

Ratings of Personality Attractiveness and Social Effectiveness by Religious Affiliation

Curtis S. Dunkel^{†*}

Abstract

Personality traits covary to form a general factor of personality or GFP. Religious groups differ on the GFP with Jews scoring high and the nonreligious scoring low. Because the GFP is thought to represent a “good” personality and/or social effectiveness, it was hypothesized that differences in personality ratings between religious groups would also emerge. Although somewhat inconsistent, the results of two studies supported the hypothesized pattern. In general, Jews were found to have higher attractive personality and social effectiveness ratings while the nonreligious scored significantly lower. Future research should employ several raters to increase the reliability of the ratings and examine Jewish intragroup differences.

Keywords: Religious affiliation, Personality ratings, Social effectiveness

1 Introduction

Although considered provocative by the general public, it is increasingly recognized by individual differences researchers that Ashkenazi Jews are, on average, highly intelligent (e.g., Cofnas (2018); Lynn (2011); te Nijenhuis et al. (2014)). Jewish success in the United States (the majority of Jews in the U.S. are Ashkenazim) is also well documented. In fact, the degree and breadth of Jewish accomplishment exceed that of even the largest posited cognitive advantage of about 10 IQ points or two thirds of a standard deviation (e.g., Cofnas, 2018). For example, the difference in income between Jews and Gentiles is greater than their difference in intelligence. In the Pew Research Center *Jewish Americans in 2020* poll almost a quarter (23%) of Jews reported having a household income > \$200,000 in contrast to just four percent of the general adult population. This has led to the search for other factors besides cognitive ability that may explain Jewish achievement. The current study examines the possibility that Jews also possess strong personality/social skills that can be considered an additional resource for achieving goals. This hypothesis is based on studies showing personality differences between Jews and Gentiles, specifically that Jews possess an especially high general factor of personality (GFP).

Simply and colloquially the GFP represents a *good personality* (Musek (2017)). More precisely, it reflects social-effectiveness (van der Linden et al. (2016)) or emotional intelligence (van der Linden et al. (2017), van der Linden et al. (2018)). Statistically the GFP is the shared variance of positively valenced personality traits. Using the popular Big Five traits of openness, conscientiousness, extraversion, agreeableness, and neuroticism as an example, an individual high in the GFP would likely exhibit curiosity, reliability, sociability, friendliness, and emotional stability (van der Linden et al. (2010)). This is not to say the GFP is limited to the Big Five model as the GFP is also seen in other personality trait models (e.g., Block (1965); Loehlin and Horn (2012); Rushton and Irwing (2011); Webb (1915)) and via different methods. Most recently large language models have found a substantial GFP in natural language (Sikström et al., 2025; van der Linden et al, 2025).

Dunkel, Reeve, et al. (2015) examined differences in the GFP between religious groups using three large data sets. In each data set it was found that Jews had a higher GFP than the other groups

[†] Independent Researcher, E-mail: curtdunkel@protonmail.com

* Corresponding author, email: curtdunkel@protonmail.com

(e.g., Catholic, Protestant, nonreligious/agnostic/atheist). Another difference that emerged is that the nonreligious/agnostic/atheist group tended to score the lowest. Importantly, these differences remained when controlling for cognitive ability. This means that the group differences in the GFP are not simply the repackaging of the well-established differences in intelligence. Furthermore, a so-called Jensen effect (Jensen, 1998) was found. That is, the group differences were most pronounced on the individual traits that were also most representative of the GFP. In a replication study using the General Social Surveys, Dunkel (2015) found mean differences between groups consistent with high Jewish GFP, but the only statistically significant difference was between Jews and the nonreligious group. The results may have been hindered by low power and a truncated personality measure. Averaged across studies the effect size for the difference in the GFP between Jews and the nonreligious is $d = .51$ suggesting a medium-sized effect. In a more recent study that was slightly more powerful and used a more extensive measure of personality, Dunkel (2024) found a similar pattern. Jews scored significantly higher than Anglicans (because the sample was British this was the most represented Protestant denomination), but while the Jewish mean was higher than Catholics the difference was not statistically significant. A nonreligious/agnostic/atheist group was not included in the study.

