

How the Non-Religious View the Personality of God in Relation to Themselves

Igor Mikloušić

Institute of Social Sciences Ivo Pilar
Trg Marka Marulića 19
10000, Zagreb, Croatia

e-mail: igor.miklousic@pilar.hr

Justin E. Lane

Center for Modeling Social Systems
Prospectus Solutions AS, Kristiansand
Sørlandets Kunnskapsark, Universitetsveien 19
4630 Kristiansand, Norway

e-mail: jelane@bu.edu

Abstract:

In this study we examined the applicability of personality measures to assessing God representations, and we explored how the overlap between personality judgments of self and God relate to strength of (dis)belief and closeness to God among atheists and agnostics. Using sample of 1,088 atheists/agnostics, we applied Goldberg's Big Five bipolar markers as a standardized measure of personality dimensions, along with measures of identity fusion with God, belief strength, and sociosexuality, as this trait has been shown to be relevant in predicting religiosity. Our study revealed that personality measures can be used for research on the personality of supernatural agents. We also found that personality self-assessments were related to the assessments of God personality. Agreeableness was positively related to the perception of emotional stability of God, while conscientiousness and surgency were negatively related to perceived intellect and surgency of god, respectively. Also, intellect of the participants was related negatively to perceptions of God's emotional stability and intellect. Perceived distance between the assessment of one's own personality and the personality of God predicted the strength of (dis)belief, thus opening new interpretations into possible sources of belief and disbelief. Finally, echoing previous studies, we found that conscientiousness of God had a negative effect on SOI-R score.

Keywords: Atheism, personality, fusion, sexuality, big-5, personality of god.

1. Introduction

As the number of people who report having no religious affiliation keeps growing in the West [68] research interest has been focusing more towards understanding atheist and agnostic populations [63], [64], [85]. Simultaneously, studies examining how people view God and other religious figures have also been gaining prominence in the past decades [80]. The studies focusing on representations of God in individuals offer a unique way of understanding the interaction between the traits of believers, their environment, the way doctrinal religious narratives are understood and how they affect their belief and life outcomes. So far this approach has been fruitful as the representations of God have been related to psycho-social functioning and wellbeing [39], [81]. However, this approach has been also wrought with a score of theoretical and methodological problems [80] and rarely applied to the understanding of the atheist population. The aim of this paper was therefore to examine how the difference between assessment of self and perceived God personality relates to the strength of (dis)belief and closeness to God while also examining the validity of applying personality measures to the study of the representation of God. Our study focuses on god representations of non-believers because, although it is a truism that they hold some representation of God, how they view God in relation to themselves is often overlooked. In this way, our study aims to fill this gap in the literature, while furthering our understanding of the attribution of personality to religious superhuman agents (or Gods).

2. The Representation of God

Research has shown that Gods, spirits, demons and other supernatural entities fundamentally are perceived and described as somewhat human, and are often attributed both human and superhuman traits [9]. This anthropomorphic property of many cultural and religious concepts, and the easiness in which we project human traits onto God, deities, or even various aspects of the natural world is considered by some to be the central tendency of our religious belief [40], [49], [83]. Gods are seen mostly through their psychological attributions, as intentional agents that feel, have memories, wishes and desires and interact with people [3], [5], [6], [9], [40], [49]. These supernatural agents are often conceptualized as a form of a mind that exists free of the constraints of the body, but still exhibits humanlike psychological traits that are not necessarily limited to theological claims such as infinite goodness, love, morality, ever-presence or immortality [83]. Interestingly, it has also been shown that the breadth of theological knowledge does not protect people from these anthropomorphic views [4], [87].

Since we view God in somewhat human terms, several researchers aimed to explore how God and other supernatural agents are conceptualized in the human mind, and what these traits that we attribute of God tell us about the believers themselves. The way to empirically approach this issue was however less straightforward. Sharp et al [80] identified 73 measures of representation of God, and out of those the most popular by far were the self-report ones. They identified three types of these measures, based on their focus. Relationally focused measures assess the perceived relationship between self and God, the attitudes and emotions people hold towards God, as well as their perceived closeness or attachment to God. Functionally focused measures, on the other hand, deal with roles God plays in peoples' lives, whether it's coping, support or just general presence in their day to day living. Finally, a number of measures that authors named God description measures resembled personality assessment measures in a way that they contained lists of either statements or adjectives participants could use to describe how they view God. Some of these were theoretical or contained a number of terms authors deemed appropriate or worth investigating while some used existing personality measures. In addition to studies that list adjectives or statements on which the responders then judge God [20], [38], [46], [89] some studies also used open ended questions asking respondents to generate words that describe God [52], or used both of the approaches [57]. Also, a distinction between doctrinal and experiential representations of God could be made [19], [80], [102] whereas the former relates to theological understanding of God (i.e. what I should

believe God is like) and the latter relates to personal experience or belief of what God is like (i.e. what I feel God is like). Finally, some studies extended the research to include the ratings on religious figures such as Jesus [66], other members of the Holy Trinity [81] or even Satan [7].

