Religiosity as a predictor of in-group favoritism within and between religious groups

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A B S T R A C T

It was hypothesized that religiosity is positively associated with religious in-group favoritism. This hypothesis was tested using the second wave of data from the Midlife in the United States representative survey of middle adulthood. The sample included White participants from four religious groups (Baptists, Catholics, Methodists, and Jews). Consistent with the hypothesis, when analyzing the full sample and within each of the four religious groups, religiosity was predictive of in-group favoritism. However, while differences between religious groups in in-group favoritism emerged, and remained when controlling for the previously found group differences in intelligence and personality, the group differences in in-group favoritism were not mediated by religiosity. For example, while Baptists scored high in both religiosity and in-group favoritism, Jews scored low in religiosity yet high in in-group favoritism. Possible explanations for these findings are discussed, such as genetic similarity among group members.

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1. Introduction

Religious adherence appears to make members group-oriented, and thus, prone to in-group favoritism. Sela, Shackelford, and Liddle (2015) have argued that religiousness is sexually selected for because it is an ‘honesty-signal’ which demonstrates that you are cooperative, rule-following and have access to a powerful or useful network. To attain this access, the religious must signal their group-commitment in numerous ways. This means that members can trust each other, making them more able to create a highly cooperative group and it means that they are clear on the nature of outsiders, who are likely to be less trustworthy, all being equal. This would invite in-group favoritism. Indeed, when religious belief is involved we would expect in-group favoritism to become even stronger than it might otherwise be. The ‘in-group’ is not just ‘similar to me,’ as would be the case with an ethnic or cultural group (see Rushton, 2005), but it is uniquely blessed by God, something likely to evoke strong in-group favoritism. The ‘out-group’ is, with many religious groups, believed to be following the path of the Devil, the embodiment of evil and the enemy of God (Sela et al., 2015).

Religious people evaluate members of the in-group more favorably than they do outsiders (Hunter, 2001). Priming subjects with religious primes promotes in-group bias (Preston & Ritter, 2013). American Protestants report greater feelings of ‘warmth’ towards other Protestants than members of other religious groups (Davis & Smith, 2008). Turkish Muslims in the Netherlands show greater in-group favoritism to other Muslims (Verkuyten, 2007), people are more likely to donate to charities if they infer that they share a religious perspective with that charity (Hawkins & Nosek, 2012) and the more religious will evaluate strangers more positively if told that they share a religious perspective with that charity (Hawkins & Nosek, 2012). Consistent with the hypothesis, when analyzing the full sample and within each of the four religious groups, religiosity was predictive of in-group favoritism. However, while differences between religious groups in in-group favoritism emerged, and remained when controlling for the previously found group differences in intelligence and personality, the group differences in in-group favoritism were not mediated by religiosity. For example, while Baptists scored high in both religiosity and in-group favoritism, Jews scored low in religiosity yet high in in-group favoritism. Possible explanations for these findings are discussed, such as genetic similarity among group members.

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1.1. Description of the data set and summary of hypotheses

We explore differences between religious groups in both religiosity and in-group favoritism using data from the Midlife in the United States II (MIDUS II; Ryff et al., 2004–2006) data set. MIDUS II is the second wave of data collection in a longitudinal study of human development with focus on middle to late adulthood. MIDUS II is well suited for the purposes of the current investigation for several reasons. First, the size and scope of the sample is such that various religious groups are well represented. Second, participants were asked several questions concerning religion allowing for the construction of measures of both religiosity and in-group favoritism. Third, the data have been used previously to explore differences between religious groups. This is important because the findings of differences between groups on the variables of religiosity and in-group favoritism will not only add to pre-existing findings, but the variables on which differences were already found can be used as statistical controls.

Dunkel, Reeve, Woodley of Menie, and Van der Linden (2015) recently used the MIDUS II data to explore differences between participants who self-identified as Agnostic or Atheist, Baptist, Catholic, Methodist, or Jewish. Dunkel et al. (2015) examined the differences between the groups on the variables of general intelligence and personality. The aspect of personality examined was the general factor of personality or GFP (Van der Linden, te Nijenhuis, & Bakker, 2010) which is the positive manifold amongst personality traits and is thought to reflect social-effectiveness (e.g., Dunkel & Van der Linden, 2014). They found that the groups exhibited unique profiles on the two variables. Amongst the religious groups, Catholics and Methodists scored intermediate on each variable whilst Baptists scored low and Jews scored high on each variable. Thus, by controlling for general intelligence and the GFP it can be ascertained as to whether or not any potential religious group difference is simply a function of differences on these two variables, or an additional, and independent dimension on which the groups differ.

