

**Of Christians, Jews, and Muslims: When gender is unspecified, the default is men**Asma Ghani<sup>1</sup>, Sa-kiera T. J. Hudson<sup>2,3</sup>, Haniya Rumaney<sup>4</sup> & Jim Sidanius<sup>1,5</sup><sup>1</sup>Department of Psychology, Harvard University<sup>2</sup>Department of Psychology, Yale University<sup>3</sup>University of California Berkeley Haas School of Business<sup>4</sup>Department of Psychology, The City University of New York<sup>5</sup>Department of African and African-American Studies, Harvard University

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### Abstract

**Objective:** Discrimination against members of non-majority religious groups is widespread, often due to negative stereotypes and emotions toward them. To understand the impact of gender on religious stereotypes and emotions, across two studies, we analyzed stereotypes and emotions towards the men and women of three religious groups: Christians, Jews, and Muslims, to determine the presence of prototypicality biases using intersectional invisibility as the guiding framework. **Methods:** In Study 1 (pre-registered,  $n = 893$ ), participants rated religious groups on four stereotype dimensions of Competence, Warmth, Beliefs, and Americanness, with religion as a within-subject variable and gender as a between-subject variable. In Study 2 (pre-registered,  $n = 915$ ), participants rated religious groups on six emotional dimensions. **Results:** There was evidence of androcentric biases, as (Christian, Jewish, and Muslim) men were perceived as more similar to their respective broader religious groups than (Christian, Jewish, and Muslim) women. Additionally, Muslim women, in particular, experienced a double distancing from their identities: they were strongly differentiated from their broader religious category, i.e., Muslim, and from their broader gender category, i.e., women. **Discussion:** While much is known regarding religious groups as a whole, there is relatively little work disaggregating religious groups by gender. This paper highlights the importance of intersectionality and incorporating gender when assessing stereotypes and emotions towards religious groups, thereby advancing our theoretical and practical understanding of intergroup conflict and designing interventions applicable to both men and women within religious groups.

*Keywords:* religion, gender, stereotypes, emotions, intersectionality

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Traditionally, stereotype content research investigates single social categories such as race, gender, or religion. In U.S. society, stereotypes exist that women are warm, Black people are athletic, and Muslims are violent (Ghavami & Peplau, 2013; Mishra, 2007), which can impact emotional reactions towards members of these groups in stereotype-relevant domains. However, it is not clear whether these broad group stereotypes equally apply to members of subgroups within those categories. Recent research has found that believing general stereotypes apply uniformly is a faculty assumption, as stereotyping often occurs intersectionally.

Intersectionality is a study of relative power; it examines the interconnected nature of marginalized identities intertwined with multiple systems of oppression. In this way, multiple social identities, such as race, gender, sexual orientation, and religion, can dynamically combine to influence the nature and consequences of stereotyping and prejudice (Kang & Bodenhausen, 2015; Remedios & Snyder, 2018). We can ask whether people have stereotypes that all women are warm, or only prototypical Christian ones. What about stereotypes that Muslims are terrorists; do people assume that both Muslim men and women are terrorists? Work on stereotypes by race and gender shows that only Middle Eastern men are associated with terrorism but not Middle Eastern women (Ghavami & Peplau, 2012), suggesting that the *terrorist* stereotype is uniquely gendered.

In the present work, we add to this growing literature on intersectional stereotyping by examining the intersectional and gendered dynamics in religious stereotyping and emotions. Several models have been proposed to study stereotypes about social groups. We primarily focus on the stereotype dimensions of Competence (e.g., intelligent, skillful) and Warmth (e.g., friendly, trustworthy) - two foundational dimensions put forth by the Stereotype Content Model

(SCM) (Fiske et al., 2002) that drive how groups are perceived. We also consider two recent models of stereotyping: the ABC model of stereotypes, which proposes that groups are primarily evaluated on Competence/Agency and Beliefs (how liberal or conservative targets are), and Warmth/Communion (Koch et al., 2016, 2020); and the Racial Position model which argues that groups are also evaluated on an Americanness (how American versus foreign they are) dimension (Zou & Cheryan, 2017). Integrating these stereotype dimensions from these previous lines of work, we assess intersectional stereotypes towards Christians, Jews, and Muslims using four broad stereotype categories: Competence, Warmth, Beliefs, and Americanness.

We also investigate emotions that arise from the intersection of Competence and Warmth as laid out in the Behaviors from Intergroup Affect and Stereotypes (BIAS) map (Cuddy et al., 2007). While ample empirical evidence exists for the BIAS map for single social categories, relatively few studies have examined how multiple identities merge to influence perceptions of fundamental categories of Competence and Warmth (Fiske, 2015; see Clausell & Fiske 2005 for an exception for subgroups of gay men) and engender prejudiced emotions towards targets occupying multiple identities. Given the discriminatory consequences of stereotypes and prejudiced emotions, it is crucial to examine stereotypes and emotions intersectionally.

Finally, we use the intersectional framework of Intersectional Invisibility (Purdie-Vaughns & Eibach, 2008), which centers the importance of group prototypicality in deciphering intersectional advantages and disadvantages, to interrogate our findings.

### **Intersectional Stereotypes**

Intersectional stereotyping occurs at the nexus of mutually constructed multiple-group categories, creating unique, emergent stereotypes that are not merely additive sets of stereotypes derived from their respective individual categories (Ghavami & Peplau, 2013). Intersectionality

identifies a significant issue in the single-axis framework – the assumption that one category, such as gender, can explain the experiences of all individuals within that category, regardless of their race, religion, or sexual orientation. Intersectionality challenges the idea that social categories are activated independently of each other. Stereotypes of multiply-marginalized groups can combine to amplify or dilute existing stereotypes (Hall et al., 2019). For example, the stereotype that gay men are effeminate is oppositional to stereotypes that Black men are hypermasculine and dominant. The combination of these stereotypes for gay Black men can dilute threat stereotypes associated with Black men overall, resulting in gay Black men being perceived as more likable than straight Black men (Hall et al., 2019; Remedios et al., 2011), evaluated more positively than White gay men (Pedulla, 2014), and seen as better leaders (Wilson et al., 2017). In a similar vein, stereotypes of the category men (threatening) and stereotypes of the category Black (threatening) are reinforcing, resulting in amplified threat stereotypes associated with Black men (Hall et al., 2019). Collectively, these findings highlight the importance of incorporating multiple identities when studying intergroup processes.

