AN INTRODUCTION TO THE POST-CRITICAL BELIEF SCALE: INTERNAL STRUCTURE AND EXTERNAL RELATIONSHIPS

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Recently, Fontaine, Duriez, Luyten and Hutsebaut (2003) have shown that the Post-Critical Belief Scale (PCBS; Duriez, Fontaine & Hutsebaut, 2000) captures the two orthogonal bipolar dimensions of Exclusion versus Inclusion of Transcendence and Literal versus Symbolic along which Wulff (1991, 1997) organized the various possible approaches to religion. This chapter outlines the original and valuable contribution of the PCBS to the field of the psychology of religion by showing how the PCBS sheds new light on several hotly debated topics within the psychology of religion.

In the early 1960s, a guy called Zimmerman wrote a song called »The times they are a-changin'.« Meanwhile, times have changed. More than ever, we find ourselves exposed to other cultures, other religions, other politics, other ways of building ethical frameworks, ... Because of this, we have entered a time of unprecedented thinking and rethinking. A time also in which beliefs about belief are shaken as never before. We can no longer convince ourselves, let alone others, that our religious story is the »true« one, or even that religion actually adds value to life. Not surprisingly, therefore, there is growing consensus among philosophers that religious ideas cannot be understood apart from the people and the language systems that created them. It is against this background that one should interpret the writings of the French philosopher Ricoeur (1970). Ricoeur tried to answer the question why some people still call themselves religious, and how this is possible after the atheist critique as formulated by, among others, Karl Marx and Sigmund Freud, who have tried to unveil religion as, respectively, opium for the masses and wishful thinking. Ricoeur concludes that in order to make it possible for religious contents to stay meaningful in spite of this, a restorative interpretation is necessary. In this respect, Ricoeur introduced the concepts of Second Naïveté and Post-Critical Belief.

Relying on the work of Ricoeur (1970), Wulff (1991, 1997) recently provided an interesting new perspective on religious attitudes. According to Wulff, all possible approaches to religion can be located in a two-dimension-
al space along two orthogonal bipolar dimensions. The vertical axis in this space, the Exclusion versus Inclusion of Transcendence dimension, specifies the degree to which the objects of religious interest are granted participation in a transcendent reality. The horizontal axis, the Literal versus Symbolic dimension, indicates whether religion is interpreted literally or symbolically. In this way four quadrants are defined, each covering a specific attitude towards religion: Literal Inclusion, Literal Exclusion, Symbolic Exclusion and Symbolic Inclusion (see Figure 1).

Figure 1. Two-componential consensus representation of the PCBS items (items appearing in the 33 item and the 18 item version are underlined)

The theoretical model of Wulff (1991, 1997) implies a departure from the established models within the field of the psychology of religion, such as the distinction between extrinsic and intrinsic religiousness (e.g., Allport & Ross, 1967) and the quest dimension that was introduced as an extension of this model (Batson, 1976). Although Batson’s quest dimension, which refers
An introduction to the Post-Critical Belief Scale: Internal structure and external relationships

to an open ended search for the meaning in religious contents, can be situated at the symbolic end of Wulff’s model, Allport’s dimensions of extrinsic and intrinsic religiosity cannot be situated in this model. Whereas Allport made a distinction between the underlying motivations of the religiously, Wulff’s model is situated at the level of social cognitions. Therefore, the classification of Allport and Wulff are logically unrelated. An extrinsic religious person can either deal with religious contents in a literal or in a symbolic way. The same is true for an intrinsic religious person. In addition, Wulff’s model can be extended to non-religious persons as well. A non-religious person can neither be extrinsically religious nor intrinsically religious. However, he can be dealing with religious contents either in a literal or in a symbolic way.

In an attempt to measure the different approaches of religion that Wulff (1991, 1997) described within a Christian context, Duriez, Fontaine, and Hutsebaut (2000) recently proposed the 33 item Post-Critical Belief Scale (PCBS; see Appendix A). All items of this scale are scored on a 7-point Likert scale, ranging from 1 (completely disagree), over 4 (neither agree nor disagree), to 7 (completely agree). The PCBS consists of four subscales: Orthodoxy, External Critique, Relativism and Second Naiveté. Duriez et al. (2000) have shown that these subscales provide accurate measures of Wulff’s approaches to religion, with Orthodoxy, External Critique, Relativism and Second Naiveté providing reliable indices of, respectively, Literal Inclusion, Literal Exclusion, Symbolic Exclusion and Symbolic Inclusion. Even more recently, Fontaine, Duriez, Luyten, and Hutsebaut (2003) have shown that, once individual differences in response styles are corrected for, two components are sufficient to explain the empirical relations between the PCBS items and that these two components can be interpreted in terms of Exclusion versus Inclusion and Literal versus Symbolic. Figure 1 provides a visualization of the average two-componential structure that was reported by Fontaine et al. (2003). In Appendix A, each item is accompanied by a label that indicates whether this item was intended to capture Orthodoxy, External Critique, Relativism, or Second Naiveté, and that allows its identification in Figure 1.

The major drawback of the original 33 item version is that it is a fairly lengthy questionnaire which contains some lengthy and complex questions. To solve this problem, Duriez, Soenens, and Hutsebaut (2005) recently proposed a shortened and simplified 18 item version of the Post-Critical Belief Scale (see Appendix B). Again, once individual differences in response styles are corrected for, two components are sufficient to explain the empirical relations between the PCBS items and, again, these two components can be interpreted in terms of Exclusion versus Inclusion and Literal versus Symbolic. Figure 1 indicates which items of the original PCBS were retained in the 18 item version. Again, in Appendix B, each item is accompanied by a label that allows its identification in Figure 1.
In the remainder of this article, we will illustrate the importance of the Post-Critical Belief Scale by showing how this scale yields new insights with respect to some important debates within the psychology of religion. For this purpose, we will be looking at the relationships of the two factor scores that are derived from the Post-Critical Belief Scale and a host of external variables. These factor scores allow researchers to disentangle the effects of being religious or not (Exclusion versus Inclusion) from the way in which religious contents are processed (either literally or symbolically). It is important to keep in mind that, whenever correlations with external variables are described, a high score on Exclusion versus Inclusion refers to a tendency to include transcendence, and a high score on Literal versus Symbolic refers to a tendency to deal with religion in a symbolic way. In most cases, the correlations that are described are based on several samples that were collected in Flanders (Belgium) between 1998 and 2006. Details on these samples can be found in the original articles to which we refer.