To summarize, it is proposed that religiosity is positively associated with in-group favoritism. This hypothesis was first tested using the full sample and subsequently within each of the religious groups (Baptist, Catholic, Methodist, and Jewish) studied by Dunkel et al. (2015) using the MIDUS II data set. Next, we tested between group differences in in-group favoritism with the hypothesis that between group differences in in-group favoritism would be mediated by between group differences in religiosity. However, given that these religious groups have been found to vary in both intelligence and personality, we also wished to control for these potential confounds when testing for between group differences.

2. Method

2.1. Participants

MIDUS II is the second wave of an extensive longitudinal examination adult midlife development within the United States (Ryff et al., 2004–2006). While MIDUS II includes a nationally representative multi-ethnic sample, we focused on White participants in order to control for ethnic differences in the nature and significance of religiousness, which have been looked at elsewhere (e.g., Dutton, 2014). Data collection for MIDUS II was completed in 2009. Selecting only White participants and participants that met the religious inclusion criteria (as stated below) resulted in a sample of 1627 (930 women and 697 men). The age range of the sample was from 33 to 84 years of age (M = 56.99; SD = 12.38).

2.2. Religion

MIDUS II includes an item about religious orientation. In response to the question, participants were given 46 options and allowed to supply their own answer. However, only four groups were examined in the current investigation. The four groups represented the three most numerous affiliations; Roman Catholic (n = 873), Baptist (n = 366), Methodist (n = 292) and a Jewish group (n = 96). The Jewish group was a combination of five separate responses (Jewish Orthodox = 2, Jewish Conservative = 35, Jewish Reform = 47, Jewish Reconstructionist = 4, and Jewish “Other” = 8).

2.3. Religiosity

Religiosity was measured using a combination of two items. The first item was a response to the question, “How important is religion to you?” A four-point Likert-type scale was used by participants to respond to this item. The second item gauges how often participants prayed using a six-point scale anchored at “once a day or more” and “never”. The inter-item correlation for the two items was r(1612) = .55. The magnitude of the association indicates significant overlap between the two items, yet also that the two items are not redundant. Each item was standardized (converted to a z-score) and the two items were added.

2.4. Religious in-group favoritism

A religious in-group favoritism scale was made by adding the response to four items (How important is it for you to celebrate or practice on religious holidays with your family, friends, or members of your religious community?; How closely do you identify with being a member of your religious group?; How much do you prefer to be with other people who are the same religion as you?; How important do you think it is for people of your religion to marry other people who are the same religion?). Participants responded to each item using a four-point Likert-type scale and the internal consistency of the scale was α = 85. The items were summed to create a total score.

2.5. Covariates

Along with the demographic variables of age and sex, the additional variables of cognitive ability and personality were included as covariates. Cognitive ability was measured by the Brief Test of Adult Cognition by Telephone (BTACT; Lachman & Tun, 2008) which includes a set of cognitive tasks administered via the telephone. The composite score consisting of the sum of the standardized scores of word list recall, backward digits, category fluency, number series, and counting backwards was used as a measure of cognitive ability. The GFP was used to measure personality as it had been done with Dunkel et al. (2015). The GFP was defined as scores on the first unrotated factor of an exploratory factor analysis using Principal Axis Factoring for the traits of neuroticism, openness, conscientiousness, extraversion, agreeableness, and agency.

3. Results

3.1. Full sample

Bivariate correlations amongst the study variables for the full sample can be seen in Table 1. As can be observed in Table 1, in-group favoritism

<table>
<thead>
<tr>
<th>Table 1: Bivariate correlations amongst the study variables.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. In-group favoritism</td>
</tr>
<tr>
<td>2. Sex</td>
</tr>
<tr>
<td>3. Age</td>
</tr>
<tr>
<td>4. Religiosity</td>
</tr>
<tr>
<td>5. Cognitive ability</td>
</tr>
<tr>
<td>6. GFP</td>
</tr>
</tbody>
</table>

Note: Ns range from 1391 to 1627. For participant sex; men = 1 and women = 2.
* p < .05.
** p < .01.
*** p < .001.
was significantly associated with each of the study variables. For the demographic variables, women and older participants exhibited greater in-group favoritism. As expected, religiosity exhibited a substantial positive association with in-group favoritism, while both cognitive ability and the GFP showed small associations. Cognitive ability was negatively correlated with in-group favoritism while the GFP was positively correlated.

Next the association between religiosity and in-group favoritism within each religious group was tested. The results of the bivariate correlations were as follows: Baptists, r(363) = .57, p < .001; Catholics, r(855) = .61, p < .001; Methodists, r(288) = .65, p < .001; and Jews, r(95) = .52, p < .001. Thus within each group, the strong relationship between religiosity and in-group favoritism remained.