3. The Personality Assessments of God

A small number of researchers interested in the descriptive aspect of the representation of God turned to the Big five or the Five factor model (FFM) measures of personality as a tool for studying this aspect of religious belief [17], [70], [71]. Integrating the study of the representations of God with a well-studied psychological construct such as personality provides theoretical depth and enables the findings to be integrated into a larger framework of studies illuminating further the relationship between personality, emotions, motivations, behaviors and real-life outcomes such as well-being and life satisfaction [70]. It also paves the way for cross-cultural comparison of the results allowing the integration of the existing religious scholarship with a wider set of findings from other social sciences [70], [71].

The most widely used framework of understanding and assessing personality was the Big Five [33], [34] or the closely related Five Factor Model of personality (FFM) [18], [58] which has established itself as a way of efficiently assessing cross-culturally identifiable and persistent [21], [30], [33], [60], evolutionary relevant [14], [15], [23], [55], [56], [62] and various life outcome related individual differences that are also related to religious belief or disbelief [59], [74], [75], [85].

The studies that have used this approach are still few and far between, but they do demonstrate its potential. For example, Piedmont, Williams, and Ciarrocchi [71] used an extensive adjective list that included the FFM terms and created an historiographic personality profile of Jesus showing that Jesus was perceived as an agreeable individual with traits such as compassion, consideration and warmth, who was also high on Extraversion with highlighted qualities such as activism and courageousness. Further research extended those findings to creating personological profiles of Satan, who was believed to be low on the dimension of Emotional stability [7], as well as Joseph and Mary, alongside those of God and Jesus [17]. In the latter, Mary was perceived to be more introverted and less emotionally stable than Jesus, whilst God was perceived to be emotionally stable and highly agreeable. The above studies showed it is possible to apply personality related terms to create meaningful personality profiles of religious figures as well as demonstrating that people are not only capable of judging and holding coherent profiles of God but also various religious figures. These findings were expanded by the research of Sharp, Rentfrow and Gibson [81] who showed people hold both propositional (doctrinal and theologically inspired) and more experiential and emotional images of the members of the Holy Trinity. Their research, which used a brief measure of the Big Five personality traits (BFI-10) [72], showed personality traits were more discernible in God and Jesus than in the Holy Spirit and echoed previous research showing that God and Jesus were perceived as high on Agreeableness and Emotional Stability with the addition of Conscientiousness. Also, since self-report measures, regardless of how reliable they are, have some inherent flaws, limitations and biases [29], the study also measured salience of certain traits. Positive terms were more salient in the perception of Jesus and God than the Holy Spirit, while Holy Spirit proved to be understood more by supernatural terms with human-like attributes being more salient for Jesus.

4. The Atheist Representation of God

Research has shown that various interpersonal differences, such as age or gender [43], culture ([66]), attachment style [50], [51] and even psychological disorders [25] are related to one's representation of God. Not surprisingly, there also seems to exist a difference in the perception of God and other religious figures between believers and atheists. And although it might seem that assessing the representation of God might not be applicable for atheists, research indicates that they

are capable of holding a specific cognitive schema or identify a set of traits of God and other religious figures and that these concepts can be both salient and coherent [28], [29]. In some way it could be understood like holding a belief about the traits of any fictional character that you don't necessarily believe exists, such as characters from Star Wars, Lord of the Rings, or the characters from Game of Thrones. In a study by Bradley, Exline and Uzdavines [11] it was shown that out of 458 atheist or agnostic individuals, 85.8% replied they were able to form a coherent representation of a hypothetical God. Of those individuals who could draw a representation of God, the reaches provided three sources of the representation of God: image held earlier in life, religious teaching and their own personal ideas, all of which they held to be non-exclusive. Most of the participants reported conjuring the image of God from multiple sources. Majority (90.6%) drew this image from the image of God present in their culture and religious teachings, or from the image of God they endorsed earlier in life before becoming atheist (77.6%), with a smaller percentage reported having their own independent ideas of what God might be like if he existed (58.3%). Atheists and believers do however differ in the way they perceive God or other religious figures. For instance, Christian believers attribute more positive traits to God, whilst atheists, although capable of drawing a stereotypically positive image of God, hold a more negative personal concept of God [28] and perceive God to be crueler [11]. In terms of assessing the personality of religious figures, Rouse [73] found Christian groups to endorse the image of Jesus as a person high in Agreeableness and Conscientiousness, whilst atheists judged Jesus as having higher level of Neuroticism. Interestingly, in the same study there were significant differences even within believers and non-believers, with non-denominational Christians viewing Jesus as having higher level of Conscientiousness and Openness than Catholics, and agnostics perceiving Jesus to be higher in Agreeableness, Conscientiousness and Emotional stability than atheists.