Religion and Personality

A first debate within the psychology of religion is whether there is a relation between religiosity and personality, and if so, which personality traits relate to religiosity. More specifically, we will look at whether religious people are characterized by certain specific personality traits. A different but related debate concerns the relation between religiosity and identity development. More specifically, we will discuss whether religious people have a different way of dealing with identity issues.

Religion and Personality Traits

Early research into the relation between religion and personality traits using Eysenck’s three-dimensional personality model (PEN; Psychoticism, Extraversion & Neuroticism; e.g., Eysenck, 1998) confirmed the hypothesis that religiosity corresponds, at least to some extent, to individual differences in personality traits. Although some authors failed to find a link between religious attitudes and personality, a series of studies in a variety of cultures and denominations converged on the conclusion that religious people tend to be lower in Psychoticism. Regarding Extraversion and Neuroticism, no such convergence was reached, leading to the conclusion that these factors do not relate to religiosity (for recent overviews, see Duriez, Soenens & Beyers, 2004; Saroglou, 2002a).

Recently, Costa and McCrae (1978, 1992) presented the Five Factor Model of personality (FFM; Extraversion, Agreeableness, Conscientiousness, Neuroticism, Openness to Experience), which can be regarded as an extension of Eysenck’s model, with Agreeableness and Conscientiousness providing a two-dimensional view of low Psychoticism and Openness to
Experience constituting a new element. Positive relations between religiosity and Agreeableness and Conscientiousness were found. However, these relations are typically low, and sometimes even absent. Regarding the other factors, no clear relation with religiosity emerged (for recent overviews, see Duriez, Soenens & Beyers, 2004; Saroglou, 2002a). In spite of this, McCrae (1999) urged attention to Openness to Experience in order to understand religiosity. Individuals high in Openness to Experience have an active motivation to seek out the unfamiliar, which goes hand in hand with tolerance of ambiguity and open-mindedness, and which leads them to endorse liberal values (McCrae, 1996). Hence, Openness to Experience is considered highly relevant towards attitudes and ideologies in general. The supposed importance towards religiosity was supported by Streyffeler and McNally (1998), who found fundamentalist and liberal Protestants to differ with respect to this factor only, and by Saucier (2000), who found Openness to Experience to relate negatively to alphaism (a broad social attitude dimension comprised of, among other things, conventional religion).

In line with this, Duriez, Soenens and Beyers (2004) expected Openness to Experience to be only modestly related to being religious or not (and hence to be only modestly related to Exclusion versus Inclusion), but to be very important to understand the way in which people process religious contents (and hence to be strongly related to Literal versus Symbolic). The hypothesized importance of Openness to Experience was confirmed in a late adolescent sample. Additionally, a positive relation between Agreeableness and Literal versus Symbolic was found. This was in line with McCrae (1999), who argued that, just like Openness to Experience (although to a lesser extent), Agreeableness is relevant to ideologies, and that, as a consequence, a similar pattern of relations with ideologies might be expected. The other personality dimensions (Extraversion, Conscientiousness and Neuroticism) were found unrelated to both Exclusion versus Inclusion and Literal versus Symbolic. And although Duriez & Soenens (2006a) have shown that the relations between Exclusion versus Inclusion and the personality factors may fluctuate quite a bit across different samples, the positive relation of Literal versus Symbolic with Openness to Experience and Agreeableness appeared highly stable.

Religion and Identity
According to Erikson (1968), the primary developmental task of adolescence is the formation of a personal identity. In the process of searching and exploring one’s identity, the adolescent is thought to develop a personal view on issues of political, philosophical and religious nature. Therefore, an important question is whether differences in identity development relate to the acquisition of religious beliefs. In spite of this, research addressing the relation between religiosity and identity development is limited, and all of these studies have relied on Marcia’s (1966) identity status paradigm (for an
overview, see Duriez, Soenens & Beyers, 2004) Although this paradigm has proven its utility in empirical research (Marcia, 1980), it has been criticized for treating identity statuses as dispositional outcome variables (e.g., Côté & Levine, 1988; van Hoof, 1999).

In an attempt to conceptualize individual differences in identity development in a more process-oriented way, Berzonsky (1990, 1992) proposed three identity styles or ways of processing information and of coping with problems that typically arise in identity crises during adolescence: The informational, the normative, and the diffuse / avoidant identity style. Information oriented individuals deal with identity issues by actively seeking out, processing and utilizing identity relevant information. When confronted with information that is dissonant with their self-conceptions, adolescents will revise and accommodate their self-perceptions. Normative oriented individuals focus on the normative expectations and prescriptions held up by significant others (e.g., parents or authority figures) and reference groups (e.g., a certain religious tradition), and adhere rigidly to their identity structures, into which they assimilate all identity-relevant information. Finally, diffuse/avoidant oriented individuals procrastinate decisions about one’s identity, which results in a fragmented and loosely integrated identity structure.

Analyses revealed relatively stable relations between the identity styles and the religiosity dimensions (Duriez, Soenens & Beyers, 2004; Duriez & Soenens, 2006a). First, adolescents who use an informational identity style tend to symbolically interpret religious contents, confirming the idea that they critically evaluate whether religious contents correspond to their self-definitions (Berzonsky, 1990). Second, a negative relation was found between adolescents’ use of a diffuse / avoidant identity style and Literal versus Symbolic. Based on the theory of Berzonsky (1990), adolescents using this identity style are indeed thought to interpret religious contents in a literal way because they are likely to avoid questioning difficult and personal issues such as religion. Third, late adolescents who use a normative identity style were found to be more religious, at least in a context that is characterized by a strong religious tradition. In addition, they also showed a slight but non-significant tendency to interpret religious contents in a literal way. This confirms the ideas of Berzonsky (1990) who claims that adolescents with a normative oriented identity style are likely to rely on and conform to the prescriptions and standards of significant others, reference groups, authorities, and traditions.

