Facial Recognition and Its Role in Tacit Anti-Atheist Prejudice

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Abstract

We examined the relationship between facial recognition and its role in tacit anti-atheist prejudice. Sixty-two participants were shown 50 pairs of unlabeled male faces, one atheist and the other Christian. They judged which face was more likely to commit acts, some of which were immoral and others non-moral. Results showed that participants were significantly more likely to assign immoral acts (rather than non-moral acts) to atheist faces. Participants were shown to have a tacit anti-atheist prejudice, leading them to believe, unknowingly, that atheists are more likely to commit immoral acts.

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Humans can determine what a certain person believes or thinks just by looking at them (Rule & Ambady, 2010; Pitts & Wilson, 2016). This seems rather implausible, considering that some category information of a person is not typically as apparent as race or gender. However, studies show that social categories like political and religious affiliation, as well as sexual orientation, are detectable simply by looking at a person’s face (Rule & Ambady, 2010; Pitts & Wilson, 2016).

Humans are also more likely to assign seemingly immoral activities to certain groups rather than others (Gervais, 2014; Mudd et al., 2015). One study has shown that, when presented with an immoral act, participants were more likely to assign this act to atheists rather than a separate religion, such as Christianity, Islam, Buddhism, Judaism, or Hinduism (Gervais, 2014). This poses the question: does the ability to determine one’s religious and political identity—just by looking at their face—coincide with tacit prejudice against certain groups? In a society with atheism on the rise, testing for prejudice, known or unknown, seems important.

**Prejudice Against Atheists**

Religion is thought to be a key factor in determining one’s moral and ethical values, according to some studies (Mudd et al., 2015; Cook et al., 2015; Gervais, 2013). One study indicates that when given a choice between hypothetical presidential candidates, participants would be more likely to choose a homosexual, Jewish, female, or African American candidate before choosing an atheist. This study also found that Americans, especially, are “less accepting” of those identifying as atheist than any other groups presented in the researcher’s survey, including Muslims, immigrants, homosexuals, Jews, and several others (Edgell et al., 2006). Because religion is thought to influence morality, and morality is a key factor when helping to lead a country, this likely played an important role in participants’ decisions.

Further supporting the evidence of anti-atheist prejudice, studies have shown that participants not only separate atheists from other members of society (Edgell et al., 2006), but also deem atheists as more likely to commit immoral or illegal acts than other religious groups (Gervais, 2014; Mudd et al., 2015). In Gervais’s study (2014), participants were presented with several different immoral acts involving murder, incest, and necrobestiality. Participants were then asked to assign these different immoral scenarios to whomever they thought would be most likely to commit them, with options ranging from an atheist, Christian, Buddhist, Muslim, Jew, or Hindu person. For every scenario, participants found each immoral act to be more representative of the atheist population than of any other religious group presented in the options (Gervais, 2014). Because religion is thought to be something that is not easily determined just by looking at someone, prejudice should not be an issue in normal, everyday life.

**The Ability to Determine Beliefs and Practices from Faces**

However, some studies have shown that participants can identify a person’s social category—ranging from religion, to political ideology, to sexual orientation—just by looking at a face. For example, Rule and Ambady (2010) explored political identification by presenting participants with pictures of U.S. senators from the 2004 and 2006 elections, asking them to deem each senator as either Democratic or Republican. Photos were cropped to only reveal the senator’s head to avoid any other factors that might give away their affiliation. Overall, participants were able to accurately place the senators in their correct political party.

Another study presented participants with faces of 81 different men, all placed on a gray scale and free of facial adornments. Participants were then asked to rate the man’s sexual orientation on a scale of 1 to 4 (1 = *very gay,* 2 = *somewhat gay,* 3 = *somewhat straight,* 4 = *very straight*). Results showed that participants were able to accurately determine each face’s sexual orientation, further supporting the claim that participants can accurately determine the beliefs and practices of a person just by looking at them (Rule et al., 2008).

Two additional studies explored participants’ ability to determine a person’s religious affiliation by looking at their face (Pitts & Wilson, 2016; Rule et al., 2010). Pitts and Wilson’s study (2016) presented participants with pictures of 70 different white men placed on a gray scale, all without facial adornments (including facial hair, piercings, tattoos, etc.) and pre-rated on an equal level of attractiveness. When shown to them, participants were able to accurately determine each face’s religious affiliation in terms of atheism and Christianity. With previous research results in mind, it begs the question: are participants prejudiced against certain groups of people without even realizing it?

Previous research has only focused on prejudice against atheists and other out-groups, as well as detecting one’s beliefs and practices just by looking at their face. However, researchers have failed to focus on whether there is an existing correlation between Christian and atheist faces and whether these faces are thought to be more capable of committing immoral acts based on tacit anti-atheist prejudice. Do we, as humans, discriminate against certain groups of people without even realizing it?

