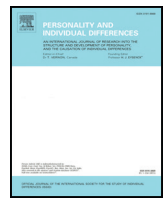




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## No empathy for people nor for God: The relationship between the Dark Triad, religiosity and empathy

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### ABSTRACT

Religiosity has been linked to low levels of antisocial personality traits. In the present study ( $N = 661$ ), we examined the relationship between various aspects of religious beliefs (general religiosity, intrinsic and extrinsic religious orientation), empathy, and the Dark Triad. We found that both empathy and general religiosity were negatively associated with psychopathy and Machiavellianism, and that religious beliefs were positively associated with empathy. Further analyses revealed that empathy partially mediated the inverse relation between dark traits and religious beliefs. These results were discussed in the context of recently emerging concepts suggesting that empathic skills and mentalization are crucial factors for religion. The capability to attribute mind to another being (human or supernatural) is argued to be an essential condition for developing religious beliefs as people usually think of deities as intentional agents with their own mental states. Additionally, the results indicated that psychopathy and Machiavellianism were negatively associated with intrinsic orientation, whereas grandiose and vulnerable narcissism were positively associated with extrinsic orientation.

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### 1. Introduction

Religiosity has been linked to various positive outcomes in psychological functioning including decreased aggression (Huesmann, Dubow, & Boxer, 2011), better health (Maltby et al., 2010), and greater subjective well-being (Ellison, 1991). Likewise, research indicates a positive correlation between religious beliefs and adaptive personality structure, such as higher agreeableness, conscientiousness, and lower psychoticism (e.g. Saroglou, 2002). In line with these results, there are findings concerning the less favorable personality traits, especially negative correlations between some aspects of religiosity and antisocial characteristics, such as the Dark Triad. The latter system has been introduced by Paulhus and Williams (2002) to describe three sub-clinical and non-pathological personality traits: narcissism, psychopathy, and Machiavellianism, which represent socially undesirable characteristics of grandiosity, callousness, and tendency to manipulate other people. These traits are generally inversely related to various aspects of religious beliefs (Aghababaei, Mohammadtabar, & Saffarinia, 2014; Kämmerle, Unterrainer, Dahmen-Wassenberg, Fink, & Kapfhammer, 2014).

#### 1.1. Religiosity, the Dark Triad and empathy

Although previous studies have shed some light on a possible link between the Dark Triad traits and religiosity, none of them has

attempted to search for possible mechanisms underlying the observed association. In the current study, we looked for factors that may potentially explain the inverse relationship. Recent data suggest that the Dark Triad and religious beliefs may be related to the same psychological phenomena. It is widely suggested that deficits in empathy or mentalizing abilities (to perceive and attribute mind to other beings) are core aspects of dark personality traits (Jonason & Krause, 2013; Jonason & Kroll, 2015). Moreover, high levels of such skills seem to be crucial for religious beliefs (Gervais, 2013; Norenzayan, Gervais, & Trzesniewski, 2012). Specifically, the capability to attribute mind to another being (human or supernatural) is argued to be an essential condition for developing religious beliefs as people usually think of deities as intentional agents with their own mental states (Gervais, 2013). This concept is supported by empirical evidence showing that religiosity correlates positively with empathy and mentalizing ability (Gervais, 2013; Willard & Norenzayan, 2013). Further, autistic individuals are less likely to believe in a personal God because of their poorer mentalizing skills (Norenzayan et al., 2012). In light of these findings, we decided to examine whether differences in empathy might be responsible for the negative relation between the Dark Triad and religious beliefs.

#### 1.2. The Dark Triad and specific aspects of religiosity

Even though general religious beliefs demonstrate positive correlates with socially desirable traits and negative correlates with antisocial personality, the results may require a more nuanced interpretation when one considers various aspects of religious experience. An important

