

Meta-stereotypes of Groups with Opposite Religious Views: Believers and Non-Believers

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ABSTRACT

Recent research on meta-stereotypes, that is, ingroup members' beliefs about how the outgroup sees them, may be of importance for intergroup relations between believers and non-believers, especially in the context of increasingly secularized societies. How do believers and non-believers think that outgroup members, respectively non-believers and believers, see them? Do these meta-stereotypes accurately reflect the outgroup's actual stereotypes? We investigated these questions by focusing on a series of relevant characteristics selected on the basis of previous research on religion and personality. Participants ($n = 100$) provided their stereotypes and meta-stereotypes on eight personality traits. Believers and non-believers tended to share the meta-stereotype that the outgroup members see them as respectively high versus low in prosociality and conservatism and low versus high in hedonism and impulsivity. In contrast, believers seemed to ignore that non-believers see them as dogmatic and non-believers often exaggerated their meta-stereotypes in comparison to how believers actually saw them. Finally, highly identified group members tended to deny the outgroup's core characteristic, that is, believers' relative higher altruism and non-believers' relative lower dogmatism. We discuss the importance of knowing commonalities and discrepancies between stereotypic and meta-stereotypic perceptions for understanding intergroup perceptions and relations between groups that hold conflicting religious positions. Copyright © 2011 John Wiley & Sons, Ltd.

Key words: atheism; dogmatism; intergroup perceptions; meta-stereotypes; personality; prosociality; stereotypes

INTRODUCTION

For centuries, religious non-believers experienced their conviction as a private, almost confidential issue. If things ever became public, they felt positioned as an isolated case, placed apart from what constituted the normative social being. In contemporary Western societies characterized by growing secularization, non-believers, although still the minority, constitute informal communities that are growing in size and influence. In several

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countries, non-believers have even developed organized formal communities that parallel organized religious groups (for example, in terms of structure, ideology, goals and political ambitions). Similarly, being a religious believer today implies an awareness of belonging to a community whose borders are narrower than those of the broader society. An intriguing consequence of this evolution is that believers and non-believers can grow up in relatively distinct worlds (families, schools, social networks, professional environments) while having to co-exist and interact in the larger social setting.

Little if anything is known about the intergroup relations between religious believers and non-believers. How does each of these groups perceive the other? What do believers and non-believers think are the stereotypes that the outgroup members hold about them? Do these perceptions and meta-perceptions correspond to what we know from research in the psychology of religion? A distinct goal of the present study is to initiate research on the intergroup relations between groups with strongly opposing religious convictions and ideologies. Specifically, we focus here on the meta-stereotypes and stereotypes between believers and non-believers.

Meta-stereotypes and their relevance in intergroup relations between believers and non-believers

It is only relatively recently that social psychologists have started to investigate meta-perceptions or meta-stereotypes between groups, that is, people's beliefs about how they are perceived by an outgroup (Vorauer, Main & O'Connell, 1998; see also Yzerbyt, Muller & Judd, 2009). Meta-stereotypes have become the focus of an increasing number of studies due to their potential consequences for intergroup relations in general and intergroup encounters in particular (Shelton & Richeson, 2005; for a review, see Yzerbyt & Demoulin, 2010). As a matter of fact, what people think members of another group think about them may greatly affect the way the interaction with one or several members of this group unfolds. To give one example, Vorauer and Sasaki (2009) found that negative meta-stereotypes were responsible for an ironically detrimental effect of empathizing with outgroup members in intergroup contact situations. In terms of the content of specific groups' meta-stereotypes, previous research has investigated the meta-stereotypes of high status and dominant groups (for example, Vorauer et al., 1998; Vorauer, Hunter, Main & Roy, 2000), men and women as physically attractive (Marcus & Miller, 2003), racial minorities (for example, Klein, Pohl & Ndagijimana, 2007) and groups differing in ethnicity, gender or nationality (for example, Judd, Park, Yzerbyt, Gordijn & Muller, 2005; Yzerbyt, Provost & Corneille, 2005).

Overall, these studies have shown the uniquely important role of meta-stereotypes in intergroup relations. In their interaction with others, people are affected not only by the stereotypes they have about the others (for example, White people may think Black people are lazy) but also by the beliefs they have about how the others see them (for example, White people may think Black people see them as arrogant). Often (negative) meta-stereotypes increase and amplify the negative ingredients of intergroup (and interpersonal) interactions, sometimes leading to a vicious circle. As a wealth of research on the so-called stereotype threat phenomenon shows (Schmader, Johns & Forbes, 2008), knowing or believing that an outgroup member sees someone as incompetent increases the likelihood for the target to behave in a way consistent with this belief. Alternatively, people may use meta-stereotypes strategically in order to secure specific advantages in

the interaction (Klein & Azzi, 2001). For instance, subordinate groups' meta-stereotypes about dominant groups may elicit feelings of guilt in the latter and the sense that their position is illegitimate (Crocker, Major, & Steele, 1998).