3.2. Between groups

To test for difference between religious groups, we first conducted an analysis of variance (ANOVA) with the four religious groups as the independent variable and in-group favoritism as the dependent variable. Subsequently, an analysis of covariance (ANCOVA) was conducted with the same independent and dependent variables, but with the addition of age, sex, intelligence, and the GFP as covariates. The results for the ANOVA can be seen in Table 2. The results for the ANCOVA can be seen in Table 3. In each analysis the test was significant and post hoc comparisons revealed that the Baptist and Jewish groups exhibited greater in-group favoritism than Catholics, who, in turn, exhibited greater in-group favoritism than the Methodist group. The effect size for the largest group difference, between Methodists and Jews, was d = .63.

To examine the possibility that the group differences in in-group favoritism are a function of religiosity we first tested for group differences in religiosity. The results of an ANOVA for the group differences in religiosity can be seen in Table 4. As seen in Table 4, Jews were less religious than all other religious groups and Baptists were more religious than the all other religious groups. The effect size for the largest group difference, between Baptists and Jews, was d = 1.62.

Because mediation is dependent upon the same groups that score high in in-group favoritism also being the highest in religiosity, mediation fully accounting for the differences in in-group favoritism can be ruled out. Jews, for example, scored high in in-group favoritism, yet low in religiosity. To see if, per chance, this is a function of the covariates an ANCOVA was calculated predicting religiosity while controlling for age, sex, intelligence, and GFP. The results can be seen in Table 5 and show the group differences persist.

4. Discussion

It was hypothesized that religiosity was predictive of in-group favoritism. A subsample of the MIDUS II data set made up of ethnically White Baptists, Catholics, Jews, and Methodists was used to test this hypothesis. Using both the full subsample and within each of the religious groups, religiosity was positively associated with in-group favoritism. However, group differences in in-group favoritism were not simply a function of group differences in religiosity. For example, while Baptists had a high level of religiosity and in-group favoritism, Jews had a low level of religiosity yet a high level of in-group favoritism. These findings were not affected by previously established group differences in intelligence and personality.

Table 2
Means, standard deviations, and ANOVA results for in-group favoritism by religious groups.

<table>
<thead>
<tr>
<th>Baptist</th>
<th>Methodist</th>
<th>Catholic</th>
<th>Jewish</th>
<th>F(3, 1609)</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>.29 (.04)⁎</td>
<td>−.29 (.99)⁎</td>
<td>−.06 (.95)⁎</td>
<td>.33 (.98)⁎</td>
<td>23.93⁎⁎⁎</td>
<td>.04</td>
</tr>
</tbody>
</table>

Note. Standard deviations are in parentheses. Groups with different superscripts differ. ⁿ⁎⁎ p < .001.

Table 3
Estimated marginal means, standard errors, and ANCOVA results for in-group favoritism by religious groups controlling for sex, age, intelligence, and the GFP.

<table>
<thead>
<tr>
<th>Baptist</th>
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<th>F(3, 1609)</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td>.33 (.06)⁎</td>
<td>−.31 (.06)⁎</td>
<td>−.07 (.04)⁎</td>
<td>.29 (.11)⁎</td>
<td>24.08⁎⁎⁎</td>
<td>.05</td>
</tr>
</tbody>
</table>

Note. Standard deviations are in parentheses. Groups with different superscripts differ. ⁿ⁎⁎ p < .001.

There has been much discussion over the origins of religiousness in terms of individual survival or sexual selection (see Blume, 2009). But this finding would seem to imply that religiousness, in general, makes people more group-centric, presumably because they believe that their group is blessed by God while outsiders are not, or, at least, not to the same extent. This interpretation is congruous with many qualitative studies which have shown that the divine dictates of most religions do appear to make the religious group fundamentally more ethnocentric; internally cooperative but externally hostile or potentially so (see essays in Sloane & Van Slyke, 2015). Many computer models (e.g. Hartshorn, Khatnatcheev, & Shultz, 2013) have shown that, in the long run, the more ethnocentric group will win in the battle of group selection. Accordingly, the spread of religiousness may at least partly be down to the fact that the more religious group, all else being equal, will be more ethnocentric and will thus displace competitors. Some of the items we employed, although they do not involve the classic ‘negative ethnocentrism’ measure of disliking outsiders, do imply that insiders are very strongly preferred which can be seen as paralleling negative ethnocentrism.

