The Significance of Motivational Regulations of Religious Behavior in a Traditional Catholic Society:

A Cross-national Comparison between Poland and Belgium

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Abstract

Earlier research showed a more autonomous regulation of religious behaviors to be positively related to well-being and to a more flexible, symbolic adherence to Catholic belief contents. This research aimed to examine whether these relations hold up in a more traditional Catholic society (i.e., Poland) in comparison to these with a more secularized society (i.e., Belgium). Because of its stronger Catholic tradition Polish (*N* = 259), relative to Belgian participants (*N* = 127), were expected to score higher on a literal approach of religious contents and a controlled regulation of religious behavior. In spite of these between-country mean level differences, based on self-determination theory, structural relations between motivational regulations and well-being and approaches towards religious contents were predicted to be cross-culturally invariant. Findings showed Polish participants to score higher on introjected regulation, inclusion of transcendence and a literal religious approach. Controlled regulations of religious behavior were positively related to a literal approach and negatively to well-being and empathy, whereas an autonomous regulation showed the opposite pattern of results. Importantly, this pattern was found to generally hold in both countries, as only one interaction emerged, that is, an externally pressured regulation of religious behaviors was more strongly negatively predictive of religious adherence in Poland than in Belgium.

KEY WORDS: autonomous and controlled regulations, internalization, religious behavior, self-determination, Post-Critical Belief Scale, Belgium, literal symbolic, Poland

RUNNING HEAD: Religious internalization in traditional and secular societies

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A diverse array of expressions of religious behaviors can be observed in the daily life of a majority of the world population. The motivations or reasons for these diverse behaviors can vary enormously which is likely to be associated with a variety of psychological experiences. Based on Self-Determination Theory (SDT; Deci & Ryan, 2000; Vansteenkiste, Ryan, & Deci, in press) one can distinguish between controlled or pressured and a more autonomous or volitional regulations of religious activities. Former research has shown that a less controlled and a more autonomous regulation of religious behaviors is related to positive well-being and a more frequent enactment of religious practices (Ryan, Rigby, & King, 1993). Recently, in a Dutch-speaking Belgian sample, Neyrinck, Vansteenkiste, Lens, Duriez, and Hutsebaut (2006) extended these findings by showing that a more autonomous regulation of religious behaviors is positively related to (1) a stronger adherence to Catholic belief contents and (2) a more flexible, symbolic interpretation of these belief contents.

In the current research we aimed to extend our scope to societies where the Catholic institute yields a stronger impact on people's daily social life, that is, Poland (Byrnes, 2006; Porter, 2001, in press). In doing so, we pursued two specific aims. First, we investigated mean-level differences in motivational regulations and approaches towards religion between Polish and Belgian participants, taking into account that the latter participants are currently living in a secularized society. Second, we examined whether the structural relations between motivational regulations of religious behavior and well-being and religiosity-related outcome variables would be identical in both societies. Building on previous research, we included assessments of interpersonal adaptive functioning (i.e., cognitive and affective empathic functioning, Davis, 1983) in addition to personal well-being outcomes.

Relying on SDT, we first discuss people's quality of motivation to engage in religious behaviors, thereby presenting different types of extrinsic motivation that vary in their degree of internalization and, hence, in their degree of autonomy or volition (Deci & Ryan, 2000). Within SDT, the internalization of behavioral regulations is seen as an expression of people's natural tendency to move towards more integrated functioning (Deci & Ryan, 2000). Second, we introduce different social-cognitive approaches towards religious contents (Duriez, Dezutter, Neyrinck, & Hutsebaut, 2007; Wulff, 1997) and indicate their expected relations to autonomous and controlled regulations. In a last section, we discuss the cross-cultural generalizability of the relation between regulations and proposed outcome variables to the Polish society that is characterized by a strong Catholic tradition.