The purpose of this paper is to study other research articles focusing on prejudice against atheism and the ability of participants to determine someone’s social category only by looking at their face. It presents different immoral acts (murder and incest), along with acts that are considered non-moral and disgusting, but not necessarily immoral (not showering for a period of time and watching atypical porn), and examines the possibility of prejudice against atheist faces as opposed to Christian faces.

This study builds on previous research by presenting participants with different acts pre-rated as either immoral or non-moral, but disgusting, and combining these acts with pairs of Christian and atheist faces. Participants were then asked to assign a face to the given act without knowing which face is Christian or atheist—or that religion was a factor in the first place. By combining these two ideas, we will be able to test whether there is an existing correlation between ideological facial recognition and tacit prejudice against atheists. The following hypothesis will be tested in this study:

1. Participants will be more likely to assign an atheist face to immoral acts than non-moral or disgusting acts.

**Method**

**Participants**

Participants included 62 students at Birmingham-Southern College (33 female, 29 male; 79% White; 8.1% Black; 12.9% other) who participated in exchange for course credit in their introduction to psychology class.

**Materials and Procedure**

Participants were given a link to our study and completed it on a computer or other electronic device. Participants were told they would be completing a survey involving different scenarios and were asked to assign those scenarios to one of two faces on their screen by clicking on either the left or the right face. Participants were told they could leave or exit out of the survey at any given time. Participants assigned one scenario to twenty-five different faces before moving on to the next scenario. The four scenarios included two of each category (immoral and non-moral) and were as follows:

1. *One of these men killed 5 homeless people that he abducted from poor neighborhoods in his home city. Their dismembered bodies are currently buried in his basement.*
2. *One of these men has had consensual sex with his sister. He enjoyed the experience.*
3. *One of these men has not showered in two weeks, but still attends his job regularly.*
4. *One of these men watches porn that is not illegal and doesn’t involve harm, but is atypical and obscure.*

The scenarios were pre-rated as either immoral or non-moral by separate participants. Participants in this study were not told the scenarios were immoral or non-moral. The order of scenarios was randomized for each participant.

The faces used in this study were all white men without facial adornments (facial hair, piercings, tattoos, etc.), all placed on a gray scale and pre-rated on the same level of attractiveness. Faces were cropped above the neck, only showing the head (including the ears and hair). Faces were obtained from online dating sites, meaning they were self-proclaimed Christians and atheists, anonymous, and available for public consumption. There were fifty Christian faces and fifty atheist faces, randomly assigned into different pairs containing one of each category, randomly assigned to every participant for every scenario. Participants chose one of the two faces on their screen they thought best fit the scenario. Participants were not aware of the religious factor in our study until after they completed the scenario questions and were debriefed.

A short survey was conducted at the end, asking the participant’s gender, race, religious affiliation, beliefs regarding a god or higher power, the importance of religion in their life, and their political affiliation.

**Results**

To test the hypothesis that participants would be more likely to assign immoral acts rather than non-moral acts to an atheist face, we conducted a one-sample t-test. A signal detection statistic was used to determine which responses were a hit or a miss (atheist + immoral = hit; Christian + nonmoral = hit; atheist + nonmoral = miss; Christian + immoral = miss). As predicted, participants were significantly more likely to assign immoral acts to atheists (*M* = .49; *SD* = .068)rather than non-moral acts (*M* = .47; *SD* = .06), *t*(61) = 5.94, *p* < .001. Participants also had a response bias, being more likely to respond overall with Christian rather than atheist, *t*(61) = -241.61, *p* < .001.

**Discussion**

As hypothesized, our results showed that participants were significantly more likely to assign immoral acts rather than non-moral acts to atheist faces. In addition, participants were significantly more likely to assign non-moral acts rather than immoral acts to Christian faces. Participants also were reported to have a response bias towards the Christian faces in our study, meaning they were more likely to click the Christian face than the atheist face on their screen. It appears that, in the current study, our participants acted on tacit prejudice when assigning immoral and non-moral scenarios to different Christian and atheist faces. In the remainder of this discussion, various differences between our findings and previous findings will be examined, as well as different limitations of our study.

Our findings supplement previous studies by broadening the perspective on out-group prejudice and examining the extent to which participants judge others without realizing it. Previous research has noted an obvious prejudice against atheists (Mudd et al., 2015; Edgell et al., 2006; Gervais, 2014; Gervais, 2013; Cook et al., 2015). Because religion is thought to be a crucial factor when determining one’s ethical and moral values (Mudd et al., 2015; Cook et al., 2015; Gervais, 2013), previous studies have observed Americans, in particular, as more prejudiced against atheists when choosing hypothetical presidential candidates (Edgell et al., 2006). Gervais’ study (2014) went further, observing participants’ bias in reporting atheists as more representative of immoral acts than any other religion, including Christianity, Buddhism, Judaism, Islam, and Hinduism.