While the pattern of high Jewish and low nonreligious GFP appears replicable, each study is susceptible to the primary criticism of the GFP: that the GFP is simply a kind of systematic measurement error. Because the GFP is based on self-report measures, the GFP may be a function of the biases inherent in the task of rating oneself. For example, people generally want to engender a positive impression. This desire is not uniformly held, and these individual differences will appear across self-report measures causing the GFP to correlate with criterion variables that are subject to the same bias. To point, several studies have found evidence suggesting that the GFP is caused by response biases (e.g., Ashton et al., 2020; Bäckström & Björklund, 2020). Applying this interpretation to the interreligious pattern of results suggests that the groups vary in response bias with Jews being more susceptible to responding to items with biases such as impression formation and self-deception and the nonreligious being more immune. Thus, if the GFP is response bias we are still left with the interesting question why religious groups differ in this regard.

One way to address the question of whether the GFP is substantive or is measurement error is to look at real-world observable behavior rather than self-report (e.g., Dunkel & Dutton, 2016). If the GFP is substantive, then individuals who possess a high GFP should be seen as having a good personality and as socially effective. In reference to religious group differences, it follows that Jews should be judged as such, having a good personality and being socially effective. This is the hypothesis of the current investigation. Given the methods of the included studies (i.e., face-to-face interviews of participants), this means that it is expected that Jews will be assessed by an interviewer as having a good personality and as socially effective.

While Jews have consistently scored high on the GFP, individuals classified as nonreligious, agnostic, and/or atheist have scored low. Thus, it is hypothesized that this group will be rated low by interviewers when assessing the quality of the interviewee's personality and social ability. This hypothesis also acts as a validity check. If the ratings of interviewers mirror the GFP, Jewish > Christian (Catholic and Protestant) > nonreligious/agnostic/atheist, then additional weight should be added to the possibility that this pattern is a valid representation of religious intergroup differences.

1.1 Overview of the present studies

Data from two longitudinal studies were used to test the hypotheses. In each study participants were interviewed and at the completion of the interview the interviewer rated the interviewee's personality (Study 1) or social ability (Study 2). There are trade-offs in analyzing (1) data with small groups or cell sizes such as small religious minorities, (2) longitudinal data with attrition that reduces the group size even more with each successive wave of data collection, and (3) reliability concerns based on the judgments of a single individual using a scale with one or very few items.

The use of ratings from a single, especially the initial, wave of data collection maximizes the group or cell size. However, this comes at the cost of reliability. Individual raters who use one or a few items to

rate an interviewee at a single point in time introduce a substantial amount of random error. Aggregating across waves reduces this error but because of attrition this occurs at the cost of cell size. Therefore, the following plan was utilized for analyzing the data. The first wave of personality ratings was included in the initial analysis. This maximizes sample size. Next ratings from each successive wave were included in a factor analysis with the initial ratings. For example, if there were six waves of data collection in total, ratings from wave 1 were analyzed first, followed by the factor analysis of ratings from wave 1 and 2, and then the factor analysis of ratings from wave 1, 2, and 3. As more waves are included, the sample size decreases but this is offset by better reliability of the ratings. This method was used to balance the trade-offs between sample size and reliability.

Two additional supplemental analyses were run for the ratings from each data set to address possible confounds. Religiosity varies across religious orientations. Jews tend to score lower in religiosity measured, for example, by items gauging the importance of religion in one's life (Dunkel & Dutton, 2016). Obviously, the nonreligious score low on religiosity. Thus, the first additional analyses controlled for religiosity. Ethnicity also varies by religious orientation. Blacks, for example, are more likely to be a Protestant denomination (e.g., Baptist). The second additional analysis addressed this by limiting the analysis to White participants.

Finally, in the fourth wave of Study 1 participants completed a measure of the Big Five personality traits that can be used to calculate a GFP. As such, the hypothesis that differences between religious groups in personality ratings are mediated by the GFP can be assessed by testing a mediation model with the GFP mediating the association between religious orientation and personality rating.

