.1	353	Once or twice a month	10.2	63
Widowed	5.5	34	Once a week	21	130
Divorced	8.9	55	2+ times a week	10.4	64
Separated	1.3	8	Missing	14.4	89
Never married	19.7	122			
Living with partner	7.4	46			

participants exited the survey before completion. Table 1 presents a detailed breakdown of participants' demographic characteristics. Additionally, participants reported their level of religiosity on a seven-point Likert-type scale (ranging from 1, Not at All Religious, to 7, Very Religious; $M = 4.09$, $SD =$

1.88), and whether or not they would describe themselves as a born-again or Evangelical Christian (35.5% answered in the affirmative). For the most part, our data correspond faithfully to demographic distributions found in the 2010 US census. However, certain inevitable sources of bias—such as non-response error—produced a less than perfect final random sample (e.g., substantially less Hispanic identification than would be expected). To correct such deviations and arrive at the most nationally representative sample possible, we applied a post-stratification weight designed to bring distributions of race, ethnicity, age, gender, education, and geographic region into line with census estimates.

Survey Instruments

Immediately following informed consent, a short introductory paragraph explained to participants that the objective of our research was to determine precisely how much information is necessary for people to form accurate impressions about others. This text also introduced a fictional character (“Jordan”) that purportedly participated in a previous stage of the research project. Participants were then instructed to answer some questions about what is likely true about Jordan based only on a few small bits of previously collected information so that their guesses could later be compared to Jordan’s “actual” profile. Jordan was described as (1) “an atheist” or (2) as “without belief in God”. To provide reference groups against which the Atheist and nonbeliever targets could be compared, we also included conditions describing Jordan as (3) religious and (4) unmarried (“single”). Four additional experimental conditions repeated the same information (target name and a single piece of information), but added a short paragraph of individuating information about Jordan to each—a positively valenced description of Jordan’s vocation and hobbies:

I am just ending my last year of college. I’ll be graduating with a Bachelor’s degree in architecture. I’m still not sure where I’ll be working when I graduate. I’ve always wanted to live in California, so I think I might start looking for a job out there. I’m also thinking about graduate school for architecture, I’m not sure yet. I’m taking part in this study in order to earn credits toward a class that I am taking this semester. In my spare time, I like to run, sometimes competitively in marathons, and just hang out with friends. I think that most people would describe me as a friendly person.

The design was completely between-participants: each was randomly exposed to only one of eight conditions.

After their introduction to Jordan, participants evaluated Jordan along six dimensions: *bad—good, foolish—wise, cold—warm, immoral—moral, unpleasant—pleasant, and untrustworthy—trustworthy*. Each word pair on this semantic differential scale—constructed for this study and adopting one of the most widely utilized tools in attitudinal research ([Himmelfarb, 1993](#))—represents a trait spectrum with both positive and negative poles to measure the connotative meaning of and attitude toward an object ([Osgood, Suci, & Tannenbaum, 1957](#)). Each item was scored on a seven-point Likert-type scale. Scores from each pair were then added together to form a total positive/negative evaluation score (Cronbach’s $\alpha = .89$ in this sample). Participants also completed a short measure of right-wing authoritarianism. However, exploratory analyses with this scale provided no additional insight about the phenomena of interest for this report. Finally, participants responded to a single open-ended item: “Please tell us how you would define the word *atheist*”.

Table 2. Semantic Differential Scores by Experimental Condition

Target	Without individuating information			With individuating information		
	<i>n</i>	M	SD	<i>n</i>	M	SD
Atheist	63	22.14 _a	5.67	87	28.24 _c	5.67
No Belief in God	79	24.06 _a	5.97	73	28.86 _{c,e}	5.19
Religious	69	27.26 _b	5.92	59	31.98 _d	6.09
Control (unmarried)	74	27.04 _b	5.78	77	31.21 _{d,e}	6.83

Note. Scores on the semantic differential measure ranged from 6-42; higher scores indicate more positive perceptions. Means with different subscripts are significantly different at $p < .01$ based on Bonferroni-adjusted inference tests. Means with the same subscripts are *not* significantly different at $p < .01$.

Results

Participants' scores on the semantic differential scale appeared suitably normal for general linear model analyses (i.e., skewness and kurtosis coefficients $< .51$). Two participants who finished the survey in less than two minutes and who exhibited suspicious patterns of responding (e.g., consecutive identical answers) were removed prior to analysis. Additionally, 14 participants indicated that they did not know or understand the word "atheist". Four of these participants were assigned to the condition that described Jordan as an "atheist"; these four cases were also removed (the pattern of results described below remains wholly intact when all 14 participants are removed). Listwise deletion was applied for remaining missing data (3% of cases). Interested parties can locate and download the raw data at <http://www.tessexperiments.org>.