A particular and highly interesting case in intergroup relations involves groups that are opposite in their respective ideologies, beliefs and values. Groups that do not differ on a single dimension (for example, ethnicity) but are defined as being the strict opposite of each other on a range of characteristics can be exemplary cases for studying reciprocal meta-stereotypes and related social consequences. The case of religious people or, more generally, believers in God or in the divine versus non-religious people or atheists is clearly one in which group members not only hold different positions but clearly embrace opposite ideologies. History and contemporary social reality, especially in secularized countries with an increasing number of non-believers and atheists, provide plenty of examples of the opposition between these two groups: conflicting values, attitudes, behaviours, legislations, politics, media, and even opposite perceptions of the origin of humanity.

Religious and non-religious individuals differ in many respects. Beyond personality characteristics that correspond to specific religious styles or dimensions (for example, religious orthodoxy, fundamentalism and quest religion), empirical research has established that general, personal religiosity is associated with several personality characteristics (traits) and individual differences (for example, in values) that are rather constant across samples, religions and cultures. First, religious people tend to be prosocial in terms of personality traits (Saroglou, 2010), values (Saroglou, Delpierre & Dernelle, 2004) and behaviour (Batson, Anderson & Collins, 2005; Saroglou, Pichon, Trompette, Verschueren & Dernelle, 2005). Second, there is a tendency for religious people to display orderliness and higher levels of closed-mindedness, certainly in terms of need for closure (Duriez, 2003; Saroglou, 2002) and conservatism (Bouchard, 2009) but also, when studies provide significant results, authoritarianism (Wink, Dillon & Prettyman, 2007) and dogmatism (Ross, Francis & Craig, 2005), and low levels of openness to experience (Saroglou, 2010). Note that the latter constructs are more typical of religious fundamentalism (Altemeyer & Hunsberger, 2005; Saroglou, 2010). Third, although there was evidence in favour of an introverted component in religiousness several decades ago (Francis, 1992), religiousness has been found to be unrelated to extraversion and neuroticism in more recent studies (Saroglou, 2010). In contrast, data suggest that religiousness continues to be systematically related to low impulsivity (Francis, 1992; Saroglou, 2010). Fourth, religious people tend to attribute little importance to hedonistic values (Saroglou et al., 2004) and are less prone to risk-taking (Miller & Hoffman, 1995). Fifth, there is some research suggesting a link between religion and honesty in terms of both personality traits and relevant behaviour (Hood, Hill & Spilka, 2009; Randolph-Seng & Nielsen, 2007). Finally, constructs related to intelligence, cognitive abilities and competence are most often unrelated or weakly and inconsistently related to general religiousness (Francis, 1998; Jeynes, 2004; Nyborg, 2009).

Little, if anything, is known in relation to stereotypes on religious and non-religious people and, as far as we know, no empirical research has examined the meta-stereotypes involving these two targets. In a previous study, Pichon (2002) provided three groups of participants (total $N = 153$) with the same brief description of a fictitious target. Depending on conditions, the target was additionally described as religious or atheist or no specific mention in relation to religion was made. Participants provided their impression of the personality of the target through the evaluation of behavioural sentences. The religious target

was perceived as altruistic, modest, tolerant and low in impulsivity and stimulation. The atheist target was perceived as neurotic and hedonistic. Using a within-subject design, Lewis (2001) found that when participants were told to consider themselves as religious, they attributed to themselves lower Psychoticism (that is equivalent to high Agreeableness and Conscientiousness) and lower Extraversion compared to when they were told to consider themselves as non-religious. Finally, research shows that non-religious targets are evaluated negatively by religious students, that is, as being hedonistic, individualistic and cynical (Harper, 2007), whereas churchgoers are evaluated by students as being more moral than non-churchgoers (Isaac, Bailey & Isaac, 1995).

Goals of the present study

The main goal of the present study was to investigate meta-stereotypes of believers and non-believers, that is, their view as to how outgroup members (respectively, non-believers and believers) see them. The study of these kinds of meta-stereotypes should provide important information on a relevant aspect (religious meta-stereotypes) of relations between groups with opposite ideologies whose interactions within most societies (especially secularized ones) can be problematic and sometimes conflicting.

