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Three religious orientations and five personality factors: an exploratory study among adults in
England

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Abstract

In order to explore the power of the five factor model of personality to explain individual differences recorded on measures of the three religious orientations, a sample of 198 adults in England completed established measures of the three religious orientations (intrinsic, extrinsic, and quest) and the big five personality factors (neuroticism, extraversion, openness, agreeableness, and conscientiousness). The data demonstrated that individual differences in the three religious orientations were largely independent of the five personality factors, apart from a significant positive correlation between intrinsic religiosity and agreeableness. These findings support Piedmont's contention that religiosity is largely independent of personality when personality is operationalised in terms of the big five factors.

Introduction

The five factor model of personality, as promoted by Costa and McCrae (1992) through the Revised NEO Personality Inventory (NEO, PI-R) and the NEO Five-Factor Inventory (NEO-FFI), discusses individual differences in terms of five domains characterised as neuroticism, extraversion, openness, agreeableness, and conscientiousness. Although an increasingly influential model in personality psychology, Saroglou (2002) observed that the model had been slow to make an impact within the psychology of religion and was able to identify only 13 studies as suitable for inclusion in his meta-analytic review of evidence relating religion and the five factors of personality. This meta-analytic review concluded that different measures of religiosity related to the five personality factors in different ways and that, overall, the effect sizes were small.

In a subsequent paper, Saroglou and Muñoz-García (2008) speculated eloquently about how a religious person might respond differently from a non-religious person:

when facing stress and emotions ('neuroticism'), novelty ('openness to experience'), challenges from the internal and external world that ask for self-control, orderliness, and responsibility ('conscientiousness'), when s/he is invested in interpersonal relationships ('agreeableness'), or is in contact and functions with others in general and in groups ('extraversion'). (p. 84)

Such global generalisations about the association between personality and religion may need to be nuanced in the light of the kind of differentiations made by theories of religious orientation, as well as in light of the findings of the earlier meta-analytic review.

The best-established conceptualisation of religious orientations, as proposed originally by Allport and Ross (1967) and extended subsequently by Batson and Ventis (1982), distinguishes between three ways of being religious or three religious motivations characterised as intrinsic religiosity, extrinsic religiosity, and quest religiosity (Francis,

2007). Straightforward studies that have run recognised measures of these religious orientations alongside the five factor model of personality remain scarce.

In an early study, Taylor and MacDonald (1999) employed the two measures of intrinsic religiosity (nine items) and extrinsic religiosity (11 items) proposed by Allport and Ross (1967) among a sample of 368 university students. According to these data, intrinsic religiosity was associated with higher agreeableness scores ($r = .25$) and higher conscientiousness scores ($r = .23$), while extrinsic religiosity was associated with higher neuroticism scores ($r = .11$) and lower openness scores ($r = -.18$).

In another early study Kosek (1999) employed the Polish version of the Swedish Religious Orientation Scale proposed by Hovemyr (1998), assessing intrinsic religiosity (10 items), extrinsic religiosity (12 items) and quest religiosity (6 items), among a sample of 104 school pupils aged around 14 years. According to these data, intrinsic religiosity was associated with higher agreeableness scores ($r = .41$) and higher conscientiousness scores ($r = .50$), extrinsic religiosity was associated with higher extraversion scores ($r = .21$) and quest religiosity was associated with higher agreeableness ($r = .26$) scores and higher conscientiousness scores ($r = .28$).

To date, however, no published studies have examined the association between the three religious orientations and the five personality factors within the context of England. The aim of the present study is to address that gap in the research literature and in so doing to add to the pool of international data on which future meta-analytic studies can build following the model proposed by Saroglou (2002).

Method

Sample

The sample comprised 198 undergraduate students and their contacts (100 female and 98 male) recruited through religious groups, ranging in age from 18 to 92 years (mean = 42.4

years, $sd = 18.4$). Of these participants, 176 self-identified as affiliated with a religious group and the remaining 22 claimed no religious affiliation.

Measures

Religious orientation was assessed by the measures of intrinsic religiosity (nine items) and extrinsic religiosity (11 items) proposed by Allport and Ross (1967) and by the measure of quest religiosity (12 items) proposed by Batson and Schoenrade (1991a, 1991b). Each item was arranged for scoring on a five-point scale: agree strongly, agree, not certain, disagree, and disagree strongly.