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distinction has been made between intrinsic and extrinsic religious orientation (RO) by Allport and Ross (1967). Intrinsically religious individuals treat religion as an end in itself, whereas those extrinsically motivated use their religious beliefs as means to achieve other goals. Both religious orientations can be seen as motivational constructs; however, they represent different role which religious beliefs occupy in one's life. Within intrinsic RO religion is regarded as a 'master motive' in the individual's hierarchy, whereas extrinsic RO assumes more peripheral role of religion, important only when it can bring some benefits to a believer (Allport & Ross, 1967). Intrinsic RO is usually strongly positively related to other measures of religious commitment (e.g. general beliefs, religious practice and participation), while extrinsic RO in the same context shows modest positive and sometimes even negative associations (Maltby, Lewis, & Day, 1999; Paek, 2006). Similarly, these two attitudes are associated with different psychological outcomes. Intrinsic RO demonstrates positive, desirable correlates, whereas extrinsic RO is, in general, connected to personal difficulties and distress (Wiebe & Fleck, 1980). The one study that took into consideration the Dark Triad and both religious orientations revealed a negative link between intrinsicness and the dark traits (Aghababaei et al., 2014). In the case of extrinsic attitude, though, the data are rather equivocal. For instance, Machiavellianism showed a negative association with the extrinsic – personal RO sub-dimension (e.g. 'What religion offers me most is comfort in times of trouble and sorrow'), but was positively connected to the extrinsic – social RO subscale (e.g. 'I go to the mosque or religious community mainly because I enjoy seeing people I know there'; Aghababaei et al., 2014). Higher psychopathy was also related to a lower extrinsic – personal tendency, but was not connected to the social extrinsicness (Aghababaei et al., 2014).

Moreover, there is certain evidence that religious/spiritual well-being (RSWB), defined as 'the ability to experience and integrate meaning and purpose in existence through a connectedness with self, others or a power greater than oneself' (Unterrainer, Ladenhauf, Wallner-Liebmann, & Fink, 2011; p. 14) correlates negatively with psychopathy and Machiavellianism (Kämmerle et al., 2014). Narcissism demonstrates an insignificant yet positive association with RSWB. This result may stem from narcissistic tendency to seek self-enhancement (Kämmerle et al., 2014). However, it is also possible that a narcissistic inclination may vary more strongly among believers as some researchers have discovered that only intrinsic religiosity relates inversely to narcissism (Watson, Jones, & Morris, 2004). Altogether, these results indicate that the relation between socially aversive personality traits and religious beliefs may be complicated and may require further exploration.

### 1.3. The current study

We examined the relationship between various aspects of religious beliefs (general religiosity, intrinsic and extrinsic RO), empathy and the Dark Triad. In the case of the latter, we decided to include two types of narcissism – grandiose and vulnerable – as many researchers emphasize that although these constructs share some basic phenomena (sense of entitlement, disregard of others), they also differ in many other aspects (Miller et al., 2011). Grandiose narcissism is characterized by an inflated positive self-image and high self-esteem, whereas vulnerable narcissism is characterized by high hypersensitivity, vulnerability, and low self-esteem (Miller et al., 2011). It would be interesting to see how these two forms of narcissism relate to religion. Given all the research cited above, one can hypothesize that a general level of religious beliefs as well as intrinsic RO should be negatively correlated with psychopathy, Machiavellianism and narcissism. Furthermore, it might be expected that greater empathy would be linked to lower levels of the Dark Triad and greater declared religious beliefs. Possibly, empathy may also mediate the relationship between religious beliefs and a less favorable personality structure.

## 2. Method

### 2.1. Participants

The online study was completed by 661 volunteer participants (530 female, 131 male) recruited via publicly accessible social networking websites. They were native Polish and their mean age was 22.05 ( $SD = 3.07$ , range 18–52). A total of 432 individuals (65.4%) declared themselves as affiliated with certain religions, as opposed to 229 who were not so affiliated (34.6%). The structure of the affiliated group with regard to denomination was as follows: Roman Catholics (86.8%); Protestants (3%); other Christian believers (4.9%); Buddhists (4.4%); Others (0.9%). Only participants who determined their religious membership were asked to complete an additional measure of religiosity in accordance with the Religious Orientation Scale, which asks participants about their experiences related to a specific denomination (e.g. attending church, praying).

### 2.2. Measures<sup>1</sup>

#### 2.2.1. General religiosity

To measure the level of declared religious beliefs, we used a Polish version of the questionnaire compiled by Willard and Norenzayan (2013) that consisted of 3 items ('I believe in God'; 'I believe in a divine being who is involved in my life'; 'There is no god or higher power in the universe') with an 8-point Likert response scale (from 1 – 'Completely disagree' to 8 – 'Completely agree'). The measure is intended to capture general attitude towards religion regardless of religious affiliation. It presents a high level of overall internal consistency, and has proven good construct validity (Willard & Norenzayan, 2013).