5. Individual Differences and the Representation of God

Our group identities that religious affiliation is not the only influence in how people create representations of God. Our perception of God also seems to be related to our culture and religious tradition as well as internal sources such as personal self-image and our own personality [71]. For instance, some studies linked the image of God with self-evaluations such as the sense of self-worth or self-esteem and showed that higher self-evaluations on these traits correlated with a more loving forgiving accepting image of God [7], [8], [13], [27], [88]. In a study by Braam et. al. [10] similar results emerged as Agreeableness was related to perceiving God as more supportive, with Neuroticism being related to negative God image. These interpersonal traits even performed better in explaining the variance of the image of God than various socialization-related measures [13]. Some ways of interpreting these findings are that our representation of God is the result of our projections of our own traits, or that our personality serves as a filter through which we interpret the ambiguous stimuli in our environment – including God or another supernatural agent, who views us and treats the way we see ourselves or believe deserve to be treated [8], [13]. Further support for this egocentric view of God, came from a study by Epley et al. [24] who completed several survey and experimental studies on a diverse set of samples to demonstrate how people consistently judge God's stance on important social and ethical issues to be similar to their own. This bias was present when judging about God's beliefs but not when estimating beliefs of other people. Using neuroimaging studies, the authors have also shown that thinking about the beliefs of God resulted in higher activation of self-referential thinking areas than it was the case when estimating the beliefs of other people. However, the extent to which this effect persists among atheists remains understudied, and studies that have focused exclusively on the relation between the perception of self and God in atheists have been scarce. In one such study by Bradley, Exline and Uzdavines [11] agnostics and atheists, who were able to imagine a hypothetical image of God, were asked to describe this hypothetical God using a relational ten item measure that was prior validated in believers. Of all the participants' personality traits Agreeableness was most related to the image of God, with agreeable people judging God to be less cruel and more loving. Also, Openness to

experience was related to seeing God as more distant. Somewhat expectantly, a good predictor of current image of God was the history of feelings toward God throughout one's life. Also, being more engaged in some form of atheist activism and putting energy towards thinking about belief and disbelief was related to a more negative image of God, although admittedly authors also state that the causality of this relation can go both ways.

Studies using personality measures for both self and God, although limited, have found further proof for this similarity in assessment. Piedmont, Williams, and Ciarrocchi, [71] were the first ones to use FFM to assess personality of self and God, or in their case Jesus, and compare it to the personality of the believers. On a sample of 77 women and 38 men, from which they selected those that had a Christian background, they applied both a 300-item adjective measure (the Adjective Check List) and the NEO Five Factor Inventory by Costa and McCrae [18]. The Adjective Check List was used to describe Jesus on 33 different scales, but the items that were related to the FFM were also selected to create a personality assessment of Jesus. The personality assessment of participants was done with the NEO-FFI measure. The researchers found that self and Jesus personality assessments were related for all traits, except Agreeableness (possibly due to restricted variance of the latter when describing Jesus). Furthermore, 11% of variance in the assessment of the personality of Jesus could be attributed to participants own personality, and that the effect was mostly carried through the Openness and Extraversion dimensions. Furthermore, the perception of higher Conscientiousness of Jesus was related to the higher religiosity of the participants, while more educated participants were seeing Jesus as more emotionally stable. Francis and Astley [26] have shown significant correlations between ratings of self and Jesus on Eysenck's personality dimensions of Psychoticism and Neuroticism. The study was conducted on a sample of non-religious high schoolers, religious studies students and regular church goers, and significant correlations were found even for the Extraversion dimension but only for the believers. Nevertheless, these findings of similarity in self- and God-personality even in atheist sample led them to infer that this effect is more likely to be the product of projection than socialization or culture. These results were not replicated in a study by Strawn and Alexander [90], which measured personality structure on judgements of both self and Jesus using the FFM. Using a sample of 241 participants (153 undergrad psychology students with 130 self-reporting as Christian and 23 as non-Christian, 23 protestant pastors, and 55 Protestant laypeople) they have shown positive correlations between self and Jesus, but only for the Christian subsample. Overlap was found for the dimensions of Extraversion (Warmth, Gregariousness and Positive Emotions subscales), Agreeableness (Straightforwardness and Tender-Mindedness subscales) and Conscientiousness (Competence and Dutifulness subscales) at the whole sample level, with Openness proving significant for the Christian student and Pastor subsamples, and Neuroticism for the laypeople subsample. For the non-Christian subsample, no self and Jesus personality correlations were found, and that was put forth by the authors as one of the most significant findings of the study. The cause of this self/Jesus overlap authors see in ether people projecting their own perceptions of the personality of Jesus or because of the devoted population is trying to shape their behavior to be more in line of how they view God or Jesus to be. The findings from all of the above studies should however be considered with caution as the samples were extremely small, and the causality mechanisms were only implied.

A study by Oisihi et al. [66] however provided more detailed look on the relation between the overlap of personality of self and God. A 44 item "Big Five Inventory" [44] was used to assess personality of participants (83 students from Korea and 200 students from the U.S.) and the personality of Jesus. Since this scale consists of statements rather than just adjectives the researchers had to rephrase items in order for them to be applicable to Jesus (i.e. I tend to see Jesus as someone who was talkative). The results showed that Americans viewed Jesus to be happier, and higher on Agreeableness, Conscientiousness, Extraversion and Openness to experience than Koreans. Incidentally, those are exactly the traits on which their self-ratings were higher than those of Koreans. The authors assumed that it was the personality of God, or in their case Jesus, that was in part responsible for the differences in self ratings found between those two samples, but reverse moderation analysis showed how the opposite can be true also. National differences in perception of

Jesus were predicted in part by national differences in perceptions of self on the FFM personality dimensions, adding further evidence towards the hypothesis that we project our own traits when judging the image of God.