Autonomous versus Controlled Functioning

In SDT (Deci & Ryan, 2000), autonomous functioning is defined as functioning with a sense of psychological freedom, volition and perceived choice. In contrast, controlled functioning entails perceived pressure to think, feel or act in a certain way. The hallmark of autonomous regulation is intrinsically motivated behavior, that is, the enactment of a behavior in absence of any external incentives. Intrinsically motivated behavior is said to be autotelic as it is performed for nothing but the feelings of satisfaction and pleasure that are associated with the enactment of the behavior itself. For this reason, intrinsically motivated behavior is said to be characterized by an internal perceived locus of causality (deCharms, 1968).

Intrinsic motivation is differentiated from extrinsic motivation which pertains to carrying out an activity to attain an outcome that is separate from the activity itself (Lens, 1997; Ryan & Deci, 2000). Originally, extrinsically motivated behaviors were said to be characterized by an external perceived locus of causality, as it was assumed that they were invariantly executed with a sense of pressure and lack of psychological freedom (Deci & Ryan, 2000). However, extrinsic motivation can vary in its degree of relative autonomy as a function of the degree of internalization of the reason for performing the activity (Ryan & Deci, 2002). Internalization is defined as an active process through which beliefs, values, attitudes or behavioral regulations are gradually transformed into self-endorsed attributes, values or regulations such that they become part of one's sense of self (Grolnick, Deci, & Ryan, 1997). As the reason for performing a certain behavior becomes more internalized, the extrinsically motivated behavior will be experienced as relatively more autonomous.

The conceptual distinction between qualitatively different types of extrinsic motivation has been examined in several life domains, including in addition to sport, education, work, and health care, also the domain of religion (e.g., Neyrinck et al., 2006; Ryan et al., 1993). Four different types of extrinsically motivated religious behaviors can be differentiated. First, a behavior is externally regulated when it is induced by others; the desired behavior is forced upon the person by the promise of an incentive or the threat of a punishment. As the behavior is controlled by social forces alien to the self, the behavior is not volitionally performed at all. In the case of external regulation, the behavioral regulation is not taken in at all, thus representing a complete lack of internalization. To illustrate, an adolescent who goes to church only to meet parental obligations is said to be externally regulated. Second, in case external regulations are partially internalized, the behavior is said to be introjected. Introjected regulation is a mode of functioning that is equally characterized by a lack of acceptance or self-endorsement of the behavior, as the behavior is motivated by feelings of shame, guilt or anxiety or the pursuit of self-aggrandizement and self-worth. The enactment of the behavior is likely to represent a source of stress and anxiety as the behavior is experienced as internally controlling and conflicting with one's natural

inclinations. Going to church to avoid feelings of guilt for not doing so constitutes an example of introjected regulation. The behavioral regulation will be more internalized when one comes to identify with the regulation of the behavior. In the case of identified regulation, the third type of extrinsic motivation, the behavior is perceived as personally relevant and, hence, will be enacted with a greater sense of self-determination and genuine personal commitment. Finally, a regulation can be more deeply integrated, that is, through critical self-reflection an identified value can become fully integrated, that is, flexibly brought in congruence with other personally relevant self-structures (Deci & Ryan, 1985). In the case of integrated regulation, the action is experienced as fully autonomous, that is, self-endorsed and emanating from one's sense of self. For example, social work instigated by a strong identification with Christian core-values such as "loving thy neighbor" represents an example of internalized religious regulation. This value can be brought in line with other values and regulations such as the value one attaches to helping behavior.

Within SDT, autonomous functioning is considered as an expression of the inherent tendency towards more integrated functioning that would characterize the true nature of the human organism (Deci & Ryan, 1985). For this reason, internalized behavioral regulations should relate to more adaptive intrapersonal functioning, as indexed by higher well-being and behavioral performance. In line with this, former research (e.g., Neyrinck, et al., 2006; O'Connor & Vallerand, 1990; Ryan, et al., 1993) has shown that a more internalized behavioral regulation of religious behaviors is positively related to well-being and a more frequent engagement in religious behaviors.