To study these meta-stereotypes, we chose to focus on characteristics that could be relevant in terms of the previous literature on religiosity and personality (self-perceptions): altruism, honesty, conservatism, dogmatism, impulsivity, hedonism and extraversion. We also added what prior work would suggest to be an irrelevant construct – competence – in order to ensure that possible divergences in meta-stereotypes are related to relevant constructs and do not simply reflect evaluative bias. Also, if mean differences observed between the two groups' reciprocal meta-stereotypes would be in line with what we know from research on self-perceptions, then one may assume the existence of meta-knowledge shared by the two groups.

A second objective of the study was to study meta-accuracy, that is, the accuracy of these meta-stereotypes when compared with the outgroup's actual stereotypes. Meta-accuracy compares group A's rating of group B to group B's belief of what group A's rating is. To do so, we also investigated believers' and non-believers' stereotypes of the respective outgroup. The believers' and non-believers' belief of how the outgroup perceives them (meta-stereotypes) was then compared to how the outgroup effectively perceived them (stereotypes).

Collecting stereotypical judgments on how believers and non-believers perceive each other allows for concretizing a third objective: comparing stereotypes that believers and non-believers hold about each other. This comparison provides interesting information that can extend the existing literature on religion stereotypes by distinguishing between believer and non-believer judges.

The use of a full design – having judges from each of the two groups, believers and non-believers, who provide ratings about both the outgroup and meta-perception of how the other group perceives them – offers an opportunity to examine an additional kind of comparison. This comparison concerns the two judgments within each group of judges: judging the outgroup differently from how one is judging oneself (through the eyes of the outgroup) could be an indirect indicator of some perceived distinctiveness between 'them' and 'us' on the examined personality dimensions (but prudence is needed since the meta-stereotype constitutes an evaluation of a different nature than the stereotype).

Finally, this full design allows us to examine whether or not there is some symmetry between the two groups across the four kinds of evaluations. For instance, a simple, symmetrical scenario could be that high versus low altruism distinguishes believers and non-believers (as targets) respectively across and between stereotypes and meta-stereotypes. In other words, if one compared only between stereotypes or only between meta-stereotypes, it would be hard to conclude whether an observed difference is due to the evaluator or the target. The full design allows for locating a possible discrepancy on either the target or the evaluator.

METHOD

Participants and procedure

Participants were recruited through acquaintances of the third author by means of a 'snowball' technique. They were told that the study concerned the way believers and non-believers see each other.

The sample consisted of 104 Belgian adults, 57 women and 47 men, all of whom came from the French-speaking part of the country. They ranged in age from 18 to 86 years, with a mean age of 38 ($SD = 19.81$), and came from various educational, social and ideological backgrounds. Almost half of the participants claimed no religious affiliation (45%). As for the others, the vast majority claimed to be Christian (47%) and, more precisely, Catholic (37%).

Data were generated by means of a questionnaire. Two versions of this were created: one for participants who defined themselves as believers and the other for those who defined themselves as non-believers. To determine which version should be administered, participants were initially asked to indicate whether they considered themselves as (a) a believer or (b) a non-believer or atheist by checking one of these options. Immediately after having provided this information, participants received the corresponding 'believer' or 'non-believer' version of the questionnaire. As a means of checking their self-selection as believer or non-believer, participants were also asked to report the importance of (a) God and (b) religion in their life on 7-point scales. In the vast majority of cases, participants' self-definition as 'believer' or 'non-believer' corresponded to the reported importance of God. Data from three participants were excluded because they indicated being a 'believer' but scored less than 4 on the 'importance of God' item. We also excluded one participant who was a self-defined 'believer' but scored 4 on the 'importance of God' item and less than 4 on the 'importance of religion' item. In total, 47 believers and 53 non-believers were included in the analyses.

Main questionnaire

Believers and non-believers first evaluated (on 9-point bipolar scales) two questions relative to the perceived quality of the ingroup (respectively, believers and non-believers) and two questions relative to the perceived quality of the outgroup (respectively, non-believers and believers). Specifically, believers evaluated (a) the degree to which they had a negative (1 = 'very negative') versus positive (9 = 'very positive') impression of believers, (b) the degree to which they appreciated believers (1 = 'I do appreciate a lot'; 9 = 'I do not appreciate at all'), (c) the degree to which they had a negative (1 = 'very negative') versus

positive (9 = 'very positive') impression of non-believers, and (d) the degree to which they appreciated non-believers (1 = 'I do appreciate a lot'; 9 = 'I do not appreciate at all'). Non-believers were asked first questions (c) and (d) and then questions (a) and (b).