#### 2.2.2. The Dark Triad

The Dirty Dozen by Jonason and Webster (2010) is a 12-item scale assessing grandiose narcissism, psychopathy, and Machiavellianism. In this study, a Polish translation of the Dirty Dozen by Jonason, Li & Czarna (2013) with a 5-point rating scale (from 1 – 'Extremely untrue for me' to 5 – 'Extremely true for me') was applied.

#### 2.2.3. Vulnerable narcissism

We used the Hypersensitive Narcissism Scale (HSNS) by Hendin and Cheek (1997) as translated into Polish by Czarna, Dufner, and Clifton (2014) to evaluate vulnerable narcissism. The measure consisted of 10 items with a 5-point Likert scale for each item (from 1 – 'Completely disagree' to 5 – 'Completely agree').

#### 2.2.4. Empathy

The measure of empathy was based on our translation of 8 items (e.g. 'I feel others' emotions'; 'I anticipate the needs of others') similar to those by Cloninger, Przybeck, Svrakic, and Wetzel (1994) obtained via the International Personality Item Pool by Goldberg et al. (2006). Participants responded using a 5-point Likert scale (from 1 – 'Completely disagree' to 5 – 'Completely agree'). The measure captured general empathic tendency and concern.

#### 2.2.5. Religious orientations

The Religious Orientation Scale (ROS; Allport & Ross, 1967) as adapted into Polish by Socha (1999) was used to assess intrinsic religious orientation in which religion is seen as an end in itself (e.g. 'I try hard to carry my religion over into all my other dealings in life'; 'I read literature about my faith or church'), and extrinsic religious orientation which treats religion as means to other aims (e.g. 'The primary purpose of prayer is to gain relief and protection'; 'The church is most important as a place to formulate good social relationships').

<sup>1</sup> Additionally, Ten Items Personality Inventory has been used to assess the Big Five, however it was not included to the final analyses.

There were 9 items for intrinsic RO, and 11 for extrinsic RO with a 5-point Likert scale (from 1 – ‘I disagree’ to 5 – ‘I agree’).

### 3. Results<sup>2</sup>

The correlation analysis revealed that the level of general religious beliefs was negatively correlated with psychopathy and Machiavellianism, and unrelated to any type of narcissism (see Table 1).

Greater empathy was associated with higher declared religiosity. Moreover, empathy was inversely linked to psychopathy and Machiavellianism. In the case of narcissism, empathy correlated negatively only with the vulnerable and not the grandiose (measured with the Dirty Dozen scale) form of narcissism.

Intrinsic RO, similarly to general religious beliefs, was linked to lower levels of psychopathy and Machiavellianism, and was independent of both types of narcissism. Extrinsic RO, on the other hand, was positively correlated with both grandiose and vulnerable narcissism.

In the next step, we sought to test whether empathy might mediate the relationship between religious beliefs and two traits: psychopathy and Machiavellianism. We decided to analyze two models where religiosity was the outcome variable, and dark traits were independent variables, because longitudinal studies have suggested that it is personality, that predicts future religiousness (Wink, Ciciolla, Dillon, & Tracy, 2007). The ‘PROCESS’ macro for SPSS by Hayes (2015) was applied to perform the mediation analysis based on bootstrapping (1000 resamples) confidence intervals (95%) for indirect (mediated) effects. Because ‘PROCESS’ provides unstandardized coefficients, in the present analyses, all variables were standardized using the z-score transformation.

For psychopathy, it was revealed that the total effect on religious beliefs ( $\beta = -.32, p < .001$ ) was reduced upon inclusion of the mediator (empathy); however, the direct effect was still significant ( $\beta = -.28, p < .001$ ; see Fig. 1). The indirect effect was  $-.04, p < .05, 95\% CI = [-.06, -.01]$ . The same analysis was replicated controlling for sex and age of the participants. The mediation effect remained significant ( $\beta$  reduced from  $-.30$  to  $-.27, p < .001$ ; see Fig. 1). When these variables were included indirect effect equaled  $-.04, p < .05, 95\% CI = [-.07, -.01]$ .