Intersectional invisibility is a prominent intersectional theory that explains how multiple identities are perceived. Intersectional invisibility is based on the premise that prototypicality biases of androcentricity (male-centered), Eurocentricity (White-centered, in an American context), and heterocentricity (straight-centered) leave individuals with multiple marginalized identities as non-prototypical of their superordinate identity groups and, therefore socially invisible (Purdie-Vaughns & Eibach, 2008). Under this theory, active oppression is then targeted towards prototypical subordinate-group members, and less prototypical group members escape active oppression. However, as a function of their invisibility, non-prototypical group members struggle to be represented and attain social influence and leadership positions (Purdie-Vaughns

& Eibach, 2008). For example, Black men are prototypical of the category “Black” and White women prototypical of “women,” leaving Black women intersectionally invisible. Addressing a gap in the literature, here we examine androcentrism and intersectional invisibility in religious groups. In terms of religion, the prototypical religious group in the U.S. would be Christians, given that around 70% of Americans identify as Christians (Public Religion Research Institute, 2021), and Americans equate Christian identification with being a true American (Jacobs & Theiss-Morse, 2013).

### **Religion and Gender Stereotyping**

There is relatively little work that systematically and theoretically explores the intersectional nature of religious stereotypes. Currently, a single-axis framework predominantly guides the stereotype literature. This framework privileges the study of single identities (e.g., Muslims or women) for intergroup processes. Research on the stereotype content model shows that Christians are stereotyped as high warmth and high competence, Jews as high competence and low warmth, and Muslims as low warmth and low competence (Cuddy et al., 2008; Fiske et al., 2002).

In comparison, there has been a fair amount of work on gender as a single-axis category as well as a relevant intersectional category. Gender is central to perceptions of who counts as a “person” and uniquely predicts humanization. Removing gender identity from targets can lead perceivers to view them as less human, less relatable, and more distant (Martin & Mason, 2022). Despite egalitarian advances, gender stereotypes have been surprisingly persistent over time (Haines et al., 2016). A comparison of stereotype data from 1983 and 2014 showed that women are still stereotyped as more communal than men, and men are still stereotyped as more competent than women (Haines et al., 2016). Importantly, gender stereotypes have also been

studied intersectionally, especially at the intersection of race and sexual orientation. For example, although the top stereotypical attributes for the category of “women” are emotional and caring, the top attributes for Latinas are feisty and curvy. In contrast, Middle-Eastern women are seen as religious and quiet (Ghavami & Peplau, 2012).

### **Current Research and Hypotheses**

To date, the intersection of religion and gender is underexplored. Given that religious identities are often gendered, with the social roles, rituals, and visible symbols of men and women prominently distinct from each other, gender should moderate stereotypes and emotions related to religious groups, but there is little empirical research on it. Across two studies, this paper examines stereotype ratings in Study 1 across gender-unspecified religious groups, and the men and women of these religious groups; and drawing on past predictions that stereotypes engender emotional reactions (Cuddy et al., 2007), Study 2 measures emotional prejudice towards gender-specified religious groups. Across these two studies, we test three hypotheses drawing on the theory of intersectional invisibility.

We examined whether androcentrism exists for religion and whether non-prototypical religious women (here, Jewish and Muslim women) are erased from the prototypes of both their broader religious groups (Jews and Muslims) and their broader gender group (women), leading to intersectional invisibility. Based on previous research, we examined three prototypicality biases for religious groups (Ghavami & Peplau, 2013; Preddie & Biernat, 2021). Firstly, we tested the prediction that stereotypes of men of a particular religious group would be closer to the broader religious group than the women (Hypothesis 1 [H1]: Androcentrism). This hypothesis is built on past research showing that national stereotypes are more closely aligned with men than

women (Eagly & Kite, 1987), and stereotypes of ethnic groups are more closely aligned with ethnic men than ethnic women, except for Asian people (Ghavami & Peplau, 2013).

Secondly, we hypothesized that men and women of non-prototypical religious groups in America (e.g., Jews and Muslims) would be differentiated to a larger extent than men and women of prototypical religious groups (here Christians) (Hypothesis 2 [H2]: Gender differentiation within religion). Derived from intersectional invisibility, this hypothesis argues that given the presence of androcentric biases, women of non-prototypical groups will face invisibility by being over-differentiated from the men in their groups (who are prototypical of their broader religious group); (Coles & Pasek, 2020; Ghavami & Peplau, 2013). Thirdly, in line with the Christian-centric gender hypothesis (Hypothesis 3 [H3]: Christian-centrism, Coles & Pasek, 2020; Ghavami & Peplau, 2013), we expected that the prototypical, religion-unspecified women, would be more similar to Christian women than Jewish and Muslim women. While we refer to H3 as Christian-centrism, this paper particularly focuses on comparing the differences between Christian women and women to the differences between Jewish/Muslim women and women to investigate intersectional invisibility, which relies on multiple marginalization, stemming from distance from *both* the broader religious identity and gender identity. Put another way, Hypotheses 2 and 3 are dependent on Hypothesis 1. For instance, if we find androcentrism, where Muslims are equivalent to Muslim men but differentiated from Muslim women, then we can test whether Muslim women are intersectionally invisible. If Muslims are equivalent to Muslim men, Muslim women should also be significantly differentiated from Muslim men. Furthermore, if Muslim women are also differentiated from religion-unspecified women, they would be rendered socially invisible with two non-prototypical identities.



The authors come to this work with relevant identities. The first author and third authors identify as South Asian Muslim women. The second author identifies as a queer Black woman who grew up Christian and currently identifies as an atheist. The last author self-identified as a Black man who passed away after the studies were conducted but before the manuscript was submitted.