Next, participants were asked to indicate the extent to which they thought that the outgroup ('non-believers' for believers and 'believers' for non-believers) was characterized by each of a series of 24 items. This set was designed to tap eight constructs (three items per construct): honesty, impulsivity, altruism, conservatism, dogmatism, hedonism, competence and extraversion. To minimize social desirability, we did not rely on adjectives, which are strongly evaluative. Rather, each construct was exemplified by a specific behaviour. For each behaviour, participants were asked to provide their evaluation in terms of the percentage (from 0 to 100) of outgroup members whom they believed demonstrate this behaviour. This provided information about the stereotype of the outgroup. The same set of behaviours was presented again and participants were asked to indicate the percentage of outgroup members whom they thought attributed the specific behaviour to ingroup members. This constituted our measure of meta-stereotype. Preliminary analyses suggested that we needed to exclude seven items (no more than one per construct) in order to increase the reliability of the subscales corresponding to each of the eight constructs. Reliabilities, although modest in size, were acceptable for measures comprising two or three items and varied from 0.50 to 0.66 (mean = .59). The list of the items retained for the analyses along with the corresponding constructs is provided in the Appendix.

RESULTS

Ingroup and outgroup evaluations

We computed separate indexes of ingroup evaluation (mean of the ingroup positivity and appreciation items; $r = .31$) and outgroup evaluation (mean of the outgroup positivity and appreciation items; $r = .51$). We also computed an index of ingroup bias by subtracting the outgroup evaluation index from the ingroup evaluation index. As can be seen in Table 1, non-believers evaluated their ingroup more positively than believers, $F(1, 98) = 8.74$, $p < .01$. No difference was observed between the two groups on outgroup evaluation, $F(1, 98) = 0.96$, *ns*. Not surprisingly, ingroup bias was higher among non-believers than among believers, $F(1, 98) = 7.85$, $p < .01$.

Comparisons between stereotypes and meta-stereotypes of believers and non-believers

We submitted the data to a 2 (Judges: believers versus non-believers) by 2 (Judgment: stereotypes versus meta-stereotypes) mixed-design ANOVA with the first factor varying

Table 1. Evaluation of ingroup and outgroup by believers and non-believers

Target	Believers		Non-believers	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Ingroup	5.51	1.14	6.30	1.48
Outgroup	5.46	1.09	5.19	1.49
Ingroup bias	0.05	1.69	1.10	2.02

between participants and the second varying within them. In all but one (competence) case, there was a significant interaction. Because main effects (Did believers differ from non-believers in their overall judgments? Did meta-stereotypes differ from stereotypes overall?) were not a focus of the present study and are not even of theoretical interest, we concentrated, for each construct, on post-hoc comparisons between the four evaluations (between groups and between judgments of the same group). Table 2 provides, for every construct, the means for stereotypical and meta-stereotypical evaluations made by believers and non-believers (see also Figure 1).

Honesty and Altruism. Non-believers think believers perceive them as being low in honesty and altruism. The judgment was significantly lower than all three other judgments for both honesty and altruism, that is, non-believers' stereotype, $F(1, 52)=22.48, p < .001$, and $F(1, 52)=19.74, p < .001$, believers' stereotype, $F(1, 98)=13.99, p < .001$ and $F(1, 98)=10.37, p < .01$, and believers' meta-stereotype, $F(1, 98)=18.67, p < .001$ and $F(1, 98)=28.05, p < .001$. Regarding honesty, no difference emerges between the three latter judgments. Regarding altruism, believers think non-believers perceive them as higher on altruism than how they themselves see non-believers, $F(1, 46)=5.49, p < .05$.

Extraversion. As for honesty and altruism, the non-believers' meta-stereotype on extraversion differed from the other three judgments. Non-believers' meta-stereotype was higher than their own stereotype on believers, $F(1, 52)=7.82, p < .001$, believers' stereotype, $F(1, 98)=4.45, p < .001$, and believers' meta-stereotype, $F(1, 98)=11.88, p < .001$. In addition, as for altruism, believers attributed to non-believers (targets of stereotypes) higher extraversion in comparison to themselves (as targets of meta-stereotypes), $F(1, 46)=3.63, p = .06$.