2 Study 1

2.1 Sample

The data set for Study 1 was the National Longitudinal Study of Adolescent Health. The sample for Study 1 is from the National Longitudinal Study of Adolescent to Adult Health (Add Health; Harris and Hotz (2020)). Details regarding the sampling procedure and methods have been provided elsewhere (Harris et al. (2019)). Add Health includes a nationally representative sample of American youth who provided information at six different waves over approximately 30 years (1995–2025). The current study uses the public-use data from the first four waves of in-home face-to-face interviews. Respondents were between 12 and 19 years of age in wave 1 and between 24 and 32 years of age in wave 4. For wave 1 the sample included 6,504 participants (Male = 3,147; Female = 3,356; Refused = 1) with the following ethnic distribution: White = 4,291; Black = 1,601; Native American = 73; Asian/Pacific Islander = 236; Other = 303).

Information about how to access the data can be found at <https://addhealth.cpc.unc.edu/>. Study administrators maintain that the privacy rights of subjects have been observed and informed consent obtained. The present study did not require IRB approval because it used publicly available de-identified data.

2.2 Measures

Religious affiliation

During the interviews the participants were asked, "What is your religion?" For wave 1 the largest Protestant denomination, and most frequent response was Baptist ($n = 1,590$). The other responses recorded for the current study were Catholic ($n = 1,448$), None ($n = 751$), and Jewish ($n = 54$). These are the ceilings for the group sizes as attrition caused the sizes to decrease across waves of data collection. The group sizes for each successive wave can be seen in Table 1.

Table 1: Descriptive statistics for personality attractiveness ratings by religious affiliation

Personality rating	Religious affiliation			
	Baptist	Catholic	None	Jewish
Wave 1	$n = 1,589$	$n = 1,447$	$n = 751$	$n = 54$
	$M = 3.57$	$M = 3.61$	$M = 3.52$	$M = 3.89$
	$SD = .86$	$SD = .85$	$SD = .85$	$SD = .74$
Wave 1 – 2	$n = 1,121$	$n = 1,090$	$n = 563$	$n = 44$
	$M = -.00$	$M = .05$	$M = -.13$	$M = .34$
	$SD = .66$	$SD = .62$	$SD = .66$	$SD = .62$
Wave 1 – 3	$n = 924$	$n = 841$	$n = 426$	$n = 39$
	$M = .01$	$M = .05$	$M = -.14$	$M = .33$
	$SD = .68$	$SD = .65$	$SD = .69$	$SD = .52$
Wave 1 – 4	$n = 796$	$n = 719$	$n = 365$	$n = 29$
	$M = -.00$	$M = .05$	$M = -.13$	$M = .28$
	$SD = .68$	$SD = .64$	$SD = .68$	$SD = .51$

Religiosity

Religiosity was measured using three items. First item: “How important is religion to you?” anchored by 1 = not at all important and 4 = very important. Second item: “How often do you pray?” anchored by 1 = never and 5 = at least once a day. Third item: “In the past 12 months, how often did you attend religious services?” anchored by 1 = never and 4 = once a week or more. Data reduction using principal axis factoring (PAF) created a scale from the items (Eigenvalue = 1.49 explaining 49.72% of the variance). It should be noted that the interview included branching which excluded individuals without a religious affiliation from being posed these religiosity questions.

Personality attractiveness

Upon completion of the interview, the interviewer recorded his or her impression of the participant. The interviewer responded to the prompt, “How attractive is the respondent’s personality?”, using a five-point Likert-type scale anchored as 1 = very unattractive and 5 = very attractive.

GFP

The Big Five personality traits of agreeableness ($\alpha = .70$), conscientiousness ($\alpha = .65$), extraversion ($\alpha = .71$), neuroticism ($\alpha = .63$), and openness ($\alpha = .65$) were measured by having participants use a five-point Likert-type scale to rate items from the 20-item Mini-International Personality Item Pool (Baldasaro et al., 2013). The scale was only administered in the fourth wave of data collection. Previously computed GFP scores (Dunkel, Nedelec, et al., 2015) in the Add Health data were used.

2.3 Results and discussion

Prior to testing group differences, the correlations between ratings were examined. The correlation matrix can be seen in Table 2. Although all the personality ratings across waves were positively correlated, the correlations were not particularly strong. This suggests a considerable amount of measurement error although it may also reflect true developmental change. The latter possibility is supported by a tendency for these correlations to get smaller as the time between interviews lengthens. This is especially visible for the wave 1 correlations, which decline from .26 to .15 and finally .08.