**Religion and Ideology**

The previous section leads to the conclusion that, although there are no specific personality traits to describe religious people, religious people tend to be characterized by a normative identity style, and, hence, are more likely to
rely on and conform to the prescriptions and standards of significant others, reference groups, authorities, and traditions. This takes us straight to another related debate within the psychology of religion: Do religious people have a different, more conservative ideology? Do religious people differ from non-religious people in value orientation? Are they more likely to hold conservative beliefs? If so, is this merely a consequence of having different values, or do there also exist identifiable aspects of general cognitive functioning in which religious people differ from non-religious people?

**Religion and Value Orientations**

The empirical study of religiosity-value relations has to be credited to Rokeach (1968), who asked subjects to rank a number of values and compared religious and non-religious subjects with respect to the average rank order. He found religious subjects to rank certain values (e.g., salvation, forgiveness & obedience) higher and other values (e.g., independence, pleasure, intellectual & logical) lower than non-religious subjects. Most research on the religiosity-value relation was inspired by this approach. However, because values are treated as isolated entities, the multitude of relations leads to poorly organized results. A solution to this problem was proposed by Schwartz (1992), who identified ten distinct value types (Hedonism, Stimulation, Self-Direction, Universalism, Benevolence, Tradition, Conformity, Security, Power and Achievement). These value types are organized in a circular fashion, with value types with compatible goals being positively related and emerging adjacent to one another, and value types with conflicting goals being negatively related and emerging opposite one another. In total, Schwartz (1992) identified three main value conflicts: (1) A conflict between Openness to Change and Conservation, opposing values referring to novelty and personal autonomy (Stimulation & Self-direction) to values leading to stability, certainty and social order (Tradition, Conformity & Security), (2) a conflict between Self-Enhancement and Self-Transcendence, opposing values referring to the pursuit of selfish interests (Achievement & Power) to values promoting the welfare of others (Benevolence & Universalism), and (3) a conflict between values referring to the gratification of desire (Hedonism) and values implying self-restraint and the acceptance of external limits (Tradition & Conformity).

Fontaine, Duriez, Luyten, Corveleyn and Hutsebaut (2005) have shown that the value pattern associated with Exclusion versus Inclusion relates to the conflict between Hedonism, Stimulation, and Self-Direction on the one hand and Tradition and Conformity on the other hand. These findings largely replicate the findings of Schwartz and Huismans (1995) and Saroglou, Delpierre and Dermelle (2004) and suggest that a dependence-autonomy rather than a conservation-openness conflict is the central intra-personal conflict for religiosity. Importantly, the value pattern associated with Exclusion versus Inclusion showed virtually no correspondence with the Self-En-
hancement versus Self-Transcendence conflict. In contrast, the value pattern associated with Literal versus Symbolic could almost perfectly be described in terms of the latter conflict. Apparently, whereas being religious does not seem to make a person sensitive for the well-being of others, dealing with religion in a symbolic way does.

Religion and Conservative Beliefs
Researchers used to assume that political parties and attitudes could be arrayed on a single left-right dimension (e.g., Lipset, 1960; McClosky, 1958). However, more recently it has been argued that the meaning of this dimension varies across nations and over time and is often insufficient to represent the relevant political dimensions in a society (Inglehart, 1990; Rokeach, 1973). Middendorp (1978), for instance, analyzed the ideological components of political conflicts and distinguished two unrelated dimensions rather than one. The first was labeled cultural conservatism versus progressivism and concerns individual rights and readiness for social change. Cultural conservatives are concerned with maintaining discipline in people’s lives, especially within the family (e.g., by making divorce difficult and by tightening controls over abortion and euthanasia), and are in favor of a harsh upbringing and traditional sex-roles. The second was labeled economic conservatism versus progressivism and concerns the desirable level of economic equality among people as well as the desirability of trade unions and governmental interference in economics, with economic conservatives opposing economic equality, trade unions and governmental interference in economy. A similar distinction was also made by other researchers (e.g., Lipset, 1981; Johnson & Tamney, 2001).

Duriez (2003a) has shown that, whereas Cultural Conservatism relates to both Exclusion versus Inclusion and Literal versus Symbolic, Economic Conservatism is unrelated to these dimensions. As far as Exclusion versus Inclusion is concerned, these results are in line with other studies that have also reported a strong relationship between Cultural Conservatism and religiosity, as well as with studies that reported Economic Conservatism to be independent of religiosity (see Duriez, 2003a).

Religion and Cognitive Conservatism
Kruglanski (1989) argued that knowledge, beliefs and attitudes are arrived at through the process of a motivated search for information. A central construct in this theory is the need for nonspecific cognitive closure, which refers to the desire for any firm belief on a given topic, as opposed to further ambiguity. Though need for closure may vary as a function of the situation (e.g., Kruglanski & Webster, 1991; Kruglanski, Webster & Klem, 1993), it also represents a dimension of stable individual differences (Webster & Kruglanski, 1994). According to Kruglanski (1989), the need for closure
might spring from various sources. In particular, five facets are assumed to represent the universe of the construct (Webster & Kruglanski, 1994). Persons with a high need for closure would (1) desire order and structure in their lives, (2) prefer predictable situations, (3) experience a desire to reach closure which is reflected in the decisiveness of judgments and choices, (4) experience ambiguous situations devoid of closure as aversive, and (5) be unwilling to have one’s knowledge and beliefs confronted and hence rendered insecure by inconsistent evidence or alternative opinions. Thus, some people may desire closure because they value ordered environments, whereas others may seek closure out of a concern for predictability, decisiveness, ambiguity avoidance, or sticking to their own knowledge, belief or opinion. Of course, closure may be desired for more than one reason. Hence, the different facets are considered additive in their impact on the total need for closure (Kruglanski et al., 1997).

