

Believing literally versus symbolically: values and personality correlates among Spanish students

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Values and personality correlates of general religiousness may be specific and even different when one distinguishes between Exclusion versus Inclusion of Transcendence and Literal versus Symbolic thinking on religious issues. In the present study, 133 Spanish students were administered the Schwartz Value Survey, the NEO-PI-R and the Post-Critical Belief scale. Exclusion versus Inclusion of Transcendence reflected the conflict between openness to change (and hedonism) and conservation values; it was positively related to agreeableness and conscientiousness, and negatively to universalism and openness to experience. Literal versus Symbolic thinking reflected the conflict between self-enhancement and self-transcendence values, and was associated with high openness to experience. Results partially replicated previous studies in Belgium, with some differences that were rather in line with previous meta-analyses. The discussion also points out cultural and contextual specifics.

Keywords: values; personality; religiousness

Values and personality as related to general religiousness

Research on religion and values has a long history with interesting findings (Rokeach 1969a, 1969b; Feather 2005; Roccas 2005). Schwartz and Huisman (1995) initiated research on religion and values using Schwartz's (1992) model of values, which is an established and dominant model today, with impressive comprehensiveness of human values and strong cross-cultural validation (a structure of 10 values of higher order organising dozens of values) (Schwartz and Bardi 2001). A recent meta-analysis of 21 studies from 15 countries (Saroglou, Delpierre, and Dernelle 2004) confirmed that rather constantly across religions (Jews, Christians, and Muslims) and countries, religiosity implies high importance attributed to conservation versus openness to change values, that is, positive associations with *tradition* and *conformity*, and negative associations with *self-direction*, *hedonism*, and *stimulation*. To a lesser extent and in a less systematic way, religiosity reflects a limited self-transcendence – high importance attributed to *benevolence*, but not necessarily to *universalism* – and, similarly, low importance attributed to the opposite, self-enhancement values, that is, *power* and *achievement*. Finally, two values seem to be particularly sensitive to the cultural context and the way religion is expressed within it. *Universalism* is negatively associated with religiosity in mono-religious countries such as the Mediterranean ones (Portugal, Spain, Italy, Greece, Turkey, Israel), whereas it is unrelated to religiosity in secularised and pluri-religious countries such as the Western European ones (Belgium,

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Germany, and the Netherlands) (Saroglou, Delpierre, and Dernelle 2004). *Security* was negatively related to religion in countries where an open conflict between the State and the churches existed (studies carried out in the early 1990s in the ex-Communist countries), whereas it is unrelated or positively related to religion in other cases (Roccas and Schwartz 1997; see also Saroglou, Delpierre, and Dernelle 2004).

Research on religion and personality has also been constant (for reviews, see Francis 1992; Eysenck 1998; Piedmont 2005). Several studies in the last decade have investigated how religiousness, in a variety of countries, relates to the dominant present-day model in personality psychology known as the Big Five or Five Factor Model (McCrae and Costa 1999). In two meta-analytic reviews of two sets of studies, Saroglou (2002, forthcoming) found that religiousness is weakly, yet quite systematically, associated with the two 'character'-like factors (McCrae and John 1992), that is, *agreeableness* and *conscientiousness*, whereas it is more or less unrelated to the two more temperamental factors, that is, *extraversion* and *neuroticism*. Finally, the association with the fifth factor seems to depend on the specific religious attitude: *openness to experience* is negatively associated with religious fundamentalism and positively associated with open, mature religion and spirituality (Saroglou 2002).