Other studies have also observed participants’ ability to determine beliefs and practices only by looking at a face (Pitts & Wilson, 2016; Rule & Ambady, 2010; Rule et al., 2010; Rule et al., 2008). Pitts and Wilson (2016) found that participants, when presented with two different faces, could accurately determine whether the face was an atheist or a Christian. The same can also be said for political affiliation (Rule & Ambady, 2010). In addition, Rule et al. (2008) found that participants, when presented with different faces, could accurately determine the sexuality of each face shown to them.

The sociofunctional approach to prejudice, as defined by Cottrell and Neuberg (2005), is based upon three things: human intelligence, the human tendency to obtain certain social processes, and the presence of those social processes to encourage self-protection from other out-groups that might seem threatening, in some way, to one’s own group. In other words, according to this theory, humans tend to protect themselves and their “group” from members of opposing groups that could potentially be a threat to their own harmony and peace. This theory begins to explain the horrific actions of the Ku Klux Klan, the presence of concentration camps during World War II, and many other vile, but defining moments in history.

Though our study did not directly test this theory, our results are in full accordance with it. Similar to other studies (Cook et al., 2015; Edgell et al., 2006; Gervais, 2014; Gervais, 2013; Mudd et al., 2015), our results suggest the presence of prejudice against atheists. While participants did so unknowingly, why would results suggest this if not for tacit prejudice? Where would this prejudice come from, other than the human tendency to bind together in groups, and the desire to protect one’s own group? Would atheists be considered enough of a threat in an opposing group member’s mind to form a prejudiced opinion against them? All questions, though not directly answered by our study, are certainly hinted and could be better tested through further research.

The present findings in our study expand on the results of other research by implying not only that participants show prejudice against atheist faces, but they do so without knowing faces are atheist in the first place. Based on our findings, this could imply that humans make judgments on other out-groups without knowing they are doing so. If future research replicates our results, this knowledge could be applied to important life settings such as the workforce and classroom, as well as other life activities such as meeting new people, and how tacit prejudice influences interactions within those settings. This tacit prejudice that we have observed could partially explain what seems to be an *un*explained dislike for another person, why a candidate was not hired for a job they were perfectly capable of doing, as well as many other things that might involve making judgments about others.

There are several limitations to consider in regard to this study, starting with a representative population. Our participants were all from Birmingham-Southern College, mostly White and, therefore, not representative of a larger population. Many additional variables, such as participant race, gender, and age, could have interfered with our study because of the lack of diversity in our sample population.

Another limitation to consider in regard to this study is the lack of diversity in the atheist and Christian faces. Because all of our faces were White, male, and without facial adornments, little can be determined from our results when considering race and gender of the faces. Adding other features to the faces could moderate the relationship between participants’ responses and tacit anti-atheist prejudice. Future researchers should consider broadening the faces’ appearance (perhaps including different races and genders, as well as facial adornments, if they so wish) to further study how diversity can affect participants’ responses.

Most research, including our own, has failed to make any comparisons between potential differential sensitivity to in- and out-group members due to atheist and Christian participants. Because of our limited pool of participants, there was a significant lack of access to atheist samples, making it difficult to compare them to Christian samples. Our study was also unable to make a direct comparison between the two categories of faces due to how it was orchestrated, but further research could solve this problem by adding a Likert response to the survey rather than a forced-choice response. Future researchers should consider implementing these two things in their studies.

Future researchers should also consider broadening the faces to other out-groups that are not easily detected by only looking at a face, such as political affiliation and sexuality. This will not only expand on our research, but on previous research as well (Pitts & Wilson, 2016; Rule & Ambady, 2010; Rule et al., 2010; Rule et al., 2008) to determine whether these findings extend to out-groups other than atheists. Additional research regarding different out-groups will help further our understanding of tacit prejudice and how it coincides with normal, everyday societal settings. For example, an individual could, unknowingly, treat a Democrat significantly differently than a Republican without knowing each person’s political affiliation. This could easily apply to other out-groups, as well.

The current research provides evidence to support the presence of tacit prejudice against atheists. In accordance with our hypotheses, participants were significantly more likely to assign immoral rather than non-moral acts to atheist faces and, in turn, non-moral rather than immoral acts to Christian faces. Could these results apply to other out-groups that are harder to detect as well, such as sexual and political identification? What about out-groups that are more easily detected, such as groups consisting of racial minorities? Future researchers should consider broadening the current investigation on tacit prejudice against out-groups to a wider variety of societal groups in order to further our understanding of societal prejudice.

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Figure 1. Mean of participants choosing an atheist or Christian face in regard to immoral and non-moral acts.