Previous research suggests that at least some of the need for closure facets and related constructs are positively related to religiosity. In this respect, no matter how it was measured, religiosity has been shown to relate to intolerance of ambiguity, dogmatism and rigidity. However, these relations are not always very strong. Some studies even suggest that religiosity is independent of intolerance of ambiguity, dogmatism and rigidity (for recent overviews, see Duriez, 2003c; Saroglou, 2002b). Some studies seem to suggest that the way in which religion is perceived and treated might be more important than religiosity as such. Feather (1967), for instance, did find a relation between religious affiliation and intolerance of ambiguity and dogmatism, but this relation was obscured by the kind of religious affiliation, with members of fundamentalist groups obtaining higher intolerance of ambiguity and dogmatism scores than members of liberal religious groups (cf. Glass, 1971). In a similar vein, Stanley (1963) argued that it is fundamentalism that represents the religious manifestation of the closed mind, and Pargament et al. (1985) argued that churches may selectively attract and keep members with and / or shape members towards varying levels of tolerance of ambiguity.

In line with these findings, Duriez (2003c) hypothesized that, rather than religion per se, dealing with religious contents in a fundamentalist, dogmatic, literal way constitutes the real threat to reason. Hence, he expected need for closure to relate to Literal versus Symbolic, rather than to Exclusion versus Inclusion. However, both religiosity dimensions appeared to relate to need for closure (cf. Saroglou, 2002b). In spite of this apparent similarity, a closer look at the data revealed that these religiosity dimensions related to different facets of need for closure. Apparently, religious people have a higher need for closure than people who are less religious because they desire an ordered and predictable environment. This suggests some instrumentality of religion, which is in line with the point of view that religion, by offering a global worldview and a moral program, reduces the complexity of life and creates a psychologically safe environment (Schwartz & Huismans,
In contrast, people who deal with religious contents in a literal way have a higher need for closure than people who deal with religious content in a symbolical way because they need to avoid ambiguity or are unwilling to have their beliefs confronted by alternative opinions. Thus, apparently, whereas religious belief as such seems associated with a mere preference for order, structure, and predictability, it is those who deal with religious content in a literal way who are incapable of dealing with alternative opinions.

Religion and Intolerance

The previous section suggests that religious people tend to have different value priorities, tend to subscribe culturally conservative beliefs, and tend to differ in general cognitive functioning by having a heightened need for order, structure, and predictability. These findings are in line with the finding that religious people are characterized by a normative identity style, and, hence, are more likely to rely on and conform to the prescriptions and standards of significant others, reference groups, authorities, and traditions. Given the fact that indices of cognitive conservatism have often been shown to predict prejudice (e.g., Van Hiel, Pandelaere & Duriez, 2004), this takes us straight to what is probably the most important paradox within the psychology of religion. Whereas all world religions proclaim brotherly love, history is littered with moments in which religion has provided a justification for, or has given cause to, atrocities directed towards people from a different religion, a different culture, a different race, a different sex, or a different sexual orientation. A number of historians and theologians concluded from this that religion should be considered as a catalyst for prejudice and intolerance, and a lot of psychological and sociological research has been carried out to investigate this (for a recent research overview, see Duriez, 2004a). First, we will look at how religion relates to some of the most important prejudice dispositions that were identified in previous research. Second, we will look more specifically at the relationship between religion and ethnic prejudice.

Religion and Prejudice Dispositions

Two research lines have dominated the quest for the antecedents of prejudice. The first has viewed prejudice as resulting from group processes (e.g., Tajfel & Turner, 1979). The second has regarded it as a result of dispositional factors making people more or less likely to adopt prejudice (e.g., Adorno, Frenkel-Brunswik, Levinson & Sanford, 1950; Altemeyer, 1981; Pratto, Sidanius, Stallworth & Malle, 1994). The latter approach received support from research that demonstrated the generality of prejudice. That is, people that are unfavorable to one outgroup tend to be unfavorable to other outgroups (e.g., Duckitt, 1992). This generality principle has been interpreted as suggesting stable individual differences which predispose people to adopt
An introduction to the Post-Critical Belief Scale: Internal structure and external relationships

Two individual difference dimensions have received empirical support. The first – the authoritarian personality – was introduced by Adorno et al. (1950), and was reconceptualized to Right-Wing Authoritarianism (RWA) by Altemeyer (1981). RWA can be defined as the covariation of (1) a strict adherence to conventional norms and values (conventionalism), (2) an uncritical subjection to authority (authoritarian submission), and (3) feelings of aggression towards norm violators (authoritarian aggression). The second – the Social Dominance Orientation (SDO) – was introduced by Pratto et al. (1994) as a dimension delineating the extent to which one desires the ingroup to dominate outgroups. And although, according to Altemeyer (1998), RWA and SDO constitute two faces of the authoritarian personality, with RWA referring to authoritarian submission and SDO referring to authoritarians dominance, research has shown that both constructs have a different genesis and are powerful but relatively independent predictors of prejudice (Duckitt, 2001; Duckitt, Wagner, du Plessis & Birum, 2002; Duriez, Van Hiel & Kossowska, 2005; Van Hiel, et al., 2004).

Among other things, Duriez and Van Hiel (2002) focused on the relation between the PCBS and RWA and SDO. Their results suggest that, whereas Literal versus Symbolic relates negatively to RWA and SDO, Exclusion versus Inclusion relates positively to RWA but is unrelated to SDO. These findings support previous research that has shown fundamentalism to be typical of authoritarianism (e.g., Altemeyer, 1996) and religiosity to be typical of RWA but not SDO (Altemeyer, 1998; Saucier, 2000; Van Hiel and Mervielde, 2002). It is important to note that, according to some researchers, three factors can be discerned within the RWA scale: Punitive authority, sexual morality, and rejecting dissent. The religiosity-RWA relation would be caused by sexual morality (Schlueterman, Schluderman, Needham, Mulega & Huynh, 2003). This might explain the relations of RWA with Exclusion versus Inclusion, suggesting that this relationship can be reduced to differences in values and attitudes.