Impulsivity, Hedonism and Conservatism. Both groups of judges seem to agree, be it in their stereotypes or meta-stereotypes, that non-believers differ from believers in terms of higher impulsivity and hedonism and lower conservatism. This is the case when we compare (a) the believers' stereotype to their meta-stereotype, respectively for each construct, $F_s(1, 46)=11.91, 29.66, 42.56, p_s < .001$, (b) non-believers' stereotype to their meta-stereotype, $F_s(1, 52)=37.59, 71.21, 152.88, p_s < .001$, (c) believers' stereotype to non-believers' stereotype, $F_s(1, 98)=14.89, 53.60, 89.62, p_s < .001$, and

Table 2. Means and standard deviations of stereotypes and meta-stereotypes held by believers and non-believers

	Believers				Non-believers			
	Stereotypes		Metastereotypes		Stereotypes		Metastereotypes	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Honesty	60.84	15.40	63.09	16.25	63.29	16.00	48.39	17.60
Altruism	60.31	14.71	66.44	14.00	63.55	17.73	50.27	16.24
Extraversion	49.93	13.66	45.34	14.85	47.19	15.66	56.60	17.50
Impulsivity	53.06	15.46	45.19	14.36	41.38	14.81	62.40	14.67
Hedonism	60.07	14.63	46.82	15.57	42.62	15.37	69.13	12.81
Conservatism	45.62	13.41	65.32	14.06	72.53	14.84	33.58	15.67
Dogmatism	51.20	12.58	49.82	13.26	61.00	17.54	48.28	13.95
Competence	59.73	13.11	59.18	14.90	57.58	12.13	57.01	10.61

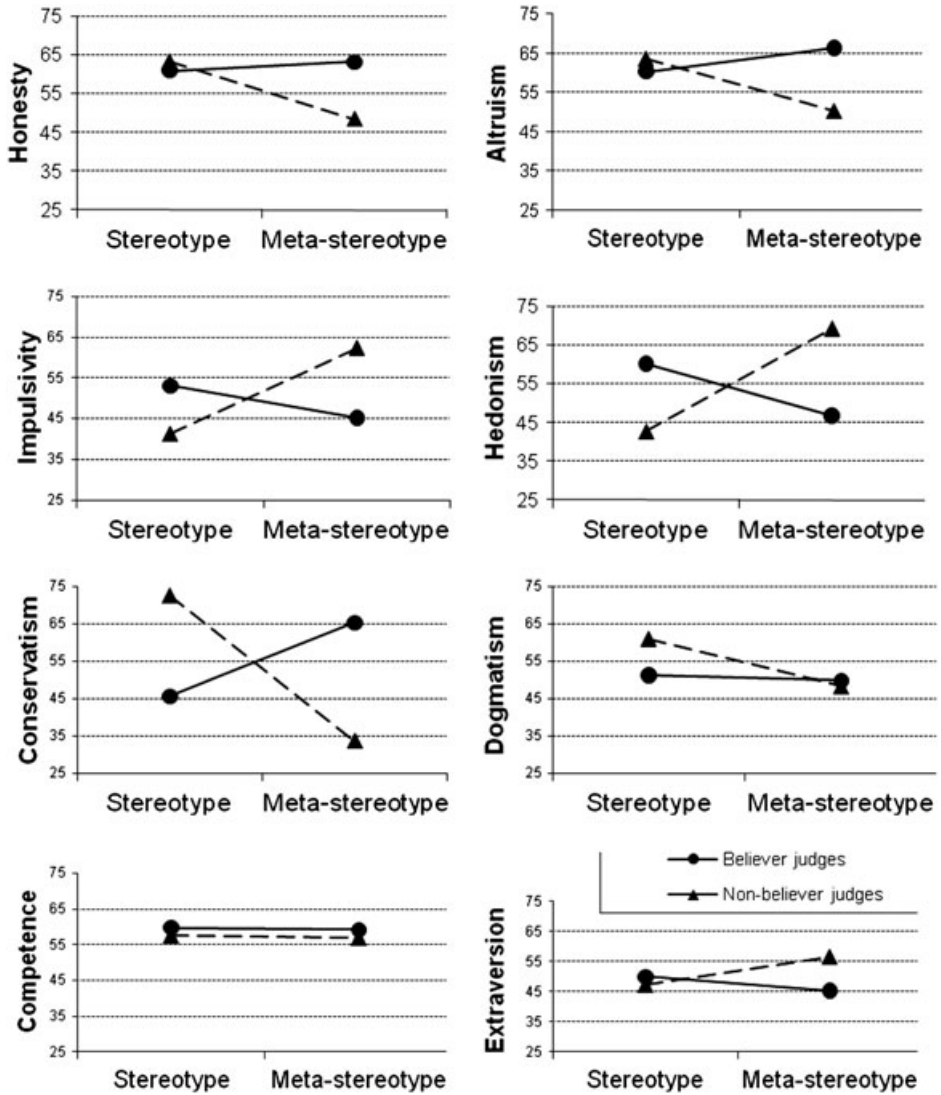


Figure 1. Mean scores of stereotypes (perceiving the outgroup) and meta-stereotypes (estimations of how the outgroup perceives the ingroup) of believer and non-believer judges, distinctly for each personality construct.