Four one-way analyses of variance (ANOVA) were performed with religious affiliation as the independent variable and personality rating as the dependent variable. The ANOVAs were followed, for the reason of highly unequal cell sizes, by Hochberg’s GT2 post hoc tests. The first ANOVA was performed on the

Table 2: Correlations of personality ratings across measurement waves

	Wave 1	Wave 2	Wave 3	Wave 4
Wave 1	—			
Wave 2	.26	—		
Wave 3	.15	.14	—	
Wave 4	.08	.08	.12	—

Note. All correlations significant at $p < .001$

wave 1 personality ratings, the second ANOVA on the scores resulting from a factor analysis using PAF of wave 1 and wave 2 ratings (26.17% of the variance explained), the third from the PAF scores of waves 1 – 3 (19.93% of the variance explained), and the fourth from the PAF scores from waves 1 -4 (15.47% of the variance explained).

The descriptive statistics can be seen in Table 1. For wave 1 the ANOVA was significant, $F(3, 3837) = 4.41, p < .01, \eta^2 = .00$. Multiple comparisons showed that Jews had higher personality ratings than Baptists ($d = .40$) and the nonreligious ($d = .46$). No other differences were statistically significant. For ANOVA of waves 1 – 2, $F(3, 2814) = 13.08, p < .001, \eta^2 = .01$. Post hoc tests showed that Jews had higher personality ratings than each of the other groups and the nonreligious had lower personality ratings than each of the other groups. For the ANOVA of waves 1 – 3, $F(3, 2226) = 11.12, p < .001, \eta^2 = .02$. Post hoc tests showed that Jews had higher personality ratings than each of the other groups and the nonreligious had lower personality ratings than each of the other groups. For the ANOVA of waves 1 – 4, $F(3, 1905) = 7.55, p < .001, \eta^2 = .01$. Post hoc tests showed that the nonreligious had lower scores than each of the other groups. No other statistically significant differences emerged.

An ANCOVA for wave 1 ratings controlling for religiosity was significant, $F(2, 3070) = 6.55, p < .001, \eta_p^2 = .00$. Pairwise comparisons showed that Jews, with an estimated marginal mean (EMM) of 3.95, had higher ratings than both Baptists (EMM = 3.56) and Catholics (EMM = 3.63). Additionally, because ethnicity is confounded with religious orientation (e.g., Blacks are disproportionately Baptist), the ANOVA for wave 1 scores was rerun including White participants only. The ANOVA was significant, $F(3, 2463) = 3.90, p < .01, \eta^2 = .01$, but the post hoc test revealed that the only significant pairwise difference was between Jews and the nonreligious, with Jews having higher personality ratings.

Given the only difference to emerge in the wave 1-4 scores were between the nonreligious and each of the other groups, a dummy variable (1 = nonreligious and 2 = combined Baptist, Catholic, Jew) was created for testing mediation. The PROCESS macro for SPSS (Hayes, 2012) was used to test for mediation. The total effect was significant ($b = .14, p < .001$). Bootstrapping results indicated that the indirect effect of religion on personality ratings mediated by the GFP was marginally significant, $b = .02$, 95% confidence limits [.002, .03]. The direct effect was also significant, $b = .14$, 95% confidence limits [.07, .22]. The results suggest that there may be partial mediation.

Although results of individual analyses varied, the trends across measurement waves tended to support the hypotheses. Jews had slightly higher personality ratings and the nonreligious slightly lower personality ratings. However, the significance of the group differences is specific to which groups are compared and the wave that was tested. Controlling for religiosity and limiting the sample to White participants led to some specific changes but left the general trend of high Jewish and low nonreligious ratings intact. Finally, the mediation analysis showed that the effect of the low ratings for the nonreligious was partially, yet marginally, mediated by the GFP. This small effect could, in part, be due to the low reliability of the personality measures. Nevertheless, the fact that the direct effect remained significant suggests that other factors beyond the GFP play a role in the personality ratings.

A limitation of the study that is partially addressed in Study 2 is the psychometric qualities of the personality ratings. The single item measure appears to have low reliability across raters as exhibited by the low intercorrelations (Table 2) and the small percentage of variance accounted for by the factor analyses of

the ratings. Likewise, validity may be affected by construct underrepresentation especially if the objective is to measure social effectiveness and not the more nebulous idea of a good or attractive personality.

3 Study 2

This study used the Americans' Changing Lives data set.