Religion and Ethnic Prejudice

Following the reasoning of Schluderman et al. (2003), it might be that, although being religious seems to go hand in hand with certain aspect of (right-wing) authoritarianism, it might not be related to those aspects of (right-wing) authoritarianism that predict racism and ethnic prejudice. Therefore, Duriez (2004a, Duriez, Appel & Hutsebaut, 2003) examined the relationship between religiosity and ethnic prejudice in more detail. Results show that Exclusion versus Inclusion is not related to ethnic prejudice. In sharp contrast, the Literal versus Symbolic dimension is highly negatively related to ethnic prejudice. These findings are compatible with earlier research showing that there is no clear relation between being religious or not and being prejudiced or not, but that this is dependent upon how people deal with religion. More specifically, these findings suggest that what seems to
be crucially important is not so much whether one is religious or not, but the way in which religious contents are processed. If religious contents are processed in a literal fashion, one is more likely to be intolerant against people of a different race and / or culture. In contrast, if religious contents are processed symbolically, one is unlikely to display ethnic prejudice. Hence, these results contribute to the debate whether religious people are more inclined to prejudice. When the way in which religious contents are processed is taken into account, the impact of being religious is trivial, implying that the danger of religious fundamentalism does not lie in religion as such but in the cognitive style that is promoted.

This is in line with Altemeyer (2003), who argued that the relationship between fundamentalism and prejudice should be accounted for by a general attitude towards whatever belief one holds, rather than in terms of particular belief system. According to Altemeyer, fundamentalists are characterized by two important tendencies: The tendency to show heightened identification with what they perceive to be the in-group and the tendency to show heightened rejection of what they perceive to be the out-group. Following this reasoning, it can be argued that Religious Fundamentalism (= RF) can also be displayed by non-religious people. Some non-religious people, namely those that process religious issues in a literal and closed-minded way, can be expected to show these very same tendencies. The only difference between religious and non-religious RF would then be the nature of the in-group. Whereas, for religious RF, the in-group will be the own denomination, for non-religious RF the in-group will be the group of atheists. From this perspective, both religious and non-religious RF can be expected to go hand in hand with ethnic prejudice that is grounded in RF. For instance, when thinking of immigrants, people in Western Europe spontaneously think of Muslims. This group of people is especially likely to become a target of RF. They will be a target of non-religious RF because of their religiousness, and of religious RF because of the fact that they belong to a non-Christian denomination. Duriez (2004a) has shown that this religious ethnocentrism cannot be reduced to differences in authoritarianism or to differences in empathy and perspective taking (see below).

Religion and Pro-Sociality

Apparently, although, compared to non-religious people, religious people obtain higher scores on measures of right-wing authoritarianism, they do not display elevated levels of ethnic prejudice. But of course, there are several other domains apart from ethnic prejudice in which anti-social behavior and anti-social attitudes can be displayed. In this section, we will further investigate the potential impact of religiosity on prosocial attitudes. More specifically, we will summarize results obtained in studies relating the
two dimensions of religiosity that are derived from the Post-Critical Belief Scale to two individual difference dimensions that are supposed to predict prosocial behavior: Empathy and morality.

**Religion and Empathy**

Recently, McFarland (2001) made a review of all the known individual differences that relate with one or more form(s) of prejudice, and set up a series of studies to identify the most important prejudice dispositions. According to McFarland (2001), apart from RWA and SDO, a third prejudice disposition is constituted by lack of empathy. In line with this, Batson (1983) argued that empathy mediates a kin-specific altruistic impulse that is part of the human genetic heritage, and that one of the functions of religion is to extend the range of this altruistic impulse beyond the kinship circle. Religion achieves this through the use of kinship language and imagery: By teaching that we are all children of God, religion enhances an altruistic impulse that is already present, extending it from the kinship circle to human kind in general. However, it is clear that religion does not always succeed in this (see above).

Because it is considered fundamental to altruism and helping behaviour (e.g., Batson, 1991, 1998), Duriez (2004b) focussed on empathy. It was shown that, whereas empathy is unrelated to Exclusion versus Inclusion, it is positively related to Literal versus Symbolic. These results contribute to the debate whether religious people are more inclined to feel empathy towards their fellow men and, hence, are more likely to provide help to a person in need. The answer is no. Apparently, this debate has its origin in the fact that the religiosity measures that have been used in previous studies confuse being religious or not with the way in which religion contents are processed. When separating both aspects, religiosity has no connection with empathy whatsoever. In contrast, the way in which religion contents are processed tells a great deal about whether one is likely to experience feelings of empathy and, hence, presumably, to display helping behaviour. These findings are in line with the relations between the religiosity dimensions on the one hand, and Agreeableness, Self-Transcendence and Self-Enhancement values, prejudice, and authoritarianism on the other hand (see above).

**Religion and Morality**

Kohlberg (1981) argued that religiosity and moral reasoning are inherently unrelated because they constitute two distinct areas of human concern. Whereas moral decision making is grounded in rational arguments of justice and is influenced by level of cognitive development (e.g., education) and exposure to socio-moral experiences (e.g., role taking opportunities), religious reasoning is based on revelations by religious authorities. Thus, whereas the primary function of morality would be to resolve competing
claims among individuals, the primary function of religion would be to affirm morality. In other words, whereas moral reasoning provides moral prescriptions, religious reasoning affirms moral judgment as meaningful. In spite of this, several researchers attempted to associate both concepts and have come to the conclusion that religiosity and morality are not unrelated at all (Duriez, 2003b). However, some researchers (e.g., Wahrman, 1981) have argued that the apparent religiosity-morality relation can probably be explained by cognitive processes such as dogmatism. Given the fact that the PCBS allows to disentangle the effects of being religious or not (Exclusion versus Inclusion) from the way in which religious contents are processed (either in a literal or in a symbolical way), and given the fact that the Literal versus Symbolic dimension relates to dogmatism and closed-mindedness (for a recent overview, see Duriez, 2003a), the PCBS allows to directly test this hypothesis.