Likewise, the total effect between Machiavellianism and religiosity ( $\beta = -.14, p < .001$ ) decreased when controlling for empathy; however, it maintained significance ( $\beta = -.012, p = .002$ ) with indirect effect equaling  $-.02, p < .05, 95\% CI = [-.04, -.01]$  (see Fig. 2). When sex and age were included in the subsequent model, sex revealed significant association with religiosity (women scored higher on this scale). Nevertheless, described mediation remained significant ( $\beta$  reduced from  $-0.13, p = .001$  to  $-0.11, p = .003$ ; see Fig. 2) with the indirect effect of  $-0.02, p < 0.05, CI = [-.04, -.01]$ . Thus, one can conclude that the relationship between dark traits (psychopathy, Machiavellianism) and religiosity was partially mediated by empathy.

Subsequently, we computed mediation effect sizes according to Shrout and Bolger (2002). In both cases the mediation size effects were small, explaining 11% of the variance for psychopathy and 15% for Machiavellianism (see also Figs. 1 and 2).

Because the two types of narcissism and extrinsic RO were intercorrelated, we conducted a regression analysis to examine the unique contribution of the two types of narcissism to extrinsic RO. The model with two forms of narcissism as predictors and extrinsic RO as the dependent variable revealed that both vulnerable narcissism ( $\beta = 0.12, p = .020$ ) and grandiose narcissism ( $\beta = .10, p = .050$ ) were significantly related to extrinsic orientation.

### 4. Discussion

The present study provided evidence that both empathy and religiosity are negatively associated with two out of three dark traits, i.e. psychopathy, and Machiavellianism. It is widely acknowledged that the Dark Triad traits are connected to limited empathy and restricted perspective-taking (Giammarco & Vernon, 2014; Jonason & Krause, 2013; Jonason & Kroll, 2015). The same empathic skills are argued to be crucial for religious beliefs (Gervais, 2013). People have an ability, and, indeed, a compelling proclivity to attribute mind to others, and this concerns all types of supernatural, divine beings (Willard & Norenzayan, 2013). Lack of such empathic, mentalizing skills, not only prevents social interaction, but also constrains religiosity as studies on autism have proved (Norenzayan et al., 2012). By analogy, it may be supposed that individuals characterized by dark traits are also less likely to become religious due to, among other things, their low level of empathy. The results of the mediation analysis conducted in the current investigation seem to support this hypothesis. Specifically, we found that the level of empathy partially mediates the effects of psychopathy and Machiavellianism on religious beliefs; however, the obtained effects were rather modest, suggesting that empathy is only one of many possible explanatory variables in these relations. The capacity for taking a perspectives of others has been argued to be a necessary component of belief in God (Norenzayan et al., 2012). As neuroimaging studies have shown, thinking about God (Kapogiannis et al., 2009) and praying (Schjoedt, Stodkilde-Jorgensen, Geerts, & Roepstorff, 2009) activates brain regions associated with social cognition. Kapogiannis et al. (2009) have suggested that religious individuals consider God to be capable of reciprocating requests, and that, therefore, the act of praying might be compared with an intersubjective experience akin to ‘normal’ interpersonal interaction. All these data suggest that people scoring high on sub-clinical psychopathy and Machiavellianism may lack adequate skills to develop religious beliefs.

What seems noteworthy is that grandiose narcissism, measured with the Dirty Dozen Dark Triad scale, was not connected to either religious beliefs or empathy. This is consistent with some previous studies, which provided rather ambiguous results, revealing narcissism to have null or even positive associations with empathy (Jonason & Kroll, 2015; Rauthmann, 2012). However, it has been suggested that narcissistic understanding of the needs and feelings of others might not be inspired by pro-social sentiment, but rather be motivated by the desire to get what they want (Jonason & Kroll, 2015). Nevertheless, it seems that narcissism is not associated with severe deficits in empathy and, by contrast with psychopathy and Machiavellianism, does not act as a blocker of religiosity.