### **Study 1: Stereotypes at the Intersection of Religion and Gender**

The purpose of Study 1 was to explore intersectional stereotype content and test intersectional hypotheses for three religion-by-gender groups – Christian, Jewish, and Muslim.

#### **Method**

##### ***Participants***

For Study 1, a representative U.S. sample of 900 participants was recruited using Prolific. A power analysis was conducted using MTurk data from a previous pilot study (not reported here) and using the SIMR package (Green & MacLeod, 2016) in *R*. A power determination analysis showed that to detect a small effect size  $d = 0.19$  (the smallest effect size of interest from pilot study),  $\alpha = .05$ , with 710 participants, power would be at 84%; 95% CI[76.64, 83.79]. To account for introducing an additional within-subjects variable (compared to the pilot study) and eliminating participants who failed attention check questions or failed to finish the study, a larger sample of 900 participants was enlisted.

After removing participants who did not pass the attention check or did not finish the study, the dataset had 893 respondents ( $M_{age} = 45.57$ ,  $SD = 16.33$ ; 50.45% women) left. 72.87% of the sample identified as European White; 12.22% as Black/African American; 2.80% as Hispanic; 4.71% as Multiracial; 5.16% as East Asian; 1.23% as South Asian; .22% as Middle Eastern; .22% as Native American; and .56% as something not listed. In terms of religion,

50.12% of the participants identified as Christian; 20.98% as Agnostic; 16.90% as Atheist; 2.21% as Buddhists; .93% as Muslims; .12% as Hindu; and 8.74% as something not listed in the options.

### ***Procedure***

We employed a mixed-method design with religion as a within-subjects variable and gender as a between-subjects variable. Participants were randomly assigned to answer questions about four social groups: Christians, Jews, Muslims, and religion-unspecified (i.e., People) *or* Christian men, Jewish men, Muslim men, and men *or* Christian women, Jewish women, Muslim women, and women. The category “people” was added to balance the category ratings, and this decision was based on previous studies (Prentice & Carranza, 2002), even though it was a strange category for participants to rate. With this design, this study could test all three intersectional hypotheses outlined above: H1: Androcentrism, H2: Gender Differentiation, and H3: Christian-centrism.

### ***Materials***

This paper assessed four broad categories of stereotypes and used five items in each category, with endpoints as described in Table 1, on a scale of 0 to 10 (Koch et al., 2020). Participants were given general instructions and told that we were not asking about their personal beliefs but rather those held by people in general. Participants were instructed to rate the way that others viewed these groups in society, and all questions were randomized. For example, participants were asked: “To what extent are [Group X] seen as powerless or powerful in U.S. society?”. The stereotype categories were created by averaging across the five items in the scale for all target groups. All scales had good reliability: Competence ( $\alpha = .87$ ), Warmth ( $\alpha = .90$ ), Beliefs ( $\alpha = .74$ ), and Americanness ( $\alpha = .95$ ). Higher scores on the scales indicate greater

competence, more warmth, more liberal beliefs, and higher perceived Americanness. After that, participants were asked some exploratory attitude questions about gendered religious groups using feeling thermometers and social distance scales. These exploratory scales are not discussed in this paper. This study is pre-registered at <https://osf.io/a3s2h><sup>1</sup>

**Table 1**

*Stereotype categories and items assessed.*

Competence/Agency	Warmth/Communion	Beliefs	Americanness
Powerless - Powerful	Untrustworthy - Trustworthy	Traditional - Modern	Foreign - American
Low status - High status	Cold - Warm	Religious - Science-oriented	Unpatriotic - Patriotic
Dominated - Dominant	Threatening - Benevolent	Conventional - Alternative	Unassimilated - Assimilated
Poor - Wealthy	Repellent - Likeable	Conservative - Liberal	Unintegrated - Integrated
Unassertive - Assertive	Egoistic or Altruistic	Intolerant - Tolerant	Immigrant - Native

## Results

We used the *lmer* function from the *lme4* package (Bates et al., 2015) in *R* to conduct a multilevel model where Target Gender (3 Levels: men, people, women), Target Religion (4 Levels: Christians, Jews, Muslims, religion-unspecified), and Stereotype Traits (4 Levels: Competence, Warmth, Beliefs, Americanness) interacted to predict stereotype ratings. Religion and Stereotype Traits were repeated measure variables in our study, and to account for the repeated measures design, a random level intercept for participants was included. The variables were effects coded so that “people”, “religion-unspecified”, and “Americanness” were the reference categories.

<sup>1</sup> While both studies were pre-registered, H2: Gender differentiation hypothesis was misarticulated in the pre-registration due to author mistake in both studies.

We built the model stepwise, starting with the main effects model, moving to the two-way interaction model, and then the three-way interaction. At each step, model fit improved. The three-way interaction between Target Gender, Target Religion, and Stereotype Traits was significant,  $F(18, 13350.00) = 19.164, p < .001$ .

### ***H1: Androcentrism***

First, this study addresses the question of androcentrism — are men of a religious group rated more similarly to the gender-unspecified group category than the women? Using the *emmeans* package (Lenth et al., 2022) in *R*, we computed pairwise contrasts to examine gender differences by target religion and stereotype category. All post-hoc tests were conducted using *tukey* adjustments for pairwise comparisons and *mvt* for a family of contrasts. We began by comparing the stereotype trait difference between *Christians* and *Christian men* and between *Christians* and *Christian women*. We then repeated the same analysis for *Jews* and *Muslims* and finally for the religion-unspecified group (see Supplemental Materials Table S1 for means, standard deviations, and gender contrasts). To test androcentrism, we further assessed whether the differentiation between (religion-unspecified) *people* and *men* was significantly smaller than the differentiation between (religion-unspecified) *people* and *women* for each religious group. As an example, after assessing the differences between *Christians* and *Christian men* and between *Christians* and *Christian women*, we then further examined whether the difference between *Christians* and *Christian men* was significantly smaller than the difference between *Christians* and *Christian women* (these difference in difference statistics are given below).