In this respect, Duriez (2003b) and Duriez and Soenens (2006b) examined the relation between the PCBS and the Moral Judgment Test (MJT; Lind, 1998). In the MJT, people are confronted with moral dilemmas. For each dilemma, a person has to indicate to which degree he agrees with the solution chosen by the main character(s). Next, this person is confronted with six arguments pro and six arguments contra his opinion on how to solve the dilemma. Each argument represents one of Kohlberg’s (1958) stages of moral reasoning. The sum score a person obtains for the arguments referring to the same stage indicates the degree to which this person reasons according to this socio-moral perspective. In addition, the C-index measures the degree to which the judgment about these arguments is consistent. A highly morally competent person will appreciate all arguments referring to a certain socio-moral perspective, irrespective of whether it is a pro or contra argument, and will obtain a C-index close to 100. A person with low moral competence will appreciate the pro arguments only and will obtain a C-index close to zero. Results showed that the religiosity-morality relation that was observed in previous studies can be explained by the way in which people process religious contents. People processing religious contents in a symbolic way show higher moral competence. In addition, people processing religious contents in a symbolic way tend to make a sharper distinction between moral arguments of the lower stages of Kohlberg’s model and moral arguments of the higher stages. In comparison to people that process religious contents in a literal way, they tend to pay less attention to arguments of the lower stages and more attention to arguments of the higher stages. In contrast, in all samples, being religious as such was unrelated to both moral attitudes and moral competence. Results supported the idea of Kohlberg (1981) that religiosity and morality are inherently unrelated and the idea of Wahrman (1981) that the religiosity-morality relation that was observed can be explained by cognitive processes. These findings are perfectly in line with the findings reported above on intolerance, empathy, etcetera.
Religion and Personal Well-Being

And now for something completely different. Whereas all of the studies that were summarized so far speak about the social aspect of religion, converging on the conclusion that there appear to be no real substantial differences between religious and non-religious people, the next section will deal with the impact of religion on everyday personal functioning. Research argues that religiosity does have an impact on personal well-being. The reason for this would be that more religious parents, who are known to generally produce a more religious offspring, tend to socialize their children in a specific way, which would, in turn, impact on the personal well-being of their offspring. The data we gathered so far with the Post-Critical Belief Scale do indicate that there is an intergenerational transmission of both being religious or not as such and of the way in which people process religious contents. However, because these data were not reported anywhere (so far), we will not go into this in more depth. We will limit ourselves to discussing our findings concerning how religiosity relates to parenting, after which we will look at whether religiosity relates to well-being. Finally, we will look at relations between people’s general motivation, motivation for religious behaviors and their outlook on religious issues.

Religion and Parenting

Studies that have examined the relation between parental religiosity and parenting have typically focused on parents of preadolescents and on narrow parenting outcomes such as spanking, corporal punishment and physical discipline in general (Mahoney, Pargament, Tarakeshwar & Swank, 2001). According to Mahoney et al. (2001), studies tend to converge on the conclusion that parents who are affiliated with conservative Christian groups or who hold literalist beliefs are more likely to endorse and use corporal punishment. However, Wilcox (1998) has shown that parents who hold conservative theological beliefs are also more likely to hug and praise their children. Together with the finding that greater parental religiosity relates to a stronger emphasis on child obedience (Jackson et al., 1999), this suggests that conservative theological beliefs go hand in hand with both strict parental discipline and an unusually warm and expressive parenting style.

Although a multitude of studies addressed the importance of parental religiosity among parents of preadolescent children, few studies have investigated the relation between religiosity and parenting among parents of adolescents. The studies that have been conducted suggest that greater parental religiosity relates to positive parenting qualities (for an overview, see Duriez, Soenens, Neyrinck & Vansteenkiste, submitted). Because previous research failed to do this, Duriez et al. (submitted) decided to use multidimensional measures of religiosity (the PCBS) and parenting, and to use parent and adolescent reports of the parenting constructs in order to exclude
problems of shared method variance. As for the measurement of parenting, Darling and Steinberg (1993) argued that, in order to understand parental influence, parents’ rearing style (i.e., how parents socialize their children) should be distinguished from the goals they promote (i.e., what parents socialize in their children). Following this recommendation, Duriez et al. (submitted) paid attention to parenting styles and parental goal promotion.

As far as parenting styles are concerned, Duriez et al. (submitted) looked at parental need support (which pertains to the quality of the parent-child relationship) and parental regulation (which relates to parental regulatory and structuring capacities). Need support would diminish vulnerability to internalized problems (such as depression and anxiety) (Barber & Harmon, 2002) and would to relate to indicators of adjustment (Gray & Steinberg, 1999). Adequate regulation should provide adolescents with a clear set of guidelines for appropriate behavior and teach them to self-regulate and become less susceptible to negative peer influences and, hence, prevent them from engaging in antisocial behavior such as delinquency and drug use (Barber, 1997). As far as parental goal promotion is concerned, Duriez et al. (2007) looked at the promotion of intrinsic versus extrinsic and openness to change versus conservation goals. Intrinsic rather than extrinsic goal promotion would increase engagement, performance, achievement, and persistence (Vansteenkiste, Simons, Bachman, Braet & Deci, 2005; Vansteenkiste, Simons, Lens, Sheldon & Deci, 2004; Vansteenkiste, Simons, Soenens & Lens, 2004), as well as to prevent adolescent prejudice dispositions such as RWA and SDO (Duriez, Soenens & Vansteenkiste, 2007). The parental promotion of conservation rather than openness to change goals would increase RWA (Duriez, et al., 2007), which is associated with indices of defensive functioning, such as a normative identity style and a heightened need for closure (Soenens, Duriez & Goossens, 2005; Van Hiel, Pandelaere & Duriez, 2004).

When differences in religiosity are separated from differences in religious cognitive style, religiosity as such no longer seemed to have positive effects on parenting. Differences in being religious related to differences in conservation goal promotion only, with more religious parents being more inclined to promote conservation goals at the expense of openness to change goals. In contrast, an openminded religious cognitive style does seem to relate to better parenting. A symbolic approach to religion related to need support and the promotion of intrinsic rather than extrinsic goals. In short, results suggest that the effects of being religious on parenting are limited, and not very positive. Having an openminded religious cognitive style, however, does seem to relate to better parenting.

Religion and Mental Health

A controversial issue in the field of the psychology of religion concerns the question whether religion impacts on mental health. Throughout history,
opinions on this relationship were sharply divided. For Freud (1962), for example, religious ideas are illusions, while Jung (1933) considered religion as necessary for mental health. In recent years, the debate continued. Whereas Bergin (1991) believed that religion can be powerfully beneficial and should therefore be integrated in psychotherapy, Ellis (1980) stated that religion is associated with emotional disturbance.