#### 4.1. Psychopathy, Machiavellianism and low intrinsic orientation

The findings on religious orientations and the Dark Triad were more complex. As hypothesized, intrinsic religiousness was inversely associated with psychopathy and Machiavellianism (but not with narcissism). Considering the character of intrinsic RO treating religion as being deeply personal to the individual (Allport & Ross, 1967) – it is possible that religious people with higher scores on the previously mentioned traits are somehow unable to develop a mature, intrinsically motivated attitude towards religion. This explanation is supported by the data indicating that psychopathy and Machiavellianism correlates especially high with emotional deficits (Jonason & Krause, 2013). It has been shown that psychopathy and Machiavellianism (but not narcissism) were positively associated with externally-focused thinking style, a sub-factor of alexithymia, defined in terms of poor fantasy life, utilitarian thinking and a focus on external concrete data of the sensate environment. Jonason and Krause (2013) pointed out that the external thinking may indicate that those high on psychopathy and Machiavellianism spend little time considering their “internal world” and instead are more focused on getting what they want from the “external world”.

<sup>2</sup> The data can be accessed via the Open Science Framework platform (<https://osf.io/e9qk/>).

**Table 1**  
Pearson's correlations and descriptive statistics for all variables ( $N = 661$  and  $n = 432$  [for 8 and 9]).\*

	1	2	3	4	5	6	7	8
1. Religiosity		-.32**	-.14**	-.00	-.06	.20**	.15**	.65**
2. Psychopathy			.50**	.31**	.21**	-.33**	.08	-.16**
3. Machiavellianism				.50**	.29**	-.11**	.06	-.14**
4. Grandiose narcissism					.35**	.03	.14**	.03
5. Vulnerable narcissism						-.16**	.15**	.03
6. Empathy							-.00	.08
7. Extrinsic orientation								-.01
8. Intrinsic orientation								–
Mean	15.60	8.20	8.68	11.83	30.45	29.69	28.35	25.86
SD	7.58	3.12	3.73	3.85	6.71	5.32	5.96	8.79
$\alpha$	.90	.65	.82	.80	.76	.86	.60	.87

\*  $p < .05$ .  
\*\*  $p < .01$ .

Low concentration on inner life and emotional states, may be an obstacle for developing intrinsic RO, since the latter refers to deep personal experiences. For instance, the intrinsic scale involves such items as 'It is important to me to spend periods of time in private religious thought and meditation' or 'Quite often I have been keenly aware of the presence of God or the Divine Being' which describe focusing on internal worlds and personal relations with supernatural beings.

Apart from emotional impairment, people scoring high on Machiavellianism and psychopathy appear to be less intrinsic in case of goals selection as well. For instance, it was shown that the Machiavellianism is associated with preference of extrinsic, externally controlled goals (e.g. financial success) to intrinsic, self-determined ones (e.g. family, community; McHoskey, 1999). Additionally, participants with high psychopathy trait were found to be selfish and motivated by extrinsic rewards in social relations, such as expectations of reciprocity and rather public than anonymous and altruistic prosocial behaviors (White, 2014). Therefore, lower levels of intrinsic RO in people scoring high on dark traits may be attributable to their general tendency to undervalue any type of intrinsic goal.

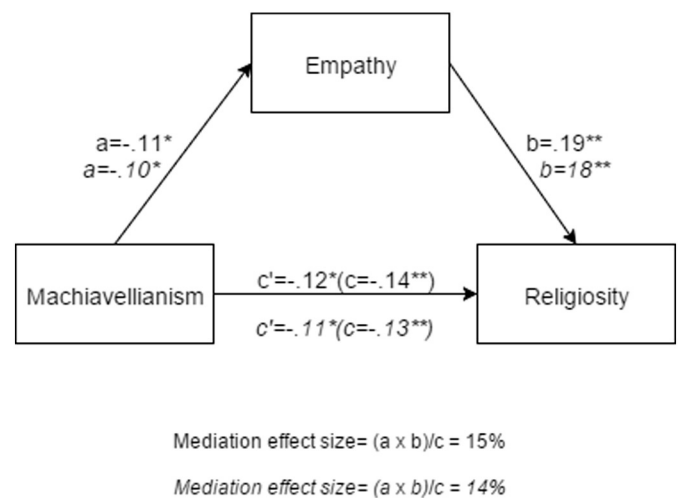
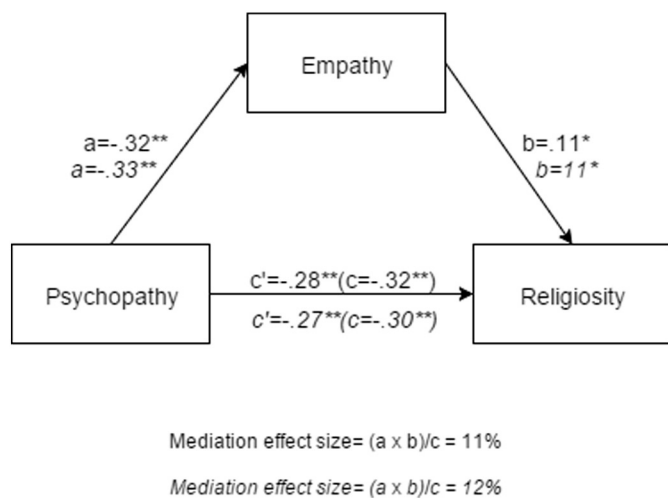
4.2. Narcissism and high extrinsic orientation