For the stereotype of Competence, Christians and Christian men were rated similarly; however, Christian women were rated significantly less competent than Christians. The difference between Christians and Christian men was significantly smaller than the difference

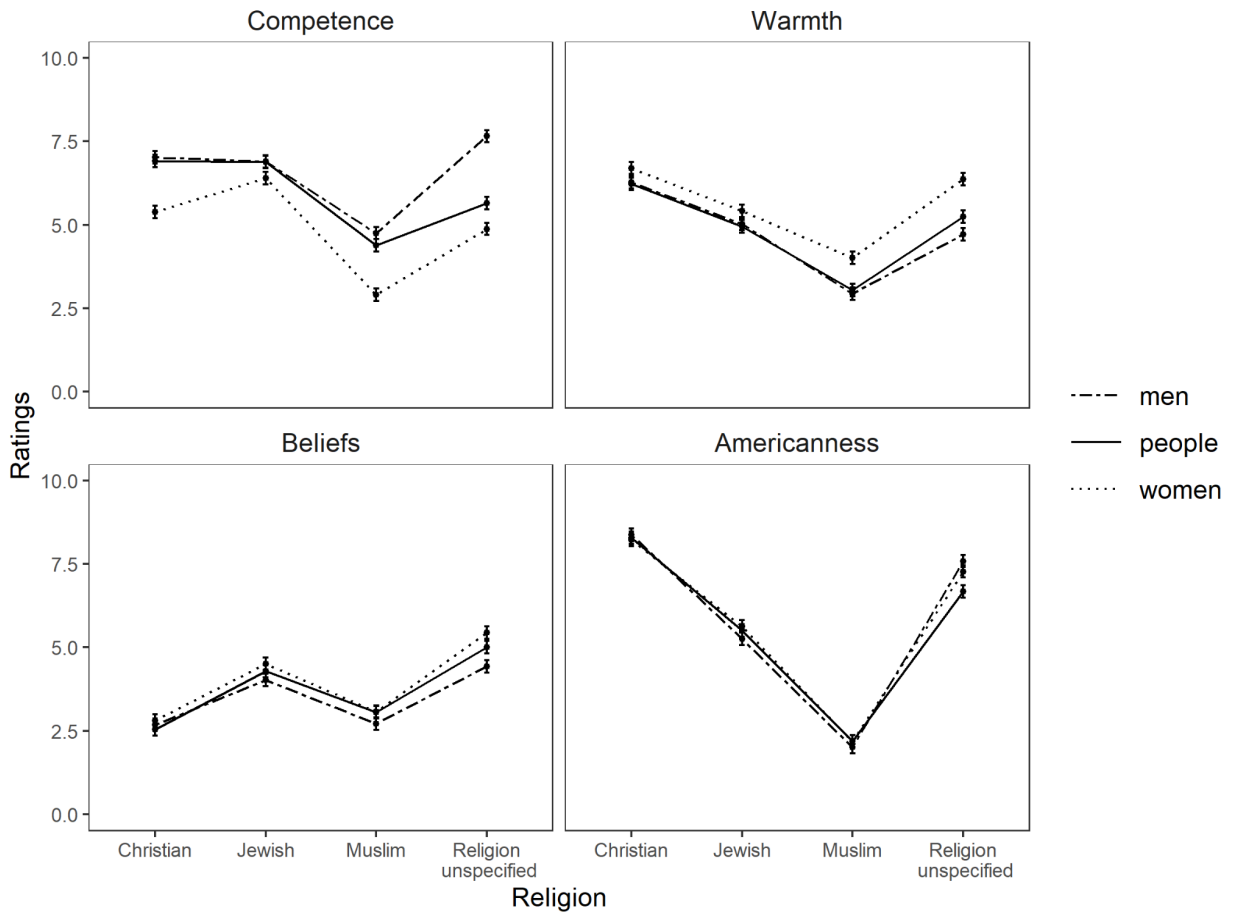
between Christians and Christian women;  $t(10399.93) = 6.13, p < .001, d = 0.95$ , showing androcentrism. Jews and Jewish men were not perceived as differently competent, but Jewish women were rated significantly less competent than Jews. However, the difference between Jews and Jewish men was not significantly smaller than the difference between Jews and Jewish women  $t(10399.93) = 1.96, p = .127, d = 0.30$ . Muslim men were significantly more competent than Muslims, and Muslim women were significantly less competent than Muslims. This difference was significantly larger when comparing Muslim women to Muslims, showing androcentrism;  $t(10399.93) = 4.79, p < .001, d = 0.74$ . For the religion-unspecified group, contrary to expectations, there was evidence of gynocentrism, such that the difference between people and men was significantly greater than the difference between people and women;  $t(10399.93) = -5.30, p < .001, d = -0.82$ .

For Warmth stereotypes, we found consistent evidence of androcentrism. The gender-unspecified category, for all groups, was rated closer to the men in the group than the women. Christians were not rated significantly differently from Christian men, but Christians were rated significantly less warm than Christian women. This differentiation between Christians and Christian men was significantly smaller than the differentiation between Christians and Christian women;  $t(10399.93) = 3.20, p = .004, d = 0.28$ . Jews were not significantly different from Jewish men, but were rated significantly less warm compared to Jewish women;  $t(10399.93) = 2.92, p = .011, d = 0.26$ . Similarly, Muslims were not significantly different from Muslim men, but Muslims were rated significantly less warm compared to Muslim women;  $t(10399.93) = 3.62, p = .001, d = 0.56$ . People, with religion unspecified, were significantly different from men and from women, such that men were rated as significantly less warm than people, while women

were rated as warmer. However, this difference was greater for women;  $t(10399.93) = 2.58, p = .029, d = 0.40$  (see Figure 1 below).

**Figure 1**

*Religion stereotypes by gender*



*Note:* Error bars represent 95% confidence intervals

For Beliefs and Americanness, there were no significant differences in differences in target gender for all groups (all  $ps > .05$ ). Thus, men and women were rated as equally similar to their broader religious categories.