Literature reviews concerning empirical research identified hundreds of studies investigating the link between religion and mental health (Hackney & Sanders, 2003). However, no consensus is yet reached. Although several researchers still search for an unambiguous answer to the question whether religion has a positive or a negative influence on individual’s mental health, it becomes more and more clear that this question is too simple to catch the complex reality. The multidimensionality of the concept of religion can be one reason why a simple and straightforward answer to the question concerning the impact of religion on mental health is not possible. Consequently, several researchers recently indicate that more attention should be paid to the operationalization and measurement of religion.

In this respect, Dezutter, Soenens, and Hutsebaut (2006) assumed that the use of the Post-Critical Belief Scale might enhance our insight in the complex relation between religion and mental health. They argued that disentangling between religious beliefs as such and the social-cognitive style to process religious contents may shed a more differentiated light on this relationship. Specifically, in line with the research conducted within the framework of the PCBS, they hypothesized that the Literal versus Symbolic dimension would be more strongly related to individual functioning than the Exclusion versus Inclusion dimension. Results confirmed this, and showed that, whereas a literal approach of religious contents is associated with lower mental health, the Exclusion versus Inclusion dimension is unrelated to mental health. It was hypothesized that coping and stress appraisal mechanisms might account for this negative link between a literal approach of religion and mental health. Literal thinkers have been shown to score high on need for closure and low on measures of openness to experience and flexible identity management (Duriez, Soenens & Beyers, 2004). Given these characteristics, literal thinkers are likely to appraise stress and change as threatening and to engage in rigid and maladaptive coping mechanisms, which, in turn, create a vulnerability to negative well-being.

Religion and Motivation

From the perspective of self-determination theory (Deci & Ryan, 2000), the way in which people approach religious contents is expected to relate to a specific motivational pattern. Based on Hodgins and Knee (2002), an openminded outlook on religious information should relate to an autonomous causality orientation, whereas a closedminded interpretation should relate to a controlled causality orientation. Autonomously oriented people
initiate or regulate their behavior by personal interests and challenges or by well-internalized and self-endorsed values. People with a controlled orientation typically let their behavior be regulated either by internally controlling imperatives in terms of »should«, »must« or »have to« (introjected regulation) or by events in the environment that are contingent upon behavioral enactment (e.g., external obligations, rewards or punishments).

Consistent with this, Neyrinck (2006) showed that, whereas an autonomous causality orientation relates to a symbolic approach of religious contents, a controlled causality orientation relates to a literal approach. The causality orientations were not significantly related to the Exclusion versus Inclusion dimension. Instead of looking at these general causality orientations, Neyrinck, Vansteenkiste, Lens, Duriez, and Hutsebaut (2006), investigated the relation between religiosity and (autonomous and controlled) regulations for religious behavior. Consistent with Neyrinck (2006), they found a symbolic approach of religious contents to relate to autonomously regulated religious behavior.

Conclusion

The results that are summarized in this chapter substantiate the claim that the Post-Critical Belief Scale, which can be used to disentangle the effects of being religious or not (Exclusion versus Inclusion) from the way in which religion and religious contents are processed (either in a literal or in a symbolical way), is an extremely valuable instrument to shed a new light on some important debates in the field of the psychology of religion. We will now briefly summarize this multitude of findings. Before doing so, we wish to stress once more that, although all of the results that were described are based on multiple samples, most samples were gathered in Flanders (Belgium). However, whenever data from other countries are available as well (e.g., Duriez et al., 2003; Duriez et al., 2005), results appear cross-culturally valid. And although the Post-Critical Belies Scale was constructed for the use in a Christian context, initial data gathered with a modified scale among Belgian Muslims suggest that the results can also be generalized across denomination (Vancauwenberghes, Van Hiel & Duriez, 2007).

Exclusion versus Inclusion

Religious people are unlikely to have specific personality traits, are neither more nor less likely to be prejudiced, to feel empathy towards fellow human beings, or to attain higher moral competence levels. Likewise, they are unlikely to be better parents, to feel better about themselves or to have a qualitatively different motivation. However, religious people do hold different values (attaching more importance to traditional values). They are more likely to let themselves be guided by other people whenever they need to
An introduction to the Post-Critical Belief Scale: Internal structure and external relationships

make important decisions in life, are more likely to hold cultural conservative and right-wing authoritarian beliefs, and are more likely to prefer order, structure and predictability. In sum, religious people can be characterized as attaching more importance to traditional values, norms and social conventions. The importance of this might stem from a psychological need for order, structure and predictability. However, attaching importance to this kind of values does not seem to lead them to reject people that chose to live their lives according to different standards. In sum, apart from displaying somewhat more conservatism, it doesn’t seem to make a big difference whether one is religious or not. Hence, the Post-Critical Belief Scale seems to show that being religious or not as such does not have a lot of implications, and, hence, is not of much importance.

Literal versus Symbolic

People who process religious contents in a literal way are less likely to be agreeable and open to new experiences. They attach more importance to Self-Enhancement values as opposed to Self-Transcendence values, are more likely to hold culturally conservative and prejudiced attitudes. They are less likely to feel empathy towards fellow human beings and are less likely to attain high levels of moral competence. They are more likely to be closed-minded and intolerant of ambiguity, and whenever they have to make important decisions concerning their own identity, they fail to actively seek out relevant information and tend to procrastinate these decisions. Finally, they are less likely to be good parents, less likely to have a sense of personal well-being, and more likely to feel controlled rather than to feel autonomous. In sum, both on a personal and social level, although whether one is religious does not seem to be very important, the way in which people deal with religion and the way in which they process religious contents is extremely important.