3.1 Sample

The sample for Study 2 is from the Americans' Changing Lives study (ACL; House et al. (2024)). ACL is a longitudinal study that began in 1986 with the face-to-face interviews of adults at least 25 years of age and up through late adulthood ($M = 53.64$; $SD = 17.62$). The current study uses public-use data from waves one through six – the last wave of data collection that primarily occurred in 2019. For wave 1 the sample included 3,617 participants (Male = 1,358; Female = 2,259) with the following ethnic distribution: White = 2,323; Black = 1,174; Native American = 47; Hispanic = 5; Asian = 4.

Information about how to access the data can be found at <https://acl.isr.umich.edu/>. Study administrators maintain that the privacy rights of subjects have been observed and informed consent obtained. The present study did not require IRB approval because it used publicly available de-identified data.

3.2 Measures

Religious affiliation

During the interview participants were asked “What is your religious preference – Protestant, Roman Catholic, Jewish, or something else?” Only responses of Protestant ($n = 2,385$), Roman Catholic ($n = 709$), Jewish ($n = 55$), or “none” ($n = 213$) were used for further analysis.

Religiosity

Religiosity was measured using three items. First item: “In general, how important are religious or spiritual beliefs in your day-to-day life?” anchored by 1 = not at all important and 4 = very important. Second item: “When you have problems or difficulties in your work, family or personal life, how often do you seek spiritual comfort and support--almost always, often, sometimes, rarely or never?” anchored by 1 = never and 5 = almost always. Third item: “How often do you attend religious services?” anchored by 1 = never and 6 = more than once a week. Data reduction using PAF created a scale from the items (Eigenvalue = 1.55 explaining 51.70% of the variance).

Personality or social effectiveness

Upon the completion of the interview the interviewer recorded responses, using Likert-type scales, to several prompts concerning his or her observations and impressions. Four of these items were assessed to reflect an aspect of social effectiveness. First item: “How comfortable would you say the respondent is in dealing with other people?” anchored by 1 = not at all and 5 = very. Second item: “How skilled would you say the respondent is in handling or dealing with other people?” anchored by 1 = not skilled at all and 5 = very skilled. Item three: “How self-confident did the respondent seem to be?” anchored by 1 = not at all and 5 = very. Item four: “How was the respondent ability to express him/herself?” anchored by 1 = poor and 4 = excellent.

For each wave separately the four items were factor analyzed. The percentage of variance accounted for by the first factor, considered to represent social effectiveness, ranged from 58.45% to 72.33% reflecting high covariance among the four items. The factor scores for each wave acted as the social effectiveness rating.

Table 3: Correlations of social effectiveness across measurement waves

	Wave 1	Wave 2	Wave 3	Wave 4	Wave 5	Wave 6
Wave 1	—					
Wave 2	.53	—				
Wave 3	.34	.37	—			
Wave 4	.23	.21	.23	—		
Wave 5	.32	.36	.29	.29	—	
Wave 6	.16	.15	.20	.17	.25	—

Note. All correlations significant at $p < .001$

3.3 Results and discussion

The correlations between ratings can be seen in Table 3. The ratings between wave 1 and wave 2 were strongly correlated, but associations between the ratings across the other waves were smaller (especially waves 4 and 6). Reliability appears to be better than in Study 1, although it is still low.

Note: All correlations significant at $p < .001$

Six one-way ANOVAs were performed with religious affiliation as the independent variable and personality rating as the dependent variable. The first ANOVA was performed on the wave 1 personality ratings, the second ANOVA on the scores resulting from a factor analysis using PAF of wave 1 and wave 2 ratings (52.98% of the variance explained), the third from the PAF scores of waves 1 – 3 (43.04% of the variance explained), the fourth from the PAF scores from waves 1 – 4 (34.71% of the variance explained), the fifth from the PAF scores from waves 1 – 5 (33.45% of the variance explained), and the sixth from the PAF scores from waves 1 – 6 (30.99% of the variance explained). The descriptive statistics for each score can be seen in Table 4.