Perhaps the most detailed exploration into the nature of the relationship between the perception of self and God was conducted by Hodges et al. [42] who used multiple methods of measuring self-God overlap, from counting the number of positive and negative traits assigned to both self and God to using measures that were developed to assess interpersonal closeness such as the “Inclusion of Other in the Self” scale [2]. They also compared these results with the religiousness of the individuals. In the first study the authors compared 16 atheists to 23 Christians on the way they described themselves and God. Using a 73 item measure consisting of both positive and negative traits the results have shown that, although there is some overlap in both believers and non-believers, believers tend both to report of sharing more traits with God, but also almost all the positive traits they recognized in themselves they also assigned to God. Interestingly this overlap was shown to be greater for God than for one’s mother, for which there were found no differences between the believers and non-believers. The second study used the aforementioned adjective list, the Awareness of God subscale of the Spiritual Assessment Inventory [41], and a pictorial measure of inclusion of self in others (similar to the pictorial fusion measure [95], which was chosen because it measures relation to God similar to the way interpersonal closeness is measured in romantic and other relationships. This measure has been appropriated to measure fusion, which is a psychological state where there is a porous boundary between oneself and their social group [48] or other belief that represents the group [53], [54], [84]. Fusion has recently been shown to be related to many aspects of religious devotion including self-sacrifice [91], [92] ritual and cooperation [100] and has been related to extremism and fundamentalism [54], [84], [99], [61], [82]. As predicted, Hodges et al. found that both the overlap of traits and the result in the inclusion of self in God scale was related to the awareness of God. Fundamentalism was related to the Inclusion of self in God scale, replicating results on the identity fusion and religious and other forms of fundamentalism [92], [94]. The authors compared these results to the findings in studies on interpersonal, romantic relationships where romantic devotion is related to higher inclusion of self in that person.

6. The Current Study

All of the above scholarship on the nature of religiosity and its relationship with personality, although relatively scarce in comparison to some other approaches in the evolutionary and cognitive science of religion, suggests that this approach has much to offer our understanding of how we envision, form and maintain our relationship with supernatural agents [42], especially through the concept of self-God overlap as the this relationship has been demonstrated to be important in understanding the quality of other interpersonal relations [79], [101].

The studies so far, although providing valuable insights, are for the most part plagued by small samples and a lack of consistency in both terminology and the measures used for both self and God assessment. Although some of the authors [12], [70], [71] recognized the perks of using the existing personality measures in this manner, their use has been inconsistent and limited to the FFM leaving out dimensions such as morality [37], [47] and sexuality [67], [77], [86] that have shown to be related to religiosity. Most of these studies have also been correlational and have not been able to answer whether self/God overlap is the cause or the result of religious devotion. Furthermore, this metric of personality overlap has not been compared to other factors important to the evolutionary and cognitive science of religion, particularly in regard to outcomes such as general religiosity, identity fusion, and wellbeing. And finally, the non-religious have for the most part been completely left out of these studies, and with almost nonexistent discrimination between different types of non-religiosity.

In order to begin to fill this gap in the literature, the aim of the present research was to examine the perception of the personality of God on a large atheist sample and to see if a coherent five factor structure would emerge even within atheist judgements of Gods personality.

Furthermore, the aim was to explore perception of the personality of God to their own personality and to examine if this relationship could predict the strength of their closeness or detachment from God. Furthermore, we aimed at expanding the scope of personality estimates to include sociosexuality, a dispositional orientation towards sexual diversity and uncommitted, short term sexual relationships. Sociosexuality can best be viewed as a separate disposition or a trait, but it has shown to be consistently and cross-culturally related to the Big five personality dimensions with Extraversion and low Agreeableness and Conscientiousness being related to various aspects of short term mating orientation [78].

The importance of sexual behavior or attitudes in understanding religiosity has been extensively documented. Weeden, Cohen and Kenrick [97] have showed, on multiple samples, how church attendance was better predicted by items related to sexuality, marriage and sociosexuality of the individuals, as well as various reproductive morals, then demographic or other personality measures. The study has shown how more restricted sociosexuality with fewer partners and commitment towards long term relationships was more prominent in the church goers. Furthermore, moral attitudes regarding sexual behavior were shown to be better predictors of religiosity than did cooperative morals [98]. These consistent relationship between restricted sexual behavior and religiousness indicates that possible evolutionary causes of religion, which by discouraging sexual permissively and behaviors such as mate poaching and short-term sexual encounters, could have deleterious consequences on health and in-group cooperation through a fitness enhancing effect [77], [97].

Since sexual behaviors and attitudes have also been shown to mediate the relationship between the Big Five traits and religiosity [97] we believed it was crucial to expand the studies on the representation of God to include this aspect of human personality also.

As such, our research set out to test the following key questions: 1) are measures of the FFM used in personality research valid for the study of God's personality (i.e., does the same five-factor structure emerge); 2) do positive correlations exist between one's self ratings of the different factors in the FFM and the perceived ratings of God on those same measures; 3) is there a positive relationship between fusion with God and the distance between one's own personality and their attributed personality of God with more overlap being related to higher fusion; and 4) is there a positive relationship between fusion with God and sociosexuality where people higher on sociosexuality will imagine God to be more extroverted, less conscientious and agreeable.