This natural tendency towards more integrated functioning is not only observed at the intra-personal but also at the interpersonal level, as individuals have the natural tendency to get steadily more strongly integrated in the social matrix. The achievement of a greater degree of integration at the intra-personal level, as indexed through the internalization of socially promoted norms, values and behavioral regulations, would allow one to be more open and flexible towards others, thus, entailing more socially adaptive functioning (e.g., Hodgins & Knee, 2002). In line with this, one single study in the religious domain to date indicated that a more internalized regulation of religious behaviors is negatively associated with social dysfunctioning (Ryan, et al., 1993). Because of the paucity of studies on this topic, the current study examined the association between qualitatively different forms of extrinsic regulations of religious behavior and two dimensions of empathic functioning, that is, empathic concern, which refers to the tendency to experience other-oriented feelings of warmth, compassion or sympathy for others and perspective-taking, which refers to the tendency to cognitively adopt the psychological point of view of other people (Davis, 1983). Previous studies have shown ambiguous research findings on the links between empathy and religiosity (e.g., Batson & Gray, 1981, Batson, Schoenrade, & Ventis, 1993). Duriez (2004a) argued that the relation should be understood in terms of how religious contents are processed rather than in terms of religiosity per se. Herein, we argue that the relative autonomy of the regulation of one's religious behaviors will help to examine when religiosity and empathy go hand in hand.

A more autonomous functioning should not only allow for more interpersonal openness but also for a greater openness and flexibility at the social-cognitive level (Hodgins & Knee, 2002). For example, Soenens, Berzonsky, Vansteenkiste, Beyers, and Goossens (2005) showed that the general tendency to function autonomously is associated with a more flexible processing of identity relevant information, while a general controlled orientation related to a more rigid and normative identity style. In the religious domain, earlier research (Neyrinck, et al., 2006) showed that a more internalized regulation of religious behaviors is positively related to a more flexible, symbolic approach of religious contents. In the following section, the conceptualization and operationalization of rigid versus flexibility in processing religious contents is addressed.

Flexibility in Approaches towards Religion

According to Wulff (1997), all possible approaches towards religious contents can be located in a two-dimensional space, organized around two orthogonal bipolar axes. The vertical axis "exclusion versus inclusion of transcendence" refers to the degree to which a transcendental reality is thought to exist. The horizontal axis "literal versus symbolic" indicates the way in which religious contents are interpreted and processed, that is, in a rigid, literal way or in a more flexible, symbolic way. The Post-Critical Belief Scale (PCBS, e.g., Fontaine, Duriez, Luyten, & Hutsebaut, 2003) was developed to measure these two dimensions with respect to Roman-Catholic belief contents. In the PCBS, exclusion versus inclusion of transcendence refers to the degree to which one adheres to Roman-Catholic thought, that is, the degree to which one believes in a transcendental realm as conceived in this religion. The literal versus symbolic dimension refers to a literal and rigid versus symbolic and more open interpretation of the Christian message.

Crossing both orthogonal dimensions (i.e., exclusion versus inclusion and literal versus symbolic) results in four different approaches towards religion. Symbolic inclusion entails a continuous processing of religious contents through critical reflection and a flexible integration of these elements with other internal cognitive structures (Ricoeur, 1970). In the case of symbolic exclusion, religious contents are not personally adhered to, although they are neither seen as incompatible with one's own values. Instead, religious beliefs represent one meaning system among many other possible meaning systems. These two flexible, symbolic approaches towards religion would enable for more open social interactions as persons with other (dis)belief attitudes are unlikely to be experienced as threatening but are rather openly approached.

Conversely, literal approaches entail a more rigid, one-sided view of Catholic religious contents. Literal inclusion of Catholic belief contents means that only these norms and values that are in accordance to Holy Scriptures are acknowledged and that perspectives of disbelief are defensively rejected. Literal exclusion entails a similar defensive functioning. However, rather than defensively sticking to the Catholic belief system, this

system is now defensively rejected; it is blocked as a possible meaning-providing framework. In these two literal attitudes, conflicting interpretations of religious contents are likely to be defensively compartmentalized instead of integrated, as such conflicting viewpoints represent a threat. At the social level, these two literal approaches entail a defensive rejection of people who hold different viewpoints (Duriez et al., 2007).