***H2: Gender Differentiation within Religion***

For this analysis, we assessed whether the differentiation between *Jewish/Muslim men* and *women* was significantly greater than the differentiation between *Christian men* and *women*. Given the presence of androcentrism, intersectional invisibility would imply that marginalized religious women (Jewish and Muslim women) would be more differentiated from the prototypical religious group members (Jewish and Muslim men), compared to dominant groups, contributing to their invisibility.

For Competence, Muslim men and women and Christian men and women were strongly differentiated from each other, with the least amount of differentiation between Jewish men and women. The difference between Christian men and women was significantly greater than the difference between Jewish men and women;  $t(13350) = 6.57, p < .001, d = 0.76.$ , counter to hypotheses. The difference between Christian men and women was not significantly greater or smaller than the difference between Muslim men and women;  $t(13350) = -1.15, p = .656, d = -0.13.$

For Warmth, Muslim men and women were the most differentiated from each other, followed by Jewish and Christian men and women. The difference between Christian men and women was significantly smaller than the difference between Muslim men and women;  $t(13350) = 3.77, p = .001, d = 0.44.$  However, the differentiation between Christian men and women was equivalent to the differentiation between Jewish men and women;  $t(13350) = -0.21, p = .996, d = -0.02,$  counter to hypotheses.

For Beliefs and Americanness, there were no differences in the differentiation between men and women for any religious group (all  $p$ 's  $> 0.05$ ).

***H3: Christian-centrism***

The presence of androcentrism implies that women are non-prototypical of the larger religious category. We further tested whether multiply marginalized religious women were also non-prototypical of their gender category (i.e., Muslim women seen as less similar to women compared to Christian women), rendering them intersectionally invisible. First, we examined the extent to which there was an overlap between all religious women and women and whether a) the difference between *Christian women* and *women* was significantly smaller than the difference between *Muslim women* and *women* and b) the difference between *Christian women* and *women* was significantly smaller than the difference between *Jewish women* and *women*.

Christians, Christian men, and Christian women were significantly differentiated from (religion unspecified) people, men, and women. All religious groups, and the men and women within these groups, were significantly differentiated from religion-unspecified groups (see Supplemental Table S2 for contrasts of religion-unspecified groups from religious groups).

For Competence, Jewish women and Christian women were both seen as more competent than women, and Muslim women as less competent than women. Christian women were differentiated from women to a lesser extent than Jewish women were differentiated from women;  $t(13350) = 8.34, p < .001, d = 0.68$ , supporting hypotheses. Christian women were also differentiated from women to a much lesser extent than Muslim women were differentiated from women;  $t(13350) = 6.87, p < .001, d = 0.97$ .

For Warmth, Christian women were stereotyped as warmer than women, whereas Jewish women were stereotyped as less warm than women, with Muslim women being stereotyped as the least warm compared to women. Christian women were differentiated from women to a lesser extent than Jewish women were differentiated from women;  $t(13350) = 2.94, p = .016, d =$



0.42. Christian women were also differentiated from women to a much lesser extent than Muslim women are differentiated from women;  $t(13350) = 9.52, p < .001, d = 1.35$ .

For Beliefs, Jewish women were the least differentiated from women, followed by Muslim and Christian women. Contrary to expectations, here, the differentiation between Christian women and women was much *greater* than the differentiation between Jewish women and women;  $t(13350) = 13.85, p < .001, d = 1.13$ . There was no difference in the differentiation between Christian women and women and Muslim women and women;  $t(13350) = 2.15, p = .129, d = 0.18$ .

Finally, for Americanness, Christian women were differentiated from women to a lesser extent than Jewish women were differentiated from women;  $t(13350) = 3.34, p = .005, d = 0.47$ . Christian women are also differentiated from women to a much lesser extent than Muslim women are differentiated from women;  $t(13350) = 19.48, p < .001, d = 2.76$ .

## **Discussion**

For Competence stereotypes, we found evidence of androcentrism for Muslims and Christians, and for Warmth stereotypes, we found evidence of androcentric biases for all religious groups such that the men of religious groups were rated more similarly to the gender-unspecified broader religious category. Additionally, Muslim women faced the strongest gender differentiation and Muslim women were also the most differentiated from the broader “women” category. For Competence, Warmth, and Americanness, Christian women were relatively closer to the category “women” than Jewish and Muslim women, and for Beliefs, Jewish women are the relatively closest. Collectively, these results show that Muslim women are most differentiated from their broader religious category and also most strongly differentiated from their broader gender category, likely rendering them intersectionally invisible. Consequently, Muslim women

may be more likely to escape the active oppression that more strongly impacts Muslim men, but simultaneously Muslim women may be excluded from social movements targeting Muslims or women.

### **Study 2: Emotions at the Intersection of Religion and Gender**

Past research shows that intergroup stereotypes lead to emotional and behavioral reactions towards outgroups (Cuddy et al., 2008; Fiske et al., 2002), and emotional prejudices offer a unique insight into discriminatory attitudes as emotions are more strongly linked to self-reported and observed discriminatory outcomes than stereotypes (Mackie & Smith, 2015). Therefore, drawing on past research on the BIAS model, Study 2 moves beyond stereotypes and measures emotions towards gendered religious targets. We test the same three hypotheses as in Study 1; H1: Androcentrism, H2: Gender differentiation within religion, and H3: Christian-centrism.

### **Method**

#### ***Participants***

For Study 2, a convenience sample was recruited using Cloud Research's MTurk Toolkit, and after removing participants who did not pass the attention check questions or did not finish the study, there were 915 respondents ( $M_{age} = 35.12$ ,  $SD = 12.08$ ; 54.70% women) left. 66.08% of our sample self-identified as European White American; 13.46% as Black/African American; 4.92% as Hispanic American; 5.91% as Multiracial; 4.16% as East Asian American; 2.95% as South Asian American; .44% as Middle Eastern American; .55% as Native American; and 1.53% as something not listed. In terms of religion, 60.62% of the participants identified as Christian; 16.69% as Agnostic; 10.68% as Atheist; 1.67% as Buddhists; 1.11% as Muslims; 1.22% as

Hindu; and 8.01% as something not listed in the options. This study is pre-registered at <https://osf.io/deykf<sup>2</sup>>.