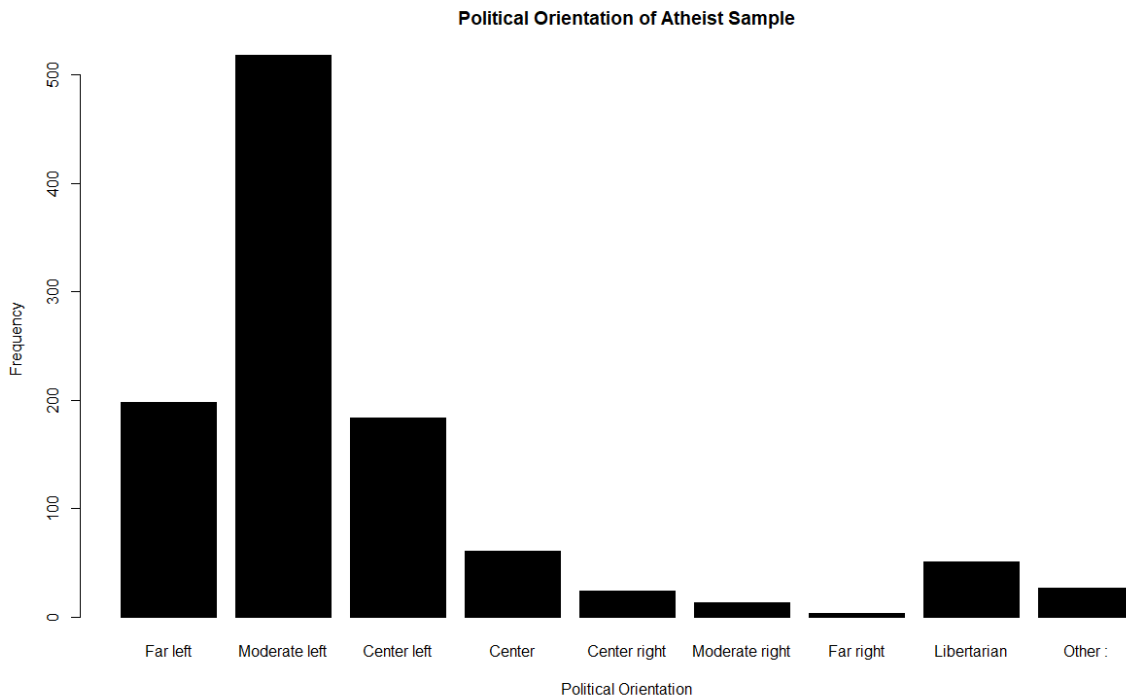
7. Method

Participants

The study was conducted on a large online sample. Participants were not compensated for participation. Initially, responses were collected from $n = 1225$ individuals. However, after removing those who currently identify with a religious tradition, we were left with $n = 1080$ responses. Participants' ages ranged from 18-63 with a mean age of 26.11. The sample had 429 males, 640 females, and 11 "other". The sample included both Atheists ($n = 953$) and Agnostics ($n = 127$). Participants came from a wide range of religious backgrounds prior to converting to nonbelief: Catholic ($n = 302$); Protestant ($n = 331$); Evangelical ($n = 89$); Jewish ($n = 17$); Muslim ($n = 3$); Buddhist ($n = 1$); other ($n = 146$). Of the currently identified atheists and agnostics, only 78 were raised atheist and 133 were raised agnostic. Participants were generally residents of Western countries, particularly the United States ($n = 777$), Canada ($n = 80$), United Kingdom ($n = 47$), Australia ($n = 39$), Croatia ($n = 32$), New Zealand ($n = 11$), countries were not included if they did not have more than ten residents in the sample.

Lastly, while the vast majority of atheists in our sample never attended religious services ($n = 943$), a small number were attending services once a month or less ($n = 124$), while 4 reported weekly attendance and 6 reported going to church multiple times a week. Similarly, we found that in our sample, frequency of prayer was generally low, 1035 claimed to never pray, while 36

claimed they pray once a month or less, 6 claimed to pray 2-3 times a month, and 2 claimed to pray 2-3 times a week or more. We also found that the atheist sample had a clear bias toward the “left wing” of the political spectrum, with frequencies decreasing as the categories moved further right. There were, however, comparable amounts of participants identifying as “libertarian” or “other” as there were centrists in the sample; however, our results suggest that atheists and agnostics tend to skew overwhelmingly to the left of the political spectrum, in line with previous studies [69] (Pew Research Center, 2015).



8. Instruments

Below, we review the key measures in our study. In addition to these measures we also collected data on standard demographics (including location and education) as well as frequency of religious behaviors (such as religious attendance and prayer).

Big Five Personality Traits

Big five personality traits of participants, and God, were measured using Goldberg’s [31] 50 bipolar personality markers. This list of personality descriptors was developed to measure Big five personality dimensions – Surgency (Extraversion), Agreeableness, Conscientiousness, Emotional stability and Intellect, with ten items measuring each dimension. Participants had to first rate themselves and then God using 50 adjective pairs, both describing opposite pole of a single trait on a nine-item scale (i.e. from very timid to very bold). Although unipolar markers have shown to provide a more unambiguous representation of the Big five, since the target of the rating in this study was somewhat different than usual in personality assessments, we opted for using a bipolar measure which explicitly states both poles of a certain trait. Finally, a measure consisting of adjectives rather than statements, found in the now more prevalent measures such as the IPIP [33] or NEO-PI [18], was used since adjectives tend to be more applicable to both God and people, and we did not have to intervene into the content of the scales. For instance, some of the IPIP items which might be less applicable to God would be “I am the life of the party” targeting Extroversion, or “I leave a mess in my room” targeting Conscientiousness.