Fontaine et al. (2003) showed that these four approaches, resulting from the two orthogonal dimensions, can be measured in a valid and reliable way. Several studies have now examined the correlates of these two dimensions. In line with theorizing, a symbolic approach towards religious contents has been found to be associated with more cognitive flexibility, as indexed by a positive association with (1) an information-oriented identity style which refers to an active adaptation of self-structures in confrontation with (dissonant) self-relevant information and (2) openness in processing information and experiences in general (e.g., Duriez & Soenens, 2006). In contrast, the cognitive rigid character of the literal approach manifests itself though the positive association between a literal approach and (1) a normative identity style, entailing a rigid adherence to one's own identity structures, distorting new information if necessary (Duriez & Soenens, 2006), (2) the unwillingness to confront one's own knowledge and beliefs with inconsistent evidence or alternative opinions (Duriez, 2003); and (3) a rigid acknowledgement of in-group norms and values that are promoted by the in-group (leaders) (right-wing authoritarianism, Duriez & Van Hiel, 2002). At the interpersonal level, a symbolic interpretation has been shown in a symbolic approach relating positively to cognitive and affective empathic responding (Duriez, 2004a) and agreeableness (Duriez & Soenens, 2006), whereas a literal approach is positively related to (1) authoritarian aggression towards those not subscribing to in-group norms; (2) a social aggressive perception of superiority and dominance vis-à-vis members of any perceived out-group (Duriez & Van Hiel, 2002); and (3) prejudice and intolerance towards ethnic minorities (Duriez, 2004b).

In sum, we can regard literal versus symbolic processing of religious information as respectively a more defensive, rigid versus a more open approach of cognitive information and other people. Because autonomous vs. controlled functioning should relate to a more flexible openness vs. closed attitude towards information and social partners, we expected controlled and autonomous motivation of religious behaviors to relate to a more literal and a more symbolic approach of religiosity, respectively. In line with this, Neyrinck et al., (2006) found a more autonomous regulation of religious behavior to relate positively to both a symbolic approach of religious contents and inclusion of transcendence in a sample of Belgian participants. In sum, the flexibility in cognitive functioning towards religious information and the flexibility in integrating behavioral regulations into self-structures seem compatible. However, so far no published research has examined this hypothesis in a more conservative religious culture, such as Poland. The present research aimed to do so and to directly compare these results with those obtained in a secularized country (i.e., Belgium) where the impact of the Catholic Church has waned over the years.

Addressing Traditional and Secularized Catholic Societies

Any discussion of the Polish national identity has to consider the strong intertwining with the Catholic identity (Byrnes, 2006). The Catholic social identity (Beit-Hallahmi, 1991) is far more salient in Poland compared to Belgium. To illustrate, 96% of the Polish population self-identifies as Roman-Catholic (Bureau of Democracy, Human Rights, & Labor, 2005). Moreover, throughout Polish history, the importance of the Catholic institute has been strong, as witnessed through the influence of the deceased Polish pope John Paul II on the Polish political and social life and the use of Catholic rhetoric by the political right (Porter, 2001, in press). Furthermore, Catholic core dogmas such as the Immaculate Conception and the bodily resurrection of Christ are still widely accepted in Poland and conformism to traditional church behaviors is widespread.

These observations strongly contrast with the Belgian situation. Over the past two decades, the influence of the Belgian Catholic church steadily waned and was gradually replaced by a lack of belief orientation and/or idiosyncratic religious sentiment (Dobbelaere & Voyé, 2000). Only 47% of the population in Flanders self-identifies as Roman-Catholic and even a substantial part of these self-identified Roman-Catholics do not subscribe to the Catholic institution and its doctrine (Bureau of Democracy, Human Rights, & Labor, 2005). In sum, in contemporary Polish society, traditional Catholicism is much more prevalent compared to Belgian society. For this reason, Polish participants are expected to score higher on both the inclusion of transcendence and literal approach. This is because, in adhering more strongly to traditional Catholicism, they would interpret religious belief contents in a more strictly literal way.