As stated, it can be seen that the Jews and the Baptists have relatively high levels of in-group favoritism and that this is still the case when we control for variables such as the GFP and cognitive ability, both of which Jews are high in and Baptists low in. In that our method controls for two important predictors of religiousness, a possible explanation is that genetic similarity may explain our findings. There is a large body of evidence showing that people are more altruistic to those who are closely related to them, because such behavior allows them to indirectly pass on their genes and thus increases their ‘inclusive fitness’ (Hamilton, 1964). In this regard, it has been shown that spouses and best friends are more genetically similar to each than would be the case by chance and that they are more similar on traits that are more heritable. Hence, this would explain, in evolutionary terms, positive and negative ethnocentrism and a tendency to consort along ethnic lines (see Rushton, 2005). We would expect such behavior to be stronger if a group had a relatively small gene pool or if there was reason to believe that highly ethnocentric behavior may have been selected for in the group’s history. There is a case for arguing that this is so with the Jewish sample. Ashkenazi Jews, the vast majority of US Jews, have a very small founding gene pool, have practiced strict endogamy for centuries, have relatively high levels of cousin or consanguineous marriage, are on average 4th cousins, and have a genetic disease profile associated with other highly inbred populations such as the Louisiana Cajun and the Amish (Carmi, Hui, Kochav, et al., 2014; Atzmon, Hao, Pe’er, et al., 2010; Sutton, 2002; Cohen, Vardi-Saliternik, & Friedlander, 2004). In addition, Ashkenazi Jews have spent centuries in Northern and Eastern Europe where they have been intermittently persecuted (Lynn, 2011). This could be seen as a form of selection in which other ingroup conflict, according to the computer models, increases ethnocentrism because if the group is not ethnocentric then it does not...
survive (Hartshorn et al., 2013). Moreover, less ethnocentric Jewish individuals would likely have moved out into the general population. Lynn (2011) notes that this process would probably also have augmented Ashkenazi intelligence.

A similar explanation may be more cautiously offered with regard to the Baptists. Lynn and Vanhanen (2012) have suggested that the higher religiousness of White Americans, compared to Europeans, may be genetic in origin. The USA was founded by English Puritans, who were extremely religious even by the standards of the early seventeenth century. In many cases, their churches developed into what are now the Baptists. Mindful of the significant degree, around 0.4, to which religiousness is heritable (Koenig, McGue, Krueger, & Bouchard, 2005), and the evidence of assortative mating along genetic lines (Rushton, 2005), this puritanical religiousness would have been passed on as a cultural and possibly genetic inheritance to white Americans of British descent. By the early eighteenth century, US Baptists were markedly separating themselves from Anglicans, and the Baptist churches are dominant among Whites in southern states where most of the Whites would be of British descent. In contrast, American Catholicism would be far more genetically mixed — reflecting later immigrant waves from Ireland, southern Europe and from South America. Both Catholicism and Methodism are far more religiously liberal than the Baptists (e.g. Nyborg, 2009) meaning members may marry those who are not from their denomination, so increasing the gene pool. This would increase the comparative group-centrictness of the Baptists. But, obviously, this is speculative and more research is needed to confirm it.

There are also some noteworthy ancillary findings with regards to in-group favoritism. Older people, women, and those with a high GFP and those with less cognitive ability were found to be more group-centric. In general, it might be argued that group-centrism – and the ability to cooperate in large groups – is related to a slow life history strategy (LHS; Figueredo, Andrzejczak, Jones, Smith-Castro, & Montero, 2011). A fast LHS develops in an unstable environment and is associated with a series of psychological and physical adaptations that permit high mating effort (so that offspring can learn), a small number of high intra-species competition. It is characterized by low mating effort, delayed maturation (so that offspring can learn), a small number of highly-invested-in offspring, strong pair bonds and long term mating. Slow LHS develops in a stable environment in which there is high intra-species competition. It is characterized by low mating effort, delayed maturation (so that offspring can learn), a small number of highly-invested-in offspring, strong pair bonds and long term mating. The characteristics of age, sex, religiosity, and the GFP are correlates of a slow LHS and were also found to be associated with in-group favoritism. Figueredo et al. (2011) found that a slow LHS was associated with both in-group altruism and simultaneously less negative ethnocentrism. Thus it is possible that our measure of in-group favoritism is more closely aligned with in-group altruism and not out-group antagonism. This explanation not only points to a limitation of the current investigation, but also supplies guidance for possible future research.

References


Table 5

<table>
<thead>
<tr>
<th>Baptist</th>
<th>Methodist</th>
<th>Catholic</th>
<th>Jewish</th>
<th>F(3, 1372)</th>
<th>Partial r²</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.62 (.09)**</td>
<td>−.15 (.10)b</td>
<td>.04 (.06)b</td>
<td>−.22 (.17)b</td>
<td>.68 (.69)**</td>
<td>.13</td>
</tr>
</tbody>
</table>

Note. Standard errors are in parentheses. Groups with different superscripts differ.

⁎⁎⁎ p < .001.