In the first three ANOVAs the assumption of homogeneity of variance was violated. To address this violation, Welch's ANOVA was used. Due to both unequal cell sizes and violation of homogeneity of variance, Games-Howell post hoc tests were used. For wave 1 scores the ANOVA was significant, $F(3, 216.94) = 8.19$, $p < .001$, $\eta^2 = .01$. Multiple comparisons showed that Jews had higher scores than Catholics ($d = .37$), Protestants ($d = .50$), and the nonreligious ($d = .57$). Catholics were also rated higher than Protestants ($d = .12$). The second ANOVA for waves 1 – 2 was significant, $F(3, 166.42) = 7.51$, $p < .001$, $\eta^2 = .01$. Post hoc tests showed that Catholics had higher scores than Protestants and the nonreligious, and Jews had higher scores than the nonreligious. The ANOVA for waves 1 – 3 was significant, $F(3, 141.42) = 8.61$, $p < .001$, $\eta^2 = .01$. Catholics and Jews scored higher than Protestants and the nonreligious. The ANOVA for waves 1 – 4 was significant, $F(3, 1385) = 3.18$, $p < .05$, $\eta^2 = .01$. No post hoc test was significant. The ANOVA for waves 1 – 5 was significant, $F(3, 929) = 2.66$, $p < .05$, $\eta^2 = .01$. No post hoc comparison was significant. The last ANOVA for waves 1 – 6 was not significant, $F(3, 485) = 2.57$, $p = .054$.

Table 4: Descriptive statistics for social effectiveness by religious affiliation

Social effectiveness rating	Protestant	Catholic	None	Jewish
Wave 1	$n = 2,364$	$n = 703$	$n = 212$	$n = 54$
	$M = -.03$	$M = .08$	$M = -.12$	$M = .40$
	$SD = .96$	$SD = .94$	$SD = 1.03$	$SD = .76$
Wave 1 – 2	$n = 1,881$	$n = 547$	$n = 161$	$n = 42$
	$M = -.03$	$M = .12$	$M = -.11$	$M = .25$
	$SD = .84$	$SD = .79$	$SD = .85$	$SD = .71$

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Social effectiveness rating	Protestant	Catholic	None	Jewish
Wave 1 – 3	<i>n</i> = 1,443 <i>M</i> = -.04 <i>SD</i> = .86	<i>n</i> = 429 <i>M</i> = .13 <i>SD</i> = .79	<i>n</i> = 126 <i>M</i> = -.16 <i>SD</i> = .90	<i>n</i> = 36 <i>M</i> = .28 <i>SD</i> = .62
Wave 1 – 4	<i>n</i> = 986 <i>M</i> = -.03 <i>SD</i> = .84	<i>n</i> = 293 <i>M</i> = .10 <i>SD</i> = .84	<i>n</i> = 82 <i>M</i> = -.15 <i>SD</i> = .91	<i>n</i> = 28 <i>M</i> = .22 <i>SD</i> = .61
Wave 1 – 5	<i>n</i> = 644 <i>M</i> = -.04 <i>SD</i> = .85	<i>n</i> = 207 <i>M</i> = .11 <i>SD</i> = .86	<i>n</i> = 62 <i>M</i> = -.13 <i>SD</i> = .95	<i>n</i> = 20 <i>M</i> = .26 <i>SD</i> = .67
Wave 1 – 6	<i>n</i> = 318 <i>M</i> = -.04 <i>SD</i> = .89	<i>n</i> = 119 <i>M</i> = .10 <i>SD</i> = .75	<i>n</i> = 42 <i>M</i> = -.23 <i>SD</i> = .94	<i>n</i> = 10 <i>M</i> = .41 <i>SD</i> = .69

As with the analyses of the Add Health data, the initial ANOVA was rerun first by controlling for religiosity and then by restricting the sample to White respondents only. An ANCOVA for wave 1 ratings controlling for religiosity was significant, $F(3, 3327) = 6.55$, $p < .001$, $\eta_p^2 = .01$. Pairwise comparisons showed that Jews, with an estimated marginal mean (EMM) of .37, had higher ratings than both Protestants (EMM = -.03) and the nonreligious (EMM = -.16). Catholics (EMM = .08) had higher ratings than the nonreligious. However, the assumption of homogeneity of variance was violated. To account for the violation if the p value is adjusted to $p < .01$ then the only group difference was between Jews and the nonreligious.