In self ratings the participants were instructed to use the list of common human traits to describe themselves as accurately as possible. They were instructed to describe themselves as they see themselves at the present time, not as they would wish to be in the future and as compared with any other persons they know of the same sex and roughly same age. This was adapted for the assessment of the personality of God in a way such that the participants were asked to use the same list of common human traits to describe God as accurately as possible. They were also instructed to describe God as they see God at the present time, or if they are a non-believer to describe how they believe God is perceived or depicted in sermons or scripture and as compared to what an average person would be.

SOI-R

Individual differences in Sociosexuality, a trait-like preference for sexual diversity and uncommitted sexual relations, was measured using the Revised Sociosexual Orientation Inventory (SOI-R) [67]. The inventory assesses three domains of Sociosexuality with three items measuring past behavioral experiences (i.e. With how many different partners have you had sex in the past 12 months), three items measuring attitudes toward uncommitted sex (i.e. „Sex without love is ok“), and three items measuring sociosexual desire (i.e. How often do you have fantasies about having sex with someone with whom you do not have a committed romantic relationship?). Sociosexuality score can be calculated for each subscale or as a global sociosexuality metric with higher score being indicative of an unrestricted sociosexual outlook and increased interest in short term mating opportunities.

Fusion

We employed the pictorial measure of fusion to measure fusion with God, fusion with family, friends, other members of the same nationality, others who believe in the same God (co-religionists), and fusion with the participant's homeland. The pictorial measure of fusion [35] depicts two overlapping circles (one representing the self and the other representing the target group) and is based on earlier measures on the phenomena of “inclusion of self in other” [2].

Belief Strength

To measure belief strength, we used a self-report measure that prompted the participant to answer the question “To what extent do you believe that God or something divine exists?” and asked them to respond on a scale anchored at 1 (not at all) and 5 (to a very great extent).

9. Results

First, we wanted to explore if the five-factor model, as measured through Goldberg's 50 bipolar markers would reveal a 5-factor personality structure for the attributed personality of God. To test this, we used the Lavaan SEM library for R. We used a maximum likelihood estimator and found that the model achieved an acceptable fit ($ML = 4257.53$; $DF = 1165$; $\chi^2 p < .01$; $CFI = 0.84$; $TLI = .83$; $RMSEA = .08$; $95\% CI \text{ for } RMSEA = [.078 - .083]$). All factors and covariates achieved significance at a level of $p < .01$.¹ This leads us to conclude that the five-factor model is sufficiently valid to map the perceived personality of god.

Second, we wanted to test the hypothesis that there would be negative correlations between participants' self personality ratings and God's personality ratings. We found several significant correlations, including an unexpected positive correlation between self-Agreeableness and God-Emotional Stability, reported in the table on the next page.

Third, we wanted to investigate if there is a relationship between fusion and the distance between one's own perceived personality and that of God's. To investigate this effect, we ran a

linear regression where one's fusion with God (as measured with the pictorial fusion scale) was the DV and the average distance between one's self and God ratings for each of the five factors were entered as IVs. Doing so revealed that the only significant variable was the distance between one's self and God on the extraversion factor ($\beta = .04$, $SE = .02$, $t = 2.02$, $p = .04$). We also found that there was a significant relationship between a non-believer's fusion with people who share their religious beliefs (or non-religious beliefs in this case), as measured with the pictorial fusion scale, and their average personality distance with God ($\beta = .06$, $SE = .02$, $t = 2.68$, $p < .01$). Running a regression with each of the personality factors separated revealed that the only significant relationship is actually between fusion with co-religionists and the distance between one's own and God's perceived extraversion ($\beta = .06$, $SE = .02$, $t = 2.40$, $p = .02$). Suggesting that as the perceived extraversion of god increases, the perceived distance between one's own personality and god's also increases.

In order to further understand the relationship between God beliefs and personality similarities, we also ran a regression where we entered belief strength (assessed by an item asking participants "To what extent do you believe that God or something divine exists") as our DV and average personality distance between self and god as the IV. We found that there is a significant negative relationship between belief strength and distance between self and god personality ($\beta = -.05$, $SE = .01$, $t = -4.88$, $p < .01$), suggesting that greater belief strength is associated with a greater overlap between how one views themselves and how they view god. To investigate this further, we used the Lavaan package in R to create a mediation model whereby the relationship between self-god personality distance and fusion to god was mediated by belief strength. Overall, we found that there are significant paths between the variables, but no significant direct effect between self-God distance and fusion.