Values and personality as related to the Post-Critical Belief scale dimensions

Two dimensions of the Post-Critical Belief scale

Based on previous theorisation by Wulff (1991, 1997), Hutsebaut (1996; see also Fontaine et al. 2003) distinguished between four attitudes relative to the way people approach religion and religious issues, and measured these attitudes through the Post-Critical Belief scale (PCB). These four attitudes can be represented as quadrants formed by two axes, two orthogonal dimensions. People may be religious or not – that is, include or exclude Transcendence from their life and worldviews (first dimension) – and may do it in a literal or symbolic way (second dimension). Literal thinking may thus characterise both believers (orthodox people) and non-believers (people who reject the religious realm as absolutely irrelevant or wrong). Similarly, symbolic thinking may characterise believers (people who endorse a symbolic meaning of religion) or non-believers (people who do not endorse religion, but accept, on the basis of a symbolic interpretation, that it has some relevance). An impressive series of empirical studies has confirmed the relevance of distinguishing between the two axes-dimensions in terms of different relationships with external constructs from personality, cognitive, social, and developmental psychology (Duriez and Hutsebaut, forthcoming).

Values

Fontaine et al. (2005) hypothesised that the two dimensions of the Post-Critical Belief scale may correspond to different patterns of relations to values. Following Schwartz (1992), they distinguished between three axes-conflicts in Schwartz's model of values: (a) the conflict between *openness to change versus conservation* (self-direction and stimulation versus conformity, security, and tradition); (b) the *self-enhancement versus self-transcendence* conflict (achievement and power versus benevolence and universalism); and (c) a conflict that opposes *hedonism* to values implying self-restraint and acceptance of external limits (tradition, conformity). Indeed, analysing data from seven samples gathered in Flanders (Belgium), Fontaine et al. (2005) found – although not always in conformity with

what they had hypothesised – that *Exclusion* (low scores) versus *Inclusion* (high scores) of *Transcendence* mainly concerns the (low) hedonism versus (high) tradition conflict, and secondarily the conflict between openness and conservation, that is, positive association with conformity and tradition, and negative association with self-direction and stimulation. It does not concern, however, the self-enhancement versus self-transcendence axis, that is, no relationship with power, achievement, universalism, and benevolence. On the contrary, the *Literal* (low scores) versus *Symbolic* (high scores) dimension clearly concerns the self-enhancement versus self-transcendence axis, that is, positive association with benevolence and universalism, and negative association with power and achievement (as well as security). This dimension was not concerned with the other two conflicts.

Personality

Two previous studies in three different samples of Dutch-speaking Belgian adolescents and young adults investigated how the two PCB dimensions relate to the five personality factors (Duriez, Soenens, and Beyers 2004; Duriez and Soenens 2006). *Openness to experience* was positively related – and constantly across samples – to *Literal* versus *Symbolic* (high scores) thinking and negatively related, but to a lesser extent, to the *Exclusion* versus *Inclusion* (high scores) of *Transcendence* (two samples). These results are in line with Saroglou's (2002) meta-analysis if we take into account the theoretical proximity between fundamentalism (versus open-minded religiousness) and *literal* (versus *symbolic*) thinking. Also in line with Saroglou (2002, forthcoming), *neuroticism* and *extraversion* were rather unrelated to the two dimensions of the PCB scale; and *conscientiousness* was weakly but positively related to the *Exclusion* versus *Inclusion* of *Transcendence* dimension ($r_s = .13, .18, \text{ and } .20$), whereas it was inconsistently related to *Literal* versus *Symbolic* thinking ($r_s = -.11, .11, \text{ and } .19$). Finally, and interestingly, *agreeableness* was constantly positively associated with *Literal* versus *Symbolic* thinking ($r_s = .46, .39, \text{ and } .34$), whereas it was rather unrelated to the *Exclusion* versus *Inclusion* of *Transcendence* dimension ($-.06, .15, .06$).