REFERENCES


An introduction to the Post-Critical Belief Scale: Internal structure and external relationships


Appendix A

The 33 item Post-Critical Belief Scale (PCBS) and their labels (see Figure 1)

<table>
<thead>
<tr>
<th>#</th>
<th>Label</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>S1</td>
<td>The Bible holds a deeper truth which can only be revealed by personal reflection</td>
</tr>
<tr>
<td>02</td>
<td>S2</td>
<td>If you want to understand the meaning of the miracle stories from the Bible, you should always place them in their historical context</td>
</tr>
<tr>
<td>03</td>
<td>O1</td>
<td>You can only live a meaningful life if you believe</td>
</tr>
<tr>
<td>04</td>
<td>O2</td>
<td>God has been defined for once and for all and therefore is immutable</td>
</tr>
<tr>
<td>05</td>
<td>E1</td>
<td>Faith is more of a dream, which turns out to be an illusion when one is confronted with the harshness of life</td>
</tr>
<tr>
<td>06</td>
<td>S3</td>
<td>The Bible is a guide, full of signs in the search for God, and not a historical account</td>
</tr>
<tr>
<td>07</td>
<td>O3</td>
<td>Even though this goes against modern rationality, I believe Mary truly was a virgin when she gave birth to Jesus</td>
</tr>
<tr>
<td>08</td>
<td>E2</td>
<td>Too many people have been oppressed in the name of God to still be able to have faith</td>
</tr>
<tr>
<td>09</td>
<td>R1</td>
<td>Each statement about God is a result of the time in which it was made</td>
</tr>
<tr>
<td>11</td>
<td>O4</td>
<td>Only the major religious traditions guarantee admittance to God</td>
</tr>
<tr>
<td>10</td>
<td>S4</td>
<td>Despite the fact that the Bible has been written in a completely different historical context from ours, it retains a basic message</td>
</tr>
<tr>
<td>12</td>
<td>R2</td>
<td>Ultimately, religion means commitment without absolute guarantee</td>
</tr>
<tr>
<td>13</td>
<td>S5</td>
<td>Because Jesus is mainly a guiding principle for me, my faith in him would not be affected, if it would appear that he never actually existed as a historical individual</td>
</tr>
<tr>
<td>14</td>
<td>O5</td>
<td>Religion is the one thing that gives meaning to life in all its aspects</td>
</tr>
<tr>
<td>15</td>
<td>R3</td>
<td>The manner in which humans experience their relationship to God, will always be colored by the times they live in</td>
</tr>
<tr>
<td>16</td>
<td>S6</td>
<td>The historical accuracy of the stories from the Bible is irrelevant for my faith in God</td>
</tr>
<tr>
<td>17</td>
<td>O6</td>
<td>Ultimately, there is only one correct answer to each religious question</td>
</tr>
<tr>
<td>18</td>
<td>E3</td>
<td>God is only a name for the inexplicable</td>
</tr>
<tr>
<td>19</td>
<td>R4</td>
<td>Official Church doctrine and other statements about the absolute will always remain relative because they are pronounced by human beings at a certain period of time</td>
</tr>
<tr>
<td>#</td>
<td>Label</td>
<td>Item</td>
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<td>---</td>
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</tr>
<tr>
<td>20</td>
<td>E4</td>
<td>The world of Bible stories is so far removed from us, that it has little relevance</td>
</tr>
<tr>
<td>21</td>
<td>O7</td>
<td>Only a priest can give an answer to important religious questions</td>
</tr>
<tr>
<td>22</td>
<td>E5</td>
<td>A scientific understanding of human life and the world has made a religious understanding superfluous</td>
</tr>
<tr>
<td>23</td>
<td>R5</td>
<td>God grows together with the history of humanity and therefore is changeable</td>
</tr>
<tr>
<td>24</td>
<td>R6</td>
<td>I am well aware my ideology is only one possibility among so many others</td>
</tr>
<tr>
<td>25</td>
<td>O8</td>
<td>I think that Bible stories should be taken literally, as they are written</td>
</tr>
<tr>
<td>26</td>
<td>S7</td>
<td>Despite the high number of injustices Christianity has caused people, the original message of Christ is still valuable to me</td>
</tr>
<tr>
<td>27</td>
<td>E6</td>
<td>In the end, faith is nothing more than a safety net for human fears</td>
</tr>
<tr>
<td>28</td>
<td>R7</td>
<td>Secular and religious worldviews give valuable answers to important questions about life</td>
</tr>
<tr>
<td>29</td>
<td>E7</td>
<td>In order to fully understand what religion is all about, you have to be an outsider</td>
</tr>
<tr>
<td>30</td>
<td>E8</td>
<td>Faith is an expression of a weak personality</td>
</tr>
<tr>
<td>31</td>
<td>R8</td>
<td>There is no absolute meaning in life, only giving directions, which differs for everyone</td>
</tr>
<tr>
<td>32</td>
<td>E9</td>
<td>Religious faith often is an instrument for obtaining power, and that makes it suspect</td>
</tr>
</tbody>
</table>
| 33 | S8 | I still call myself a Christian, even though a lot of things that I cannot agree with have happened in the past in name of Christianity,
An introduction to the Post-Critical Belief Scale: Internal structure and external relationships

Appendix B

The 18 item Post-Critical Belief Scale (PCBS) and their labels (see Figure 1)

<table>
<thead>
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</tr>
<tr>
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<td>E1</td>
<td>Faith turns out to be an illusion when one is confronted with the harshness of life</td>
</tr>
<tr>
<td>04</td>
<td>S3</td>
<td>The Bible is a rough guide in the search for God, and not a historical account</td>
</tr>
<tr>
<td>05</td>
<td>O3</td>
<td>Even though this goes against modern rationality, Mary truly remained a virgin</td>
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<tr>
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<td>R1</td>
<td>Each statement about God is a result of the time in which it was made</td>
</tr>
<tr>
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<td>Even though the Bible was written a long time ago, it retains a basic message</td>
</tr>
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<td>O4</td>
<td>Only the major religious traditions guarantee admittance to God</td>
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<td>10</td>
<td>O6</td>
<td>Ultimately, there is only one correct answer to each religious question</td>
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<tr>
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<td>E4</td>
<td>The world of Bible stories is so far removed from us, that it has little relevance</td>
</tr>
<tr>
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<td>E5</td>
<td>Science has made a religious understanding of life superfluous</td>
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<tr>
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<td>R5</td>
<td>God grows together with the history of humanity and therefore is changeable</td>
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<td>S7</td>
<td>Despite the injustices caused by Christianity, Christ’s message remains valuable</td>
</tr>
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<td>17</td>
<td>E6</td>
<td>In the end, faith is nothing more than a safety net for human fears</td>
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