### ***Materials and Procedure***

A mixed-method design with religion as a within-subjects variable and gender as a between-subjects variable was employed. Participants were randomly assigned to answer questions for one of three conditions: Christians, Jews, Muslims, and religion-unspecified (asked as *other people*) or Christian men, Jewish men, Muslim men, and men or Christian women, Jewish women, Muslim women, and women. The condition in which gender is not specified is referred to as the “people” condition for easier interpretation and analysis.

### ***Emotions***

Each participant rated their assigned four groups on six two-item scales assessing emotion. The six broad emotion categories were Admiration (i.e., admire, proud), Contempt (i.e., contempt, disgust), Pity (i.e., pity, sympathy), Envy (i.e., envy, jealousy), Fear (i.e., afraid, anxious), and Anger (i.e., angry, hostile). All items were measured on a sliding scale of 0 to 10 (Cuddy et al., 2007). For example, “To what extent do people tend to feel pity towards [Group X] in U.S. society?”. The emotion categories were created by averaging across the two items in the scale for all target groups (Cuddy et al., 2007). All scales had reasonable item correlations: Admiration ( $r = .78$ ), Anger ( $r = .79$ ), Contempt ( $r = .67$ ), Envy ( $r = .81$ ), Pity ( $\alpha = .66$ ), and Fear ( $r = .80$ ).

### **Results**

We used the *lmer* function from the *lme4* package in R to conduct a multilevel model where Target Gender (3 Levels: people, men, women), Target Religion (4 Levels: Christians,

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<sup>2</sup> For H3: Christian-centrism we also examine *relative* differences between Christian women and women and Jewish/Muslim women and women, which was not pre-registered.

Jews, Muslims, religion-unspecified), and Emotions (6 Levels: Admiration, Anger, Contempt, Envy, Fear, and Pity) interacted to predict emotion ratings. Religion and Emotions were repeated measure variables in our study. To account for the repeated measures design, a random level intercept for participants was included. The variables were effects coded so that people, no religion specified, and Fear were the reference categories.

The model was built stepwise, starting with just the main effects model, moving to the two-way interaction model, and then the three-way interaction; at each step, the model fit improved. The three-way interaction between target religion, gender, and emotion category was significant,  $F(30, 20975.01) = 11.41, p < .001$ .

### ***H1: Androcentrism***

Do men of a religious group elicit the same emotional prejudice as the broader religious category compared to religious women? Using the *emmeans* package in *R*, we computed pairwise contrasts to examine gender differences by target religion and emotion category (see Supplemental Materials Table S3 for emotion means, standard deviations, and gender contrasts) and further examined whether *people versus men* differences were smaller than the *people versus women* differences.

For Anger, there was evidence of androcentrism for all groups except Christians,  $t(5143.8) = -1.37, p = .366, d = -0.14$ . The difference between Jews and Jewish men was smaller than the difference between Jews and Jewish women;  $t(5143.8) = -2.96, p = .010, d = -0.31$ . The same pattern emerged for Muslims,  $t(5143.8) = -3.86, p < .001, d = -0.40$ , and religion-unspecified targets,  $t(5143.8) = -4.43, p < .001, d = -0.46$ . Contempt showed the same pattern as anger there was evidence of androcentrism for all groups except Christians;  $t(5143.8) = -2.01, p = .117, d = -0.21$ . The difference between Jews and Jewish men was smaller than the difference

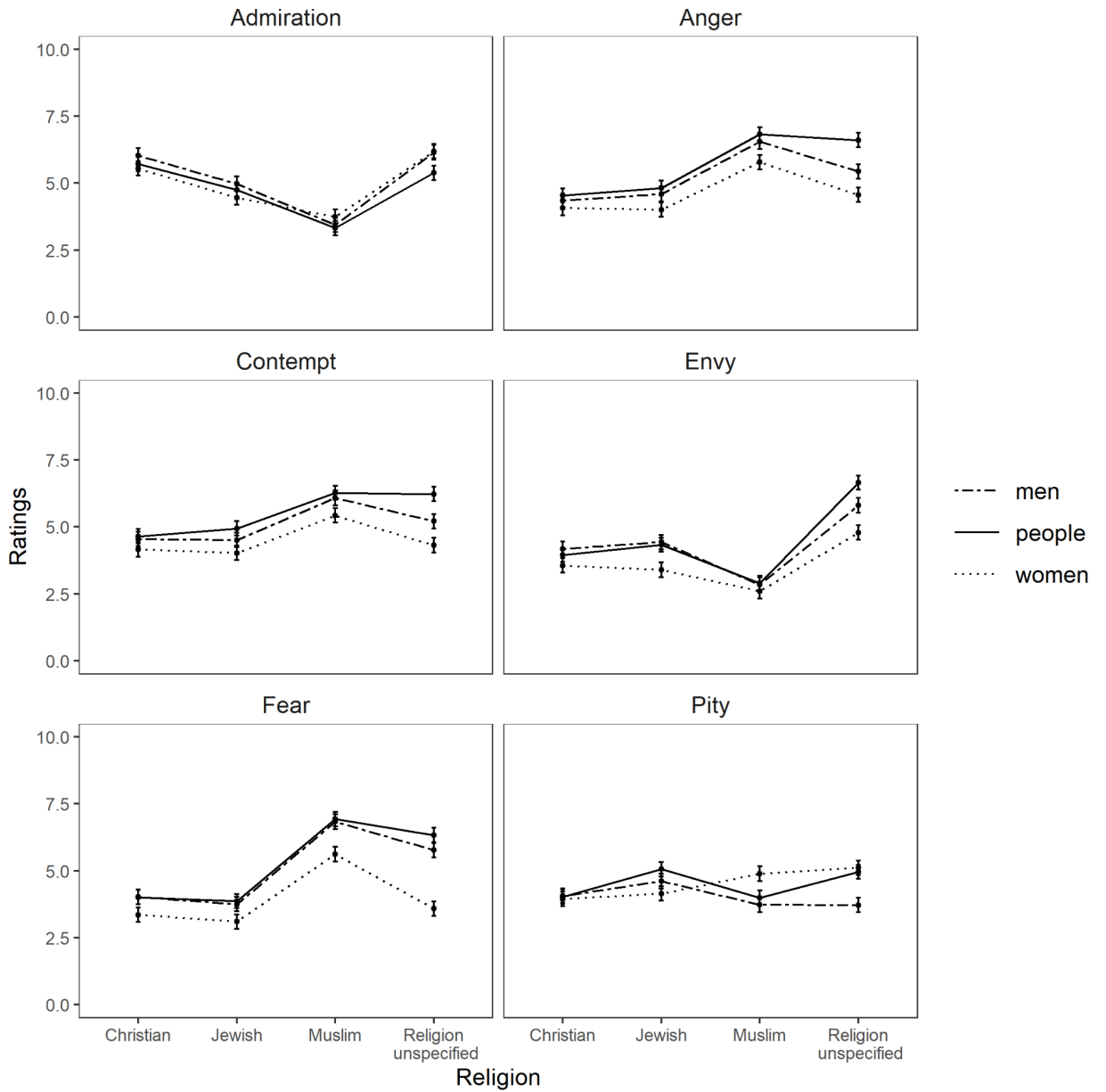
between Jews and Jewish women,  $t(5143.8) = -2.48, p = .038, d = -0.26$ , same as for Muslims,  $t(5143.8) = -3.31, p = .003, d = -0.34$ , and religion-unspecified targets,  $t(5143.8) = -4.57, p < .001, d = -0.47$ . Fear also showed evidence of androcentrism across all groups except Christians,  $t(5143.8) = 1.94, p = .135, d = 0.34$ . The difference between Jews and Jewish men was smaller than the difference between Jews and Jewish women,  $t(5143.8) = -3.33, p = .003, d = -0.34$ . Similarly, the difference between Muslims and Muslim men was smaller compared to Muslims and Muslim women,  $t(5143.8) = -6.18, p < .001, d = -0.64$ . Contrary to hypotheses, there was gynocentrism, or a female-centric bias, present for the religion-unspecified groups,  $t(5143.8) = -11.15, p < .001, d = -1.15$ .