(d) believers' meta-stereotype to non-believers' meta-stereotype, $F_s(1, 98)=34.94, 61.78, 112.48, p_s < .001$. Moreover, non-believers 'overestimate' in their meta-stereotype the impulsivity and hedonism and the low conservatism that are effectively attributed to them by believers in their stereotypes, respective $F_s(1, 98)=9.61, p < .01$ and $10.89, 16.81, p_s < .001$. They also attribute in their stereotype more conservatism to believers than the latter thought to be the case in their meta-stereotype (or the latter underestimated how much they are seen as conservative by non-believers), $F(1, 98)=6.20, p < .05$.

Dogmatism. In non-believers' stereotype, believers appear higher in dogmatism in comparison to non-believers' meta-stereotype, $F(1, 52) = 16.42, p < .001$, and believers' stereotype, $F(1, 98) = 10.07, p < .01$, and meta-stereotype, $F(1, 98) = 12.67, p < .001$. In other words, believers seem to ignore that the others perceive them as dogmatic. There were no differences between believers' stereotype and believers' and non-believers' meta-stereotypes.

Competence. No difference between believers' and non-believers' stereotypes and meta-stereotypes was found.

The impact of ingroup bias on construct evaluations

We computed correlations between the index of ingroup bias and both believers' and non-believers' stereotypical and meta-stereotypical perceptions. The more believers discriminated between the two groups, the more they tended to perceive non-believers as dogmatic, $r(47) = .29, p < .05$. The more non-believers expressed ingroup bias, the less they attributed altruism to believers, $r(53) = -.26, p < .05$. As far as meta-stereotypes were concerned, believers' ingroup bias was associated with the meta-perception to be high in altruism and low in impulsivity and dogmatism, $r_s(47) = .34, -.26, -.26, p < .05$. Non-believers' ingroup bias was associated with the meta-perception to be low in honesty and conservatism, $r_s(53) = -.31, -.22, p < .05$, and high in hedonism (.27, $p < .05$) and dogmatism (.40, $p < .01$).

DISCUSSION

In the present study, believers and non-believers provided stereotypical perceptions of their respective outgroup. They also reported their meta-stereotypical perceptions, that is, their perception of what the members of the outgroup think of them. They did so with respect to eight personality traits, seven of which were expected to be relevant on the basis of previous work on religion and personality. The construct that was irrelevant in light of the literature, that is, competence, failed to differentiate believers and non-believers whether as judges or targets of stereotypical or meta-stereotypical perception.

A series of interesting differences emerged with respect to the seven personality constructs that were hypothesized to be relevant. We observed three main series of results. The first concerns the shared and 'symmetrical' stereotypes and meta-stereotypes between believers and non-believers that conform to the religious personality literature. Believers and non-believers see the other group, respectively, as high (indeed above 50) versus low (indeed below 50) in impulsivity and hedonism as well as low versus high in conservatism. They also think that the outgroup members perceive them this way. Interestingly, in their meta-stereotypes, non-believers seem to 'over-emphasize' the high impulsivity and hedonism and the low conservatism in comparison to how believers actually perceive them in their stereotypes. In contrast, believers seem to 'underestimate' in their meta-stereotype how high in conservatism they were perceived to be by non-believers.

The second series of results is also in line with the literature on religious personality and is evidenced by differences in meta-stereotypes and their relation to stereotypes but does not extend to differences in stereotypes. Non-believers think that believers perceive them as being immoral, that is, low in honesty and altruism. In addition, non-believers think that believers perceive them as being high in extraversion. Although there was some excessiveness in these (non-believers') meta-stereotypes (compared with believers' stereotypes), non-believers were not wrong: believers indeed attributed (stereotypes) lower honesty

(marginally significantly), lower altruism and higher extraversion (significantly) to non-believers compared to themselves (meta-stereotypes).

Dogmatism constitutes a third and unique case. Non-believers perceive believers as being highly dogmatic, a stereotype that seems to be ignored by believers in their meta-stereotype and is in line with the literature on religious personality only to a certain extent: dogmatism-related constructs are more typical of closed-minded ways of being religious than of mere religiousness (Duriez & Hutsebaut, *in press*).

The findings regarding ingroup bias are also interesting. First, the stereotypes expressed by strongly biased group members deny or reverse what, on average, the outgroup says about them: partisan believers tended to perceive non-believers as being dogmatic whereas partisan non-believers tended to perceive believers as being low in altruism. In all likelihood, non-believers may doubt the altruistic motivation of the prosocial religious people and may even attribute some level of moral hypocrisy to them (see Batson et al., 2005, for studies on the motivation of religious prosociality). Second, turning to meta-stereotypes, strong ingroup bias implied higher self-attribution – through the outgroup's hypothesized judgment – of characteristics very likely considered to be positive for one's own group: low impulsivity and dogmatism and high altruism for the believers and high hedonism and low conservatism for the non-believers. However, in addition, non-believers with strong ingroup bias hold two negative meta-stereotypes by suspecting that believers see them as dishonest and dogmatic.