To sum up, these two studies taken together suggest that the belief versus non-belief component (*Inclusion* versus *Exclusion* of *Transcendence*) reflects some conscientiousness, whereas an open-minded versus closed-minded approach to religious questions (*Symbolic* versus *Literal* thinking) reflects openness to experience and agreeableness. The results regarding agreeableness, along with the above-mentioned findings relative to the self-transcendence values associated with the PCB, seem to challenge the general idea of prosociality in religious people – heavily established both theoretically and empirically – but some prudence is in order once we realise that these results come from a unique source of data, that is, adolescents and students from one linguistic community of one country. In interpreting this finding, the authors argue that the complexity of thinking (among symbolic versus literal believers or non-believers) implies the capacity for perspective-taking, which is a valuable ability for demonstrating prosocial tendencies. Once this reality is taken into account, there is no reason to claim that religiousness per se reflects high or low prosocial tendencies (Duriez, Soenens, and Beyers 2004; Duriez and Soenens 2006).

The present study

The present study aimed to replicate in a different country (Spain) the previous studies that investigated how the PCB scale relates to values and personality (Duriez et al. 2004;

Fontaine et al. 2005; Duriez and Soenens 2006). These three studies were all carried out in a country of Catholic tradition (Belgium) and, more particularly, in one linguistic community (Dutch speaking). Carrying out such a study in Spain has three advantages. First, replication is necessary for establishing solid research conclusions. Using a sample from a country which also has a Catholic tradition and has also entered into a secularisation process (González-Anleo et al. 2004) allows us to control for cross-religious differences; possible differences in results can then be interpreted as cultural differences or differences in the ways religion is expressed/experienced within each country. Second, the present study allows for testing whether some particularities of the results of the above three studies – see for instance the results concerning agreeableness and benevolence – with regard to previous literature (Saroglou 2002, forthcoming; Saroglou, Delpierre, and Dernelle 2004) were due to the fact that in these studies researchers moved from measures of general religiosity towards the two dimensions of the PCB scale, or whether the results may be suspected of representing a reality specific to the country or the sample. Finally, using multi-dimensional and multi-item measures of religiousness in order to investigate values and personality correlates allows us to see whether our results may differ from those of two previous studies in the same country (Spain) that used a one-item (the Spanish sample included in Schwartz and Huisman 1995) or few-item (Saroglou and Muñoz-García 2008) measure of general religiosity.

Method

Participants

The sample included 133 Spanish university students in education (98 women and 35 men). The mean age was 24.83 years ($SD = 6.40$), and the range of age was 18–53. Participants were administered questionnaires on religion, values, and personality in groups of 40–50 students. The order of presentation of the measures was randomised and the questionnaires were answered anonymously. Students received credits for participating in the study.

Measures

Values

In order to measure the importance of each value as a guiding principle in the participant's life, we used the Spanish version (Ros and Grad 1991) of the Schwartz Value Survey (Schwartz 1992). The Schwartz Value Survey includes 56 single-value items representing a group of 10 (types of) values that can be summarised as reflecting a first axis of conservation (tradition, conformity, security) versus openness to change values (self-direction, stimulation) traversed by a second axis of self-enhancement (power, achievement, hedonism) versus self-transcendence (benevolence, universalism) values. Definitions of the values and corresponding single-value items, as well as the way structural relations between the 10 values may be spatially represented, can be found in many published papers (e.g. Schwartz 1992; Schwartz and Bardi 2001). The structure of the 10 values has shown cross-cultural stability across dozens of countries and has been found to relate meaningfully to a whole series of behaviours. Respondents rate the importance of each value item as 'a guiding principle in my life' on a 9-point scale ranging from 7 (*of supreme importance*) to –1 (*opposed to my values*). In the analyses carried out on our data we used all items and not only the restricted pool of 44 items (used in several other studies; see Schwartz and Sagiv 1995) because reliability of the 10 types of values decreased in the latter case.

Personality

The Spanish version (Costa and McCrae 1999) of the NEO Personality Inventory-Revised (NEO-PI-R; McCrae and Costa 1999) was used in order to measure the Big Five personality factors. This Spanish version has shown structural equivalence with American, Italian, and German versions of the NEO-PI-R (Caprara et al. 2000).