The big five personality factors were each assessed by Goldberg's lexicon approach to personality assessment (Goldberg, 1990, 1992). Each of the five factors was assessed by five five-point semantic differential grids. Openness was assessed by: imaginative *vs* unimaginative, creative *vs* uncreated, curious *vs* uninquisitive, reflective *vs* unreflective, sophisticated *vs* unsophisticated. Conscientiousness was assessed by: organised *vs* disorganised, responsible *vs* irresponsible, practical *vs* impractical, thorough *vs* careless, hardworking *vs* lazy. Extraversion was assessed by: talkative *vs* silent, assertive *vs* unassertive, adventurous *vs* unadventurous, energetic *vs* unenergetic, bold *vs* timid. Agreeableness was assessed by: kind *vs* unkind, cooperative *vs* uncooperative, unselfish *vs* selfish, Trustful *vs* distrustful, geneous *vs* stingy. Neuroticism was assessed by: tense *vs* relaxed, nervous *vs* at ease, unstable *vs* stable, discountended *vs* contented, emotional *vs* unemotional.

Data analysis

The data were analysed by SPSS using the frequency, reliability, correlation and partial correlation routines.

Results

Table 1 presents the scale properties for the three indices of religious orientation and

-insert table 1 about here-

for the five personality factors. All eight instruments recorded alpha coefficients well in excess of the threshold of .65 proposed by DeVellis (2003).

Table 2 presents the Pearson correlation coefficients between each of the

-insert table 2 about here-

three religious orientations and each of the five personality factors, together with the partial correlation coefficients controlling for sex differences (since sex is known to be a key contaminant in the association between personality variables and religion: see Francis, Pearson, Carter, & Kay, 1981). These data found no associations between quest religiosity and any of the five personality factors, and no association between extrinsic religiosity and any of the five personality factors. Intrinsic religiosity was significantly associated with only one of the five personality factors, reporting a positive correlation with agreeableness ($r = .17$).

Discussion and conclusion

The present study set out to explore the association between the three religious orientations (intrinsic, extrinsic and quest) and the five personality factors (neuroticism, extraversion, openness, agreeableness, and conscientiousness) among a sample of adults in England. Four main conclusions emerge from these data.

First, the data support the conclusion drawn by Saraglou (2002) from his meta-analysis of 13 studies examining the association between the five personality factors and a range of indices of religiosity, namely that where significant associations emerge, the effect sizes are small. Overall, the big five factor model of personality appears to be somewhat less successful in explaining individual differences in religiosity than the Eysenckian model of the three major dimensions of personality (see Francis, 2010 for recent review).

Second, the only significant association found by the present data, concerning the positive correlation between intrinsic religiosity and agreeableness, is consistent with one of the findings of the other studies reviewed earlier (Taylor & MacDonald, 1999; Kosek, 1999). So far this is the only consistent finding to emerge from all the studies reviewed reporting on the association between religious orientation and the five personality factors. Commenting on this association within the Polish study, Kosek (1999: 235) wrote as follows:

The definition of the intrinsic religiosity as unselfish, altruistic and humanitarian (Hood *et al.*, 1996) was in full agreement with the personological dimension defined by the agreeableness 'dimension of interpersonal tendencies' (Costa & McCrae, 1992: 15). Thus, the agreeable individual is essentially altruistic, where 'he or she is sympathetic to others and eager to help them and believes that others will be equally helpful in return' (Costa & McCrae, 1992: 15).

Third, the fact that agreeableness scores were associated with intrinsic religiosity in all previous studies, but were independent of extrinsic religiosity in all previous studies provides some further support for the construct validity of the measures of intrinsic religiosity, and extrinsic religiosity employed.

Fourth, the fact that 14 of the 15 correlations reported in table 2 failed to reach a level of statistical significance supports Piedmont's contention that religiosity is largely independent of personality when personality is operationalised in terms of the big five factors and that, consequently, in some research situations there may well be advantages in conceptualising the spiritual dimension as an independent (sixth?) factor of personality (Piedmont, 1999).

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Table 1:

Scale properties

scale	n items	alpha	mean	sd
<i>three religious orientations</i>				
intrinsic religiosity	9	.93	31.69	10.10
extrinsic religiosity	11	.79	29.25	8.41
quest religiosity	12	.82	32.90	8.75
<i>five personality factors</i>				
neuroticism	5	.80	23.16	7.98
extraversion	5	.79	32.33	6.05
openness	5	.74	33.69	5.39
agreeableness	5	.85	36.98	5.73
conscientiousness	5	.86	35.80	6.15

Table 2:

Correlations between three religious orientations and five personality factors

	intrinsic	extrinsic	quest
neuroticism	-.11	.09	.12
extraversion	.01	.00	-.01
openness	-.07	-.04	.07
agreeableness	.17*	-.03	-.01
conscientiousness	.08	.03	-.14
<i>partial correlations controlling for sex</i>			
neuroticism	-.12	.09	.13
extraversion	.01	.00	-.01
openness	-.07	-.04	.07
agreeableness	.17*	-.03	.01
conscientiousness	.07	.07	-.14

Note: * = $p < 0.5$