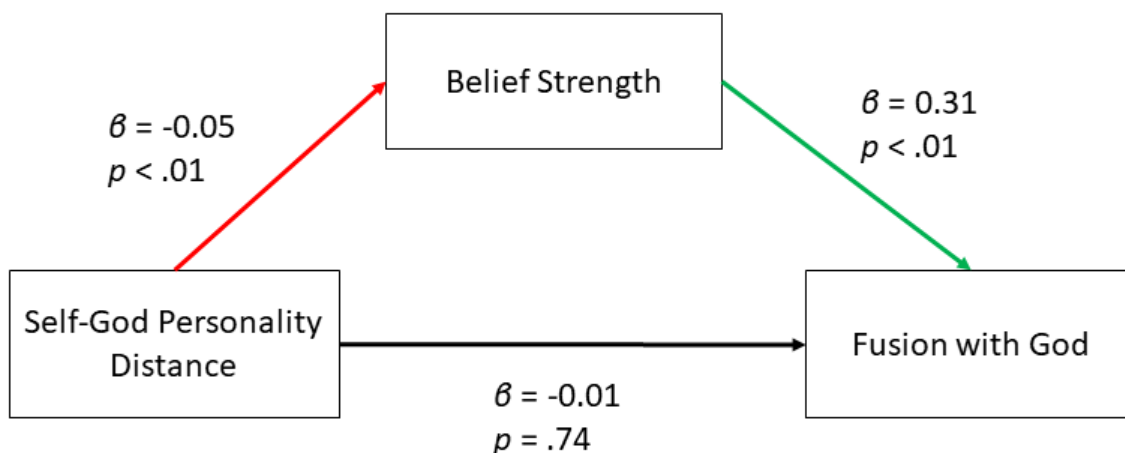


Figure 1: SEM output testing the exploratory hypothesis that the relationship between self-god overlap. Red lines represent significant negative relationships, green lines represent significant positive relationships, and black lines represent insignificant relationships

Self-Emotional Stability					
Self-Surgency					
Self-Intellect					
God-Agreeableness					
God-Conscientiousness					

Correlation table for self and god personality ratings. * p<.05
** p<.01

Lastly, we used the data to investigate if people who are higher in sociosexuality (SOI-R) will imagine God to be more extroverted, open to experience, and less conscientious, while they would view themselves as more extroverted. We ran correlations between the SOI-R score (as well as the subscales of SOI-R behavior, SOI-R desire, and SOI-R attitude), as well as gender and age. The correlations are presented in the table below:

	SOI-R Total	SOI-R Behavior	SOI-R Desire	SOI-R Attitude	God Emotional Stability	God Extraversion	God Intelligence	God Conscientiousness	God Agreeableness	Age	Gender
SOI-R Total	1										
SOI-R Behavior	.78**	1									
SOI-R Desire	.80**	.27**	1								
SOI-R Attitude	.44**	.27**	.21**	1							
God Emotional Stability	-0.02	-0.02	<.01	-0.03	1						
God Extraversion	-0.04	-0.05	-0.04	0.05	0.47**	1					
God Intelligence	-0.04	-0.05	-0.03	-0.01	0.73**	0.55**	1				
God Conscientiousness	-0.06	-0.04	-0.06	-0.01	0.81**	0.56**	0.81**	1			
God Agreeableness	-0.04	-0.01	-0.04	-0.05	0.82**	0.54**	0.73**	0.86**	1		
Age	0.03	.14**	-0.06	-.09*	0.05	0.03	0.03	0.09*	0.08	1	
Gender	-.32**	-0.07	-.45**	-0.04	0.1*	0.12**	0.13**	0.1**	0.1*	-.11**	1

Correlation table for SOI-R scores, age, and gender. * $p < .05$ ** $p < .01$

We then used linear regression to test that the variance in SOI-R scores could be captured in part by personality, controlling for age, and gender. We found that the perceived conscientiousness of God had a negative effect on SOIR scores. Gender also had a significant effect. Country of origin was not believed to be an important factor in this study, as we assume that these variables are not as affected by cultural information as they would be by cross-cultural cognitive structures. When adding country to the analysis, it was not found to be significant, nor were there significant differences on SOI-R scores by country ($F_{(38,625)} = 0.66, p = .94$).

Variable	B	SE	T	P
God Emotional Stability	.04	.04	0.99	.32
God Extraversion	.01	.03	0.38	.71
God Intelligence	.06	.04	1.62	.11
God Conscientiousness	-.11	.05	-2.47	.01
God Agreeableness	.01	.04	0.15	.88
Age	.001	.003	0.50	.61
Gender	-.64	.09	-7.54	<.01

We found that self perceptions of greater extraversion and intelligence had a positive effect on SOI-R, and conscientiousness had a negative relationship. Gender also had a significant effect.

Variable	B	SE	T	P
Self Emotional Stability	-.05	.04	-1.55	.12
Self Extraversion	.15	.04	4.16	<.01
Self Intelligence	.11	.05	1.99	.05
Self Conscientiousness	-.15	.05	-3.23	<.01
Self Agreeableness	.03	.05	.57	.57
Age	.001	.003	.20	.84
Gender	-.68	.08	-8.47	<.01

10. Discussion

Although several studies used the Big five or the Five factor model (FFM) to assess the perceived personality of Jesus [26], [71], [90], God [17] or various other religious figures and concepts [81] of both believers and non-believers [12], [73] none of the researchers so far have examined that the measure conforms to the predicted Five factor model. Although we can presume that the measures would be applicable even to the concept of God, as it is the case when using a measure in a new language, in a new culture or on a new and previous unstudied demographic the presumption of the applicability of the scale should be tested before interpreting its relation between to other scales. Our study has thus shown, at least for the Goldberg's 50 bipolar markers [31], the Five factor model achieved acceptable fit and can be used for future research studying the perceived personality of deities and supernatural agents.

Secondly, we wanted to expand on the literature studying the overlap between the perception of self and God. Since personality similarity has been shown to be an important factor affecting relationship quality [79], [101] we wanted to examine how is God perceived within a community that hasn't established a personal relation with God or formed a religious affiliation.