Next the ANOVA for wave 1 was rerun for Whites only. This is especially important as ACL oversampled Blacks. The ANOVA was significant, $F(3, 199.45) = 6.76$, $p < .001$, $\eta^2 = .01$. Post hoc tests revealed that the nonreligious scored lower than Jews and Catholics and that Protestants also scored lower than Catholics.

4 General discussion

There are interreligious differences on the GFP with Jews scoring high and the nonreligious scoring low (e.g., Dunkel, Reeve, et al., 2015). If the GFP is due to response bias, these results mean that the religious groups are different in one or another of these biases (e.g., impression formation, self-deception). Alternatively, if the GFP is a substantive personality characteristic, then differences in real-world behavior indicative of its nature should be observable. If the latter view is the more appropriate, if the GFP indicates a *good* personality or social effectiveness, then group differences in the ratings of these constructs by external observers are expected. This was the hypothesis of the current investigation: that Jews would have high personality and social effectiveness ratings and the nonreligious would have low personality and social effectiveness ratings.

However, the results were somewhat equivocal. On the one hand, mean differences between groups directionally aligned with expectations. The nonreligious tended to have the lowest ratings and Jews tended to have the highest. Additionally, in the tests with the highest power (i.e., largest cell size) the differences between groups were, for the most part, statistically significant. This is most clearly seen comparing Jews and the nonreligious. In contrast, some group differences were also eliminated when controlling for religiosity and when only White participants were included. Likewise, the mediation analyses in Study 1 showed partial mediation by the GFP suggesting other factors also play a role in the religious orientation-personality rating association.

In speculating about the reasons for the results of the nonreligious, it may be informative to view atheism as the expression of a cognitive and interpersonal style that may also include impaired social effectiveness (Caldwell-Harris, 2012). C. L. Caldwell-Harris (2012) proposed that fundamental characteristics of the non-believer are low sociality, low conformity, and high individualism. Conceivably, these attributes may

contribute to lower ratings of personality attractiveness and social effectiveness. In support of this possibility, it has been found that individuals with autism, which is defined in part by impaired social relations, are more likely than others to be agnostic or atheist (C. Caldwell-Harris et al. (2011); Norenzayan et al. (2012)). Additionally, experimental evidence shows that priming thoughts of God may heighten social awareness and desirability (Gervais and Norenzayan (2012)).

As for Jewish high social ability it may be useful to turn to reasons given for their high cognitive ability. Cochran et al. (2006) proposed that high Ashkenazi intelligence evolved out of a history of discrimination that pushed Jews into cognitively demanding jobs in management, finance, and commerce. Success in these professions was not just financial but also reproductive, leading to an increase in intelligence across time. This pattern has also been observed in other pre-industrial populations (Clark and Hamilton (2006)). Because success in these professions would also require social ability (van der Linden et al. (2023)), it is posited that a similar dynamic led to the evolution of high Jewish social effectiveness. This would be exceedingly difficult to research, limiting this possibility to conjecture.

Other limitations may be easier to address in future research. For example, a primary limitation of the studies is the low reliability of the ratings. For Study 1 this includes the use of a single item measure and a single rater for each rating. For Study 2 the results of the factor analysis showed that the social effectiveness scale had good inter-item reliability, but similar to Study 1 the ratings across waves showed low coherence. In future research multiple raters could be utilized to strengthen the reliability of the ratings. We are also unable to conjecture why Catholics score higher than Protestants in analyses of Americans' Changing Lives. Mean level differences favouring Catholics have inconsistently been found in previous studies on the GFP.

As with the GFP, the starkest and most reliable difference was found to be between Jews and the nonreligious. Interestingly, ethnic Jews have a high likelihood of identifying as nonreligious, atheist, or agnostic (Pew Research Center (2021)). Do atheist ethnic Jews possess the corresponding social skills of their co-ethnics, or are they more similar to other nonreligious individuals? It might be expected, for example, that if atheist Jews have enhanced social skills, they will assume leadership positions in atheist organizations. Alternatively, if nonreligious ethnic Jews have decreased social ability, then interesting questions of intragroup dynamics arise. For example, if individuals with decreased ability leave the group or "boil-off" (West Hunter, 2012), their departure may act to keep the overall ability of the group high. In short, future research into the personality differences between religious identified and non-identified ethnic Jews may help to further elucidate the mechanisms that may have led to their high average level of social ability.

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