Religiousness

The Post-Critical Belief scale (PCB) in its original 33-item version (Hutsebaut 1996) was translated into Spanish by the first author of this article. The items were scored on a 7-point Likert scale. This scale measures two dimensions, Exclusion versus Inclusion of Transcendence (high scores mean inclusion of Transcendence in life) and Literal versus Symbolic (high scores mean a tendency to deal with religion in a symbolic way). The scores on the two dimensions were computed after orthogonal procrustes rotation (McCrae et al. 1996; Schonemann 1966) of these components towards the average structure reported by Fontaine et al. (2003), a structure defined by the results obtained in 16 samples. Measures of congruence between estimated and observed structure with Tucker's Phi were .95, for Exclusion versus Inclusion, and .88, for Literal versus Symbolic Thinking.

Results

Mean scores and standard deviations of values, personality, and religious dimensions, as well as Pearson correlations of values and personality with the two dimensions of the Post-Critical Belief scale, are shown in Table 1. *Exclusion versus Inclusion of Transcendence* was positively related to tradition and conformity, and negatively related to universalism, hedonism, stimulation, and self-direction. It was also associated with high agreeableness and conscientiousness, and low openness to experience. *Literal versus Symbolic Thinking* was positively related to benevolence and universalism, but negatively associated with power, achievement, and conformity. In terms of personality traits, it was associated with high openness to experience.

Discussion

Results from the present data on Spanish students replicate to an important extent previous research distinguishing between the two dimensions of the Post-Critical Belief scale in Dutch-speaking Belgian samples (Duriez, Soenens, and Beyers 2004; Fontaine et al. 2005; Duriez and Soenens 2006) and are also in line with previous research on values and personality correlates of religion in general (Saroglou 2002, forthcoming; Saroglou, Delpierre, and Dernelle 2004). However, results also suggest some differences between these two countries of Catholic tradition.

More precisely, in line with Fontaine et al. (2005), the Literal versus Symbolic dimension had mainly, if not exclusively, to do with the conflict between self-enhancement and self-transcendence values. The more believers (or non-believers) had a symbolic, non-literal approach to religious ideas, texts, and practices, the more they valued benevolence and universalism, and the less they valued power and achievement. In addition, the Exclusion versus Inclusion of Transcendence dimension concerned the conflict between hedonism (low scores as a function of believing) versus tradition (high scores among believers), and the openness to change versus conservation conflict: believers tended to value conformity

Table 1. Means and standard deviations of religiousness, values, and personality measures, and correlations of values and personality factors with religiousness.

	<i>M</i>	<i>SD</i>	E-I	L-S
Religiousness				
Exclusion vs. Inclusion of Transcendence (E-I)	-0.05	1.12		
Literal vs. Symbolic Thinking (L-S)	0.12	1.00		
Values				
Universalism	5.08	0.79	-.28**	.28**
Benevolence	5.31	0.86	-.02	.22*
Tradition	3.76	1.09	.48***	.01
Conformity	4.75	1.05	.16*	-.16*
Security	4.79	0.83	.04	-.05
Power	2.97	1.17	-.02	-.25*
Achievement	4.39	0.85	-.04	-.19*
Hedonism	4.96	1.18	-.30**	-.08
Stimulation	3.73	1.24	-.17*	.07
Self-direction	5.29	0.77	-.15*	-.06
Personality				
Neuroticism	92.81	14.18	-.02	-.07
Extraversion	115.68	15.89	.03	.06
Openness	112.92	16.73	-.38***	.25**
Agreeableness	120.65	14.78	.17*	.09
Conscientiousness	115.78	19.01	.18*	-.03

* $p < .05$. ** $p < .01$. *** $p < .001$.

and to consider self-direction and stimulation as secondary. This religious dimension did not concern the self-enhancement versus self-transcendence conflict of values.