The relationships we found are small but have generally replicated previous findings that had previously mostly investigated the phenomena among religious believers; for example, of the overlap in Surgency or Extraversion, as found by Strawn and Alexander [90]. Overall, we found that participants Agreeableness, Conscientiousness, Surgency and Intellect was related to perceived Emotional stability, Intellect, Surgency. In our sample of non-believers personal Intellect was negatively related to God's perceived Intellect and God's Emotional stability. Although the Intellect factor from the Big Five model is somewhat different than the Openness to experience factor measured within the Five Factor Model [76], [96] they are comparable and the research on non-believers [12] has shown that Openness was related to seeing God as more distant, whilst Rouse [73] showed atheists depict Jesus as being lower on Emotional stability than believers did. This suggests that the more people deemed themselves to be creative, imaginative, reflective and analytical the less they tend to perceive God to be like themselves and tend to judge God to be more emotionally unstable and characterized as envious, emotional, and moody. This finding can be indicative of the link between analytical thinking style and disbelief but also showing how the atheist who see themselves as more intelligent and cultured focus on traits that have been given to an "Old Testament" type God by the "new atheists". Similarly, conscientiousness of the participants was negatively related to the perceived Intellect of God, which is particularly interesting since Conscientiousness is one of the personality traits regularly related to religiosity [74]. Perhaps, among many "atheists" or "free thinkers" who value intellect highly, beliefs about God are in some way dissonant. Further research should therefore incorporate measures that dig deeper into intellectual aspects of religious and atheist beliefs, in particular, future research could investigate the extent to which personality variables interact with one's religiosity and knowledge and openness toward science.

More importantly we wanted to explore to what extent this perceived distance between self-personality and God's personality is related to fusion with the idea of God. Although Hodges et al. [42] showed how both self/God trait overlap and the inclusion of self in God predict various aspects of religiosity, the relationship between the two constructs hasn't been studied. Our data suggests that self-God personality discrepancies are related to belief strength which in turn is related to fusion with God showing a possible pathway of how imagining God to be more or less similar to oneself reflects how integrated in a belief system we become. Surprisingly, the effect, although small, has proven to be robust enough to manifest itself even in our atheist sample. However, the exact mechanism underlying this relationship is still underexplored. It is possible that people see themselves as distant from the image of God (acquired through culture) can't relate to God, and therefore reject religion, or that people that have the same traits as the image of God promoted in the culture find him easily relatable and become religious more easily. Otherwise, it is possible that some people are inherently religious and are motivated to a) change their self-image to be more like God or b) imagine God to be more like them and project their traits to God, as proposed nearly two decades ago by Francis and Astley [26].

We also aimed to, for the first time that we are aware of, explore the relationship between sociosexuality and the perceived personality of God. As significant amount of religious morals revolves around reproductive behavior this trait seems to have been unjustly left out. We found that in our atheist sample the perceived Conscientiousness of God had a negative effect on SOI-R score, reflecting the findings in Self rating and indicating into the importance of including also these measures when expanding on the studies of the personality of God and self/God personality overlap. This further adds weight to the argument that people project their own personality and values to the image of God, even when they are not believers, as Conscientiousness is consistently related to lower Sociosexuality score, as is sex, with females being less open to short term mating behaviors as reflected through their lack of openness to sexual relationships without commitments.

Future research should aim to replicate these results with larger samples, drawn from a wider range of societies. Also, although adjective lists and validated personality measures are useful for capturing predetermined dimensions of God, they limit the study of the perception of God in numerous ways. Without having a theoretical outline or an empirical framework from which to

choose and with which to organize the terms, the study of the concept of God is likely to remain marginalized from the larger body of psychology and in a state of disorganization, which can, in turn, prevent the findings from being compared and better understood. In many ways it resembles the state of personality research before the emergence of the Big Five model of personality. Following the lexical tradition [1], [16], [45], [65] which provided both a theoretical rationale and methodological guidelines for the selection of the traits it enabled creation of valid and easily applicable measures, cross-cultural replications of the initial emic studies and subsequent comparison of the resulting factor structures [22], [30], [32]. The adjective lists that yielded this five factor structure of personality were only later replaced by universally applicable, easily administered questionnaires which then further propelled the field [18], [32], [33]. By enabling researchers to easily implement these measures in their research, compare their findings and accumulate knowledge on the impact of personality on real life outcomes in a relatively short period of time it brought personality psychology back into focus.

We believe the same methodology can and should be applied to unravel emic personality of God structure across religions and cultures and develop measures that can assess the personality of God universally.

Also, the question on the source of this self/God overlap, or the causal process of whether self-perceptions shape the perception of God, and or vice versa, remains unanswered. Are people that view God as more similar to them more likely to form a strong bond with God or does a strong bond with God shape our perceptions of God to be more similar to ourselves? Do religious people model their behavior and traits to become more similar to the image of God drawn from the scripture or does our perception of self-God overlap on important personality traits lead us to be more open to believing in God and be more intimately involved, just as it is the case in romantic relationships or friendships. In order to answer this a more nuanced statistical models as well as experimental work needs to be implemented

Finally, measures of strength of identification to their religious affiliation (i.e., Atheist, Agnostic, Protestant, Buddhist, etc.) should also be employed to better understand the nuances of religious and non-religious identities insofar as they effect personality variables of themselves or their image of God. Nevertheless, we believe that the measures employed and results reported here can serve as an interesting point for future work in understanding the relationship between personality psychology and religiosity.

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Notes

1. Additional information, analyses, data, and code are found in the electronic appendix.