In sum, believers and non-believers seem to share the meta-stereotype that the other side sees them as respectively high versus low in prosociality, conservatism and self-control-related traits (low hedonism and impulsivity). With the exception of prosociality, they may be happy with these perceptions that are presumably valued differently within each group. At the same time, believers seem to ignore the fact that non-believers see them as dogmatic, and non-believers often seem to meta-stereotypically exaggerate their differences in comparison to how believers actually see them. Finally, partisan group members seem to deny the outgroup's core characteristic, that is, believers' altruism (for non-believer judges) and non-believers' low dogmatism (for believer judges).

Most meta-perceptions found in the present study are in line with what we know from research on religiousness and its relation to personality, values and corresponding behaviours (Saroglou, 2010; Saroglou et al., 2004). They are also in line with previous research on religious stereotypes showing perceived associations of religiousness with moral, prosocial and self-control-related traits – or associations of irreligiousness with the opposite traits (Harper, 2007; Isaac et al., 1995; Lewis, 2001; Pichon, 2002). This suggests, at least to some extent, that there is some broad accuracy in meta-perceptions between these two groups of opposite ideology. The reasons for this accuracy need to be further investigated. For instance, does this accuracy reflect personal experience and thus generalized knowledge of the real personality of believers and non-believers or does it simply reflect shared implicit theories and ideologies?

This study also suggests some discrepancies between meta-stereotypes and stereotypes on the same targets as well as between perceptions and the corresponding literature. This mainly concerns (a) several meta-stereotypical overestimations by non-believers and (b) the underestimation by believers of how much non-believers see them as dogmatic and conservative. The meta-stereotypical over-estimations by the non-believers are open to at least two interpretations and research is needed to investigate this issue further. First, non-believers, as members of a minority group (Halman, 2001), may over-estimate how

negatively believers see them as being anti-social and individualistic, that is, low in altruism and honesty and high in hedonism and impulsivity. The non-believers' higher ingroup bias found here may result from their minority status: minority groups tend to show higher self-identification and may thus be suspected to form strong meta-perceptions (Frey & Tropp, 2006). Also, it cannot be excluded that by over-emphasizing the negative evaluation of themselves by believers, non-believers might boost their positive social identity (Haslam et al., 1996); meta-stereotypes are not fixed representations but can be used strategically, for instance when addressing outgroup members (Klein & Azzi, 2001). Second, rather than non-believers exaggerating negative meta-stereotypes, it might be that believers tended to prevent themselves from making negative evaluations of the outgroup in their stereotypes, either due to prosocial motives or social desirability concerns (religiosity is known to be related to both: Batson et al., 2005; Sedikides & Gebauer, 2010).

The opposite finding, that is, the believers' under-estimation of how dogmatic and conservative they are perceived to be by non-believers, is also an intriguing finding which merits further investigation. It may be that non-believers confound personality characteristics of mere religiosity with the personality of religious fundamentalists. However, more subtly, non-believers may be aware of the fact that, as documented in psychological research, even average religiousness (not necessarily an orthodox or fundamentalist form of religiousness) reflects, to some extent, some closed-mindedness: traditionalism, conventionalism, need for closure and low autonomy (see the research cited in the introduction). In parallel, it could also be that believers deny this reality. One gets the overall impression from the present findings that believers do not incorporate negative components in their meta-stereotypes, which, as pointed out by Santuzzi (2007; see also Vorauer et al., 1998), are usually part of groups' meta-stereotypes. One reason for doing this is that believers, being a majority and thus a powerful group, may pay less attention to information sources (Guinote, 2007) and have stereotypes and meta-stereotypes that are less realistic. In parallel, the high negative meta-stereotypes of non-believers may be due to their lower status. As a matter of fact, being confronted with a lower status has been found to increase perspective taking and meta-stereotyping (Lammers, Gordijn & Otten, 2008).