Envy showed no evidence of androcentrism for Christians,  $t(5143.8) = 0.54, p = .856, d = 0.09$ , or for Muslims,  $t(5143.8) = -1.29, p = .408, d = -0.13$ . However, there was evidence of androcentrism for Jewish people, as the difference between Jews and Jewish men was smaller than the difference between Jews and Jewish women,  $t(5143.8) = 2.50, p = .036, d = 0.44$ . While the difference between people and men was smaller than the difference between people and women, this difference in difference was not significant;  $t(5143.8) = -2.01, p = .117, d = -0.21$ .

For Pity, there were no androcentric biases present for Christians;  $t(5143.8) = 0.15, p = .988, d = 0.03$ , Jews;  $t(5143.8) = -2.35, p = .053, d = -0.24$ , or Muslim;  $t(5143.8) = -1.91, p = .142, d = -0.34$ . There was gynocentrism present for the religion-unspecified group;  $t(5143.8) = 3.26, p = .003, d = 0.58$ . Finally, there was no evidence of androcentrism for Admiration in any group.

**Figure 2**

*Emotional reactions towards religious groups by gender*



*Note:* Error bars represent 95% confidence intervals

***H2: Gender Differentiation within Religion***

For the negative emotions of Anger, Contempt, Fear, and Pity, Muslim men and women were the most differentiated from each other. For Admiration, Jewish men and women, and Christian men and women were the most differentiated, with no differentiation between Muslim men and women. For Envy, Jewish and Christian men and women were the most differentiated from each other, with no differentiation between Muslim men and women (see Supplemental Table S3 for more details).

We further examined whether the differences between Christian men and women were smaller than the differences between Muslim men and women and Jewish men and women. The differences between Christian men and women were smaller than the differences between Muslim men and women for two emotions: Fear,  $t(20975) = -2.46, p = .014, d = -0.28$ , and Pity,  $t(20975) = -3.19, p = .010, d = -0.55$ . The differences between Christian men and women were not significantly different from Jewish men and women for any emotion category.

***H3: Christian-centrism***

Similar to Study 1, Christians, Christian men, and Christian women were significantly differentiated from (religion-unspecified) people, men, and women for most emotion categories. Jewish and Muslim groups were also significantly differentiated from religion-unspecified groups for most emotion categories (see Supplemental Materials Table S4 for emotion contrasts of religion-unspecified groups from religious groups).

To examine whether multiply marginalized religious women were also strongly non-prototypical of their gender category, we further examined whether Christian women and women were more similar than Jewish women and women and Muslim women and women. The difference between Christian women and women was smaller than the difference between Jewish

women and women only for Admiration;  $t(20975) = -7.1, p < .001, d = -0.58$ , but not any other emotion category (all  $p$ 's  $> .10$ ). The difference between Christian women and women was smaller than the difference between Muslim women and women for Admiration ( $t(20975) = -11.71, p < .001, d = -0.95$ ), Anger ( $t(20975) = -2.72, p = .032, d = -0.38$ ), Contempt ( $t(20975) = -3.57, p = .002, d = -0.50$ ), Envy, ( $t(20975) = -6.27, p < .001, d = -0.51$ ), and Fear ( $t(20975) = -6.76, p < .001, d = -0.95$ ). However, we found the reverse pattern for Pity, where Muslim women and women were undifferentiated from each other, and this difference is smaller than the difference between Christian women and women;  $t(20975) = 6.16, p < .001, d = 0.50$ ). In sum, for all emotion categories except Pity, Muslim women were the most differentiated from the broader gender category.