While psychopathy and Machiavellianism were linked to intrinsicness, narcissism (grandiose and vulnerable alike) revealed correlations with extrinsic religious orientation. The regression analysis indicated that both types of narcissism independently predicted

extrinsic religious orientation. It is possible then that individuals presenting both forms of narcissism become extrinsically oriented believers for different reasons. One may suppose that people high on grandiose narcissism may use their religiousness to attain high status in the religious community, whereas vulnerable narcissists may engage in religious practice as a way to protect their sensitive egos (Miller et al., 2011; Rauthmann & Kolar, 2012). What may be common though to both types of narcissism is the instrumental usage of religion for the purpose of achieving personal profit. Furthermore, it is argued that individuals scoring high on grandiose narcissism may lack certain kinds of inner freedom connected to sincere religious commitment because of their constant struggle for approval of others (Watson et al., 2004). Instead, they would preferably engage in extrinsic religiosity that creates opportunities to compete for self-esteem in the religious context (for example, an item from the extrinsic scale: 'One reason for my being a church member is that such membership helps to establish a person in the community').

4.3. Limitations and future studies

The present research has provided deepened insight into the relations between the Dark Triad, religiosity, and empathy, however it has certain limitations. First, we used relatively simple, one-dimensional measure of empathy. In the future investigation it would be interesting to distinguish between the two aspects of cognitive and affective empathy. The former refers to capacity to take mental perspective of other



**Fig. 1.** Relations between psychopathy, empathy and general religiosity; a and b represent direct paths, c is the total effect from psychopathy to religiosity and c' is the direct path from psychopathy to religiosity controlling for empathy. Values in italics indicate the same analysis controlling for sex and age. \*  $p < .05$ ; \*\*  $p < .01$ .

**Fig. 2.** Relations between Machiavellianism, empathy and general religiosity; a and b represent direct paths, c is the total effect from Machiavellianism to religiosity and c' is the direct path from Machiavellianism to religiosity controlling for empathy. Values in italics indicate the same analysis controlling for sex and age. \*  $p < .05$ ; \*\*  $p < .01$ .

person, whereas the latter appeals to sharing the emotional experience with other people (Cox et al., 2012). Some recent studies suggest that the pattern of empathic deficits may be much more complex among individuals with the Dark Triad traits (Jonason & Krause, 2013; Jonason & Kroll, 2015). Second, we used a brief measure of the Dark Triad (with four items per scale). The Dirty Dozen questionnaire has been recently criticized by Miller et al. (2012) who showed that its psychopathy subscale manifests smaller correlations with personality trait scales than those evinced by the longer scales and that it may not assess some specific aspects of psychopathy, e.g. interpersonal antagonism and disinhibition. The future studies should use longer measures of the Dark Triad to examine nuances of their relationship with religiosity. Third, the Dark Triad characteristics overlap to some extent, however it has been shown that each of the traits manifests unique associations (controlling for other two dark traits) with personality (Jonason, Kaufman, Webster and Geher, 2013). Finally, regarding the generalizability of the current findings some restrictions should be noted. For instance, two scales applied (i.e. Machiavellianism, and extrinsic RO) presented relatively modest reliability ( $\alpha$  respectively .65 and .60). Moreover, the age range of the participants should be considered. In this study we examined the sample that was relatively young and homogenous, while it may be worth replicating these results with more representative samples. Nonetheless, the present investigation contributes substantially to a better understanding of the relationship between personality and religiosity and shows that deficits in empathy might be crucial for both antisocial characteristics and religious disbelief.

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