Although we believe the present study to be original in topic, questions and results, it also has important limitations which invite further research. First, endo-evaluations of participants' own ingroup were not requested, making it difficult to know whether the discrepancies between one's group stereotypes and the other group's meta-stereotypes may be due to inaccuracy of one, the other or both groups' judges. Second, although the measures used turned out to be highly informative, it will be interesting to replicate the present study with more established personality measures. Third, some research has shown that collectivistic attitudes may lead to an exaggeration in perceived similarity between how we think others see us and how we actually see ourselves (Krueger & Clement, 1994). People with a high need for approval who try to present consistent images of themselves across partners also assume they are viewed consistently across partners and people who have positive self-views generally think they are viewed positively by others (see Frey & Tropp, 2006). Thus, the low discrimination between stereotypes and meta-stereotypes in believers' judgments may be due to such factors as collectivism, need for approval or positive self-image that are known to characterize religious people (Batson et al., 2005; Cukur, De Guzman & Carlo, 2004; Sedikides & Gebauer, 2010). Finally, the study was conducted with mostly Christian participants and in a country with a predominant Catholic tradition. Although there is interesting cross-religious and cross-country consistency among studies

of religious personality (Saroglou, 2010), it is premature to generalize the present results to all religious and societal contexts.

For reasons we mentioned in the introduction, studying intergroup relations between believers and non-believers and, more specifically, their respective stereotypes and meta-stereotypes, is particularly important and timely. Both groups constitute what can be considered as large communities, especially in societies that are increasingly secularized but also multi-religious and multi-convictional (that is, including areligious or atheist ideologies). People may have grown up for years in ideologically segregated social environments, a factor that is bound to foster the development of stereotypes and meta-stereotypes. At the same time, members of both groups interact with each other in everyday life, whether at the collective or interpersonal level. In this kind of situation, meta-stereotypes are highly activated, may increase misunderstanding and may lead to a series of negative consequences (Yzerbyt & Demoulin, 2010).

The present study should be considered an exploratory one, opening several new questions for understanding the role of religious meta-stereotypes. The discussion underlined some of them such as the minority and powerless versus majority and powerful status of the group, the valence (positive or negative) of the meta-stereotypes and the role of the ingroup's norms on qualifying this valence, as well as the issues of accuracy, meta-accuracy and generalizability.

A final issue is the specificity of religion when studying stereotypes and meta-stereotypes between groups with opposite religious views. Most groups studied in the literature on intergroup relations differ from each other on rather stable, descriptive, natural and 'essentialized' categories such as gender, ethnicity, race, age or social status (Yzerbyt, Corneille & Estrada, 2001). However, groups formed on the basis of different ideologies and belief systems may differ from these more traditional groups by including in the respective stereotypes and meta-stereotypes more moral and evaluative elements, a situation that may render intergroup relations even more difficult and complex.

In line with this rationale, the present findings suggest a possible compensation in (meta-) stereotypes between social cohesion-related and self-enhancement-related elements. Altruism, honesty and conservatism as the content of stereotypes and meta-stereotypes between believers and non-believers (possibly also of other groups differing in ideology) seem to compensate for hedonism, impulsivity and extraversion. Competence was irrelevant. In other words, if, for 'natural' groups, compensation in (meta-) stereotypes may emerge between 'warmth' and 'competence' (that is, people who are seen as warm are likely to be seen as non-competent and vice versa: Judd, James-Hawkins, Yzerbyt & Kashima, 2005), for ideological groups, compensation in (meta-) stereotypes may be between stability/morality and plasticity/growth. In other words, (meta-) stereotypes between believers and non-believers would seem to correspond to what we know from the work on religious personality (Saroglou, 2010): whereas stability and conservation of social order (in terms of personality and values) are characteristic of religious believers, plasticity and self-enhancement are more typical of non-believers and atheists.

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APPENDIX

BEHAVIOURAL ITEMS USED TO TAP PERSONALITY CONSTRUCTS THAT WERE EVALUATED AS STEREOTYPES AND META-STEREOTYPES

Personality constructs	Behavioural items
Honesty	I make efforts to keep my promises
Altruism	It is more important for me to be sincere than to be liked by others
	If a friend of mine is in need, I do my best to help him/her
Extraversion	I always take others' interests into consideration
	I feel uncomfortable when I am in the middle of the crowd (reversed)
Impulsivity	I prefer to spend my vacations in a isolated house rather than at a crowded beach (reversed)
	It often happens that I act on a sudden impulse
Hedonism	I often think that it is important to favour rapidness over quality
	I make many efforts to satisfy my desires
Conservatism	I use humour even in dramatic situations
	Tradition is an important value for me
Dogmatism	If necessary, I do not hesitate to criticize the authority's decisions (reversed)
	People who disagree with me may turn out to be right (reversed)
Competence	I have convictions that I believe are not able to be criticized
	One day, I may realize that some of my views on life were wrong (reversed)
	In general, I succeed at what I undertake
	People consider me to be someone intelligent and competent