Interestingly, a difference was observed between the present study and Fontaine et al.'s (2005) one. Exclusion versus Inclusion of Transcendence was negatively related to universalism among Spanish participants ($r = -.28$) but unrelated to this value among Belgian participants ($r = .01$; $z = 3.17$, $p < .001$). One possible interpretation can be advanced in light of the cultural context. As found in Saroglou, Delpierre, and Dernelle's (2004) meta-analysis, religious people living in mono-religious and mono-cultural societies such as the Mediterranean ones tend not to be open to ecological values and tolerance of all people and nature, whereas such a discomfort with universalism is not present among religious people living in secularised countries with bi-religious or multi-religious traditions.

The results regarding the value correlates of the Exclusion versus Inclusion dimension are quite similar – Benevolence being a notable exception – to the results of two previous studies in Spain that used a one-item (one sample from Schwartz and Huisman 1995) or a few-item (Saroglou and Muñoz-García 2008) measure of general religiousness. This suggests that, at least as far as some outcomes are concerned, few-item religious measures may tap external realities as well as multi-item ones (see also Gorsuch and McFarland 1972).

The two dimensions of the PCB scale also provided distinct results regarding the five personality factors. However, these results did not systematically correspond to the distinc-

tions between the two dimensions found in Belgian participants (Duriez, Soenens, and Beyers 2004; see also Duriez and Soenens 2006), and some of the results could in fact be understood in the light of the meta-analysis of studies from various countries that used measures of general religiousness (Saroglou 2002, forthcoming). First, high *conscientiousness* as a function of Inclusion of Transcendence was found in the present study similarly to the Belgian studies that also used the PCB scale and to previous ones using general measures of religiosity. Second, *extraversion* and *neuroticism* were unrelated to either PCB dimensions, similarly to previous studies based on the PCB scale or religion in general. Third, *openness to experience* was not only positively related to the symbolic approach in line with work by Duriez (Duriez, Soenens, and Beyers 2004; Duriez and Soenens 2006; see also Saroglou 2002 for open, mature religiosity and spirituality), but also negatively associated with Inclusion of Transcendence. Indeed, the mean correlation across studies between measures of general religiousness and the fifth factor was found to be weak but significantly negative ($-.07$, Saroglou 2002). Fourth, contrary to the Belgian studies, where agreeableness characterised symbolic thinking rather than the Inclusion of Transcendence (Duriez, Soenens, and Beyers 2004; Duriez and Soenens 2006), in the present sample, in line with many studies using a variety of religious measures (Saroglou 2002, forthcoming; Piedmont 2005), *agreeableness* was positively related to Exclusion versus Inclusion of Transcendence and unrelated to the Literal versus Symbolic dimension. To sum up, believing in Transcendence seemed typical of conscientious, agreeable, and somewhat closed-minded people, whereas being symbolic in religion seemed typical of open-minded people.

The present results suggest that, although it is pertinent to distinguish between the strictly pro-religious versus non-religious component and the cognitive, that is, symbolic versus literal, style of approaching religious issues because they reflect different personality profiles and value priorities, it is still unclear which exact personality factors definitively correspond to each dimension. It is, for instance, not unlikely that the failure to find a positive association between agreeableness and Inclusion of Transcendence in two out of the three samples in the studies in Belgium (Duriez, Soenens, and Beyers 2004) is something of an exception within the whole series of studies on religion and personality. If this is the case, it makes sense because, as Saroglou (2006) argued, with regard to the religion–prosociality link, ‘it is hard to assume from a psychological, religious, and philosophical perspective that all comes down, for instance, to higher cognitive and cognition-related abilities such as an integrative complexity of thought, symbolic thinking or openness to experience’ (p. 7). Alternatively, it may be that what each of the two PCB dimensions reflects in terms of personality and values may be somewhat culturally dependent: in Spain, a country that is currently at the beginning of its secularisation process, Inclusion of Transcendence still seems to imply low importance attributed to universalism, whereas in Belgium, a country that together with France is one of the most secularised in Western Europe (Halman 2001), the value of universalism is irrelevant for the Inclusion of Transcendence but relevant for symbolic thinkers who highly value universalistic ideals. Further research should investigate these interpretative hypotheses.

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