Hypotheses

A four (experimental condition: atheist, nonbeliever, religious, or unmarried) by two (individuation paragraph, present or absent) analysis of variance revealed significant main effects of the experimental condition [$F(3, 573) = 18.26, p < .001, f = .31$] and individuation [$F(1, 573) = 100.48, p < .001, f = .42$] on semantic differential scores. The homogeneity of the variance assumption was satisfied by a non-significant Levene's test statistic, and Bonferroni alpha-adjustment ($\alpha = .05$) was applied to all subsequent individual mean comparisons. Consistent with previous research and our expectations, participants' evaluations of the atheist target were significantly more negative than evaluations of the religious ($p < .001, d = .89$) or unmarried ($p < .001, d = .86$) targets in the minimal information condition (see Table 2 for means and standard deviations).

Hypothesis 1. Inconsistent with the labeling hypothesis (that the atheist target would garner significantly more negative evaluations than a nonbeliever target without the label), participants' evaluations of the fictional target identified as an atheist were not significantly more negative than evaluations of the target described as without belief in God in either the minimal information condition ($p =$

ns, $d = .22$) or the individuated condition ($p = ns$, $d = .08$). Both effect sizes are small by Cohen's (1988) standards. Moreover, the means for these two targets across individuation conditions (atheist: $M = 25.78$, $SD = 6.62$; nonbeliever: $M = 26.23$, $SD = 5.91$) were statistically *equivalent*, providing an independent, converging source of evidence that a true meaningful difference is unlikely to exist (criterion = 10% difference, $Z = 3.01$, $p < .01$; Rogers, Howard, & Vessey, 1993).

Hypothesis 2. Consistent with hypothesis 2—that individuation will increase the positivity of participants' evaluations of the atheist target—simple effects decomposition revealed that adding the paragraph describing Jordan's vocation and hobbies significantly improved evaluations in *all four conditions* (all p 's $< .001$, see Table 2 for descriptive statistics). Although the effect sizes of these differences might suggest that the atheist ($d = 1.08$) and no belief in God ($d = .86$) targets benefited slightly more from individuation than the religious ($d = .79$) or control ($d = .66$) targets, the main effect of individuation did not alter the overall pattern of results or significant differences *between* targets [interaction term: $F(3, 573) = .71$, $p = ns$]. Even with the extra information, Jordan garnered significantly more negative evaluations when identified as an atheist than as religious ($p < .001$, $d = .64$) or as unmarried ($p < .01$, $d = .48$).

Atheist Definitions

As an additional exploratory analysis, two undergraduate research assistants served as independent judges in broadly classifying responses to the open-ended prompt, "Please tell us how you would define the word *atheist*". Eighty-five percent of participants offered some close variation of "someone who does not believe in God," while only 15% provided a substantially different definition without describing nonbelief. Inter-rater agreement was 89%, and disagreements between coders were settled by the authors. Removing all participants who either responded with a divergent definition or who did not respond to the item from analyses did not meaningfully affect the results described above.

Discussion

Consistent with previous investigations, this study documented a strong anti-atheist prejudice: labeling Jordan as an "atheist" had a clear deleterious effect on participants' social perceptions. Only the atheist target received an average evaluation score in the negative half of the semantic differential scale range, and the nonbelievers averaged three and a half points lower than the reference (religious and unmarried) targets across conditions. Apart from this conceptual replication, the true goal of our study was to explore two specific assumptions often ignored by social scientists. The first concerned the supposition that nonbelief in God is the principal source of enmity toward atheists. Contrary to the labeling hypothesis we derived from the writings of several prominent atheist authors (Dawkins, 2006; Dennett, 2003; Harris, 2007), attitudes toward atheists did not differ as a function of labeling in our study: alerting participants to Jordan's lack of belief in God had functionally the same effect as calling Jordan an atheist outright, and most participants provided a definition of the word that suggested familiarity with this definition of "atheism". Even the largest difference between these two targets in semantic evaluations (in the minimal information condition) was small enough to treat as practically insignificant ($d = .22$; Cohen, 1988). Converging evidence against the labeling hypothesis was also found in the statistical significance of an equivalence test comparing the two targets across individuating conditions. Thus, we conclude that these data do not support the idea that the word "atheism" has become emotionally charged and dissociated from its meaning. The implications of this correspondence are encouraging for emerging explanatory models, all of which rely on this assumption to some extent. For instance,

Gervais and colleagues (2011) posit that belief in God serves as a cue to one's trustworthiness in obeying society's rules; if one is subject to monitoring and punishment by a supernatural agent, he/she is unlikely to transgress. Atheists' lack of belief, then, is vital for perceivers making heuristic social evaluations.