## Discussion

For emotion categories, there was evidence of androcentrism for most emotion categories and across all religious groups. There was also evidence of gender differentiation within religion: Christian and Jewish men and women were differentiated from each other to similar extents. However, Muslim men and women were differentiated to a greater extent than Christian men and women for the emotions of *Fear* and *Pity*. Additionally, *Muslim women* were the most differentiated from the broader category of *women* for most emotion categories. Taken together, these findings imply that Muslim women may face intersectional invisibility as they are most likely to be differentiated from their broader religious category and their broader gender category. This implies that while Muslim women may face an advantage in escaping the active oppression targeted towards Muslim men, they may nevertheless face social exclusion, misrepresentation, and disempowerment from social movements.



## General Discussion

There was evidence of androcentrism in the stereotypes (Study 1) and emotions (Study 2) for all religion-by-gender groups. Thus, when participants were rating broader religious groups (i.e., Christians), they were more likely to think of the men in these groups rather than the women. Muslim men and women were the most differentiated from each other, and Christian and Jewish men and women were differentiated to similar extents. Furthermore, intersectional invisibility argues that if marginalized groups are also dissimilar to their broader gender category, they would become socially invisible. Muslim women, in particular, were strongly non-prototypical of both their broader religious category and the broader gender category. Consequently, while Muslim women may not face the active religious hostility targeted towards prototypical members, i.e., Muslim men, they may still be disadvantaged and erased from issues concerning Muslims and women. Also, Jewish women often had patterns that were more aligned with Christian women than Muslim women, suggesting that the non-prototypicality of Jewish identity is not as strong as the non-prototypicality of Muslim identity.

The consequences of androcentrism not only impact what knowledge we can glean from broad social categories, like Muslims or Christians, but it also influences theoretical and methodological psychological constructs. For instance, studies on Islamophobia (e.g., Uenal et al., 2021) generally measure Fear and Anger, but not Pity, towards Muslims, likely capturing attitudes towards Muslim men to a greater extent than Muslim women (who engendered Pity to a greater extent than Muslim men in Study 2). In past work on racial groups, authors show that racial bias scales are designed to more accurately capture the experiences of Black men compared to Black women (Harnois & Ifatunji, 2011; Ifatunji & Harnois, 2016). In this way,

gendered psychological scales, influenced by androcentric biases, may be measuring artificially gendered phenomena.

This paper also highlights the importance of intersectionality: adding gender information to religious categories can amplify or dilute existing stereotypes. For example, Muslims may be characterized as cold, but for Muslim women, the addition of the category *women*, who are strongly viewed as warm, may be diluting the “cold” stereotyping of Muslims, thus increasing their warmth ratings compared to Muslim men (Hall et al., 2019).

Finally, in this work, we specifically focus on the U.S. context. Stereotypes, and consequently, discrimination towards social groups, are variable and culture-dependent. In particular, race, ethnicity, and religion show cultural variation in their stereotype content, and therefore, it is imperative to examine these categories in various cultural and historical contexts (Fiske, 2017). For instance, it is likely that in European contexts, Muslim women face hypervisibility in specific contexts. Indeed, the data suggests that this may be the case as in many European countries, Muslim women are disproportionately targeted and emerge as more likely victims of hate crimes and speech compared to Muslim men, most notably when Muslim women wear a headscarf. In the Netherlands and France, over 90% and 81.5%, respectively, of Islamophobic hate crimes targeted visibly Muslim women – with most crimes involving verbal insults or pulling Muslim women’s clothing or hijabs off (Valfort, 2015).

### **Limitations and Future Directions**

The paper has several limitations. First, these results were obtained from online samples that may not be entirely representative of the U.S. population. Furthermore, social desirability concerns may influence the self-reported nature of data collection in this work. Second, the stereotypes and emotions assessed in this work were largely assessed in a context-free

environment. Research shows that different contexts (e.g., stereotyping in hiring contexts versus criminal sentencing) can elicit different lenses: dependent on situational cues, perceivers may use a religion lens, gender lens, or an intersectional lens when stereotyping groups (Petsko et al., 2022). Future work should examine how changing or specifying context can change these intersectional stereotypes.

Third, religious identities and race are categories that heavily overlap. To most perceivers, Arab and Muslim might be interchangeable categories (Hall et al., 2019), even though they are distinct. Indeed, when asked about stereotypes of Middle-Eastern people, “Muslim” emerged as a standard response for Middle-Eastern men, women, and people more broadly (Ghavami & Peplau). The current set of studies cannot differentiate the extent to which these attitudes towards religious groups are being driven by overlapping attitudes towards their default racial groups. We recommend that future studies explore stereotypes at the intersection of race and religion. Similarly, political orientation can influence the perception of social and religious groups and should be explored as an additional intersectional identity in future studies.

Finally, participants’ own gender, religious, and political identities can all have an impact on stereotyping and prejudice. A recent study showed that Republicans have stronger negative emotional responses (anxiety, anger) toward Muslim population growth than Democrats, and see this population growth as a threat to Christians (Bai, 2020). Political and gender identities likely influenced our results too, but we are underpowered to include these identities as explanatory variables in our model. Furthermore, we solicited stereotypes and emotions in a general sense by asking participants to indicate what they thought the average person thought. While identities might influence broader perception, using such language likely dampens the impact of identity on responses. We look forward to future research that can explore this critical question.

Our methodology does not allow us to determine which religion subcategory participants are thinking about (e.g., Protestant Christians or Orthodox Jews) when imagining the broader Christian or Jewish categories or how knowledgeable participants are about religious groups and where they acquired that knowledge (e.g., media exposure versus personal contact). Participants may be much less familiar with the intricacies contained within Jewish and Muslim identities. Participants are likely more familiar with Christians and are probably answering questions while thinking of either Protestants or Catholics. Differences in how people imagine Christians could have contributed even to Christians being differentiated from men, women, and people. We hope that future studies can delve into these subcategories and tease apart these differences.

In conclusion, this paper highlights the importance of studying stereotypes and emotions intersectionally towards religious targets to fully understand how intersectionality may affect intergroup attitudes. The presence of androcentrism and intersectional invisibility has downstream consequences: psychological theories and bias-reduction interventions built on broader religious groups like Christians or Muslims may be more applicable to the men in those groups than the women.

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