We also challenged a label-only approach to studying anti-atheist prejudice: when a survey respondent answers questions about atheists *en masse*, investigators have no readily-available method for assessing whether the items trigger group-level stereotypes or recollections of actual interpersonal experiences, or something more complex, such as imagined intergroup contact (Turner & Crisp, 2010). It therefore remains plausible that such items do not reliably measure individual-level biases. This study aimed to test this assumption by comparing directly two methodological approaches: employing the label-only method (the minimal information condition), and embedding the label within a more mundane and realistic context (the individuated condition). This online survey research cannot provide insight into how our participants actually would have behaved if they had met Jordan face-to-face. Further, one could argue that participants may have relied on their group-level prejudicial attitudes when assessing a person with such interpersonal distance: words on a computer screen describing Jordan's personality may not be "real" enough to trigger cognitive schemas for a *bona fide* social context or to dilute prejudice. However, the comparison revealed that the dilution effect did indeed apply to social perceptions of atheists, a finding not previously reported in the scholarly literature. The medium to large sized (d 's = .66 – 1.08; Cohen, 1988) differences between experimental conditions with and without additional individuating information imply that Jordan's unrelated personal qualities (college major, hobbies) mattered: in each case, Jordan's average rating increased substantially. However, the inclusion of this information did not attenuate the evaluative gap between atheists and the religious or control targets—preliminary evidence that people may indeed practice what they preach.

In this way, anti-atheist attitudes may exemplify a socially acceptable prejudice (perceived as reflecting unbiased and valid observations about the stereotyped group; Allport, 1979), perhaps sanctioned by an interaction of specific faith-based teachings (i.e., open condemnation of religious skeptics or heretics; Harper, 2007) and a larger cultural context of theism as necessary for morality. Many varieties of minority group prejudice bow to social pressures of political correctness, rechanneling into implicit biases or micro-aggressions (e.g., Sue et al., 2007). Anti-atheist bias appears to be, however, resistant to these forces. An editorial published in the *Los Angeles Times* entitled, "Atheists: No God, No Reason, Just Whining" illustrates this point: the piece begins pointedly with the author's admission that she simply "can't stand atheists" (Allen, 2009). We know of no other religious minority group for whom this would stand in a major media outlet.

This discussion must be qualified by a consideration of this study's limitations. Foremost, we made no attempt to determine *why* people exhibited bias in this study—we constructed our criterion measure only to measure global attitudes, which we confirmed by finding support for a unidimensional factor structure. We also ignored a world of individual difference variables. Future research might do well to focus on *who* exhibits this bias, and *when*. Many elements of the experimental manipulation were arbitrarily chosen. It is possible that specific characteristics (e.g., the name "Jordan," architecture, running competitively in marathons) may have interacted with our experimental manipulation, precluding uncritical generalization. We did, however, find evidence that this description made Jordan more likable across conditions. Another salient limitation concerns demand characteristics: given that the only information provided about Jordan concerned religious beliefs (or marital status) in the minimal information conditions, some participants may well have correctly identified our manipulation. Indeed, this limitation signified a major motivation for this investigation: when a label is all that

participants have, it seems highly probable that some will deduce the true goal of the study (perhaps increasing the likelihood of socially desirable or non-natural responding; see [Stangor, 2009](#)). We sought to evaluate how this traditional approach to measuring anti-atheist prejudice would fare when compared to a stimulus presentation that more closely approximates people's real experiences of atheists (i.e., "Jordan"). Participants may have seen through this facade as well, detecting atheism as the variable of interest. On the other hand, they also may have guessed our aim *inaccurately*, by focusing on one or more of the other descriptive features.

We also wish to reiterate that these data cannot provide true insight into how our participants would have behaved in a natural setting when encountering an atheist. A productive next step in anti-atheist prejudice research may be to actually observe and measure participants' reactions to a flesh-and-blood atheist confederate. Our review of the empirical literature found a lacuna on this issue.

Antipathy toward atheists appears to represent a robust and socially acceptable prejudice that pervades American society. In conclusion, our data suggest that two important assumptions underlying anti-atheist prejudice research are tenable: nonbelief—rather than extraneous connotations of the word "atheist"—seems to largely underlie the effect, and people appeared to exhibit the bias even when confronted with an otherwise attractive individual. We hope that these results will prove useful for researchers forming and refining theories of these complex social behaviors, and for those seeking ways to ameliorate the harmful effects of stereotyping and prejudice on members of religious minority groups.

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