With respect to one's reasons for engaging in religious behaviors, it can be expected that Polish, relative to Belgian, participants will display a stronger pressure to conform to Catholic norms and rules, given that Catholicism is an integral part of Polish culture. Therefore, we predicted that religious behaviors would be more strongly externally regulated in Poland compared to Belgium. Similarly, elevated levels of introjected regulation which pertain to performing religious behaviors to avoid feeling guilty or ashamed can be expected. This is because among more traditional Catholic believers, issues of sin, shame, guilt, and resulting feelings of anxiety are abundant (e.g., Hailparn & Hailparn, 1994, Sheldon, 2006). Indeed, not only norm transgressive behavior per se but even the mere thought of disobeying religious norms and expectations do trigger feelings of guilt and shame, for which confession and atonement are obligatory. Finally, we predicted less internalized regulation of religious behaviors among Polish compared to Belgian participants. This is because the presence of more externally and internally controlling instances in Poland would hinder full internalization of Catholic behavioral scripts. Conversely, in a more secularized society, the absence of societal pressure creates the freedom and to

freely enact any kind of religious behaviors. As a result, those who do engage in religious behaviors more strongly endorse them, as they more volitional identify with their importance.

Present research

Two main goals guided this research. First, we wanted to investigate mean-level differences between Poland and Belgium with respect to several of our central constructs. Second, we examined the comparability of the structural relations between the motivational regulations of religious behaviors and three types of outcomes, that is, intra-personal and interpersonal adaptive functioning and social-cognitive approaches towards religion. Intrapersonal adaptive functioning is operationalized through the use of an eudaimonic (i.e., self-actualization), a hedonic (i.e., life satisfaction) well-being indicator (Ryan & Deci, 2001) and identity integration. The latter was deemed appropriate as both samples constituted late adolescents/early adults, for whom the formation of a clear and coherent sense of identity constitutes a crucial developmental task (Luyckx, Schwartz, Soenens, Vansteenkiste, & Goossens, in press) and religion might play an important role in such identity formation (Assor, Cohen-Malayev, Kaplan, & Friedman, 2005). Interpersonal adaptive functioning was operationalized using two essential dimensions of empathic functioning, respectively cognitive perspective-taking and affective empathic concern (Davis, 1983). Finally, social-cognitive approaches towards religion were indexed by the extent to which one adheres to Christian belief contents and the literal versus symbolic interpretation of these contents (Fontaine, et al., 2003) The following predictions were made.

With respect to country differences between Poland and Belgium, it can be predicted that the stronger and more conservative Catholic tradition characterizes the Polish society would translate into (1) a more literal approach of religious contents, (2) a more externally and (3) more internally pressured (i.e., introjected) regulation of religious behaviors and (4) a lower internalized regulation of religious behaviors among Polish, relative to Belgian, participants.

With respect to the cross-national comparability of the structural relations between regulations and outcomes, two conflicting hypotheses can be posited. First, based on the SDT-conceptualization of an innate human growth-tendency that is universal and, hence, independent of gender, social class or cultural background (Chirkov, Ryan, Kim, & Kaplan, 2003; Deci & Ryan, 2000), cross-cultural stability in the structural relations can be expected. From this perspective, one would predict regulations of religious behaviors to follow a simplex-pattern to (1) well-being and (2) empathy, with the effects becoming increasingly less negative and more positive when one moves along the autonomy continuum from external, via introjected, to internalized regulation. Additionally, integrating cognitive structures such as behavioral regulations means bringing these more in line with (Catholic) religious belief contents. This tendency towards integrating regulations and religious

values leads us to predict the same continuum-pattern of correlations between relatively more internalized regulations and (3) inclusion of transcendence. Finally, because both more integrated regulations of religious behavior and a symbolic approach of religious contents are characterized by flexible cognitive functioning (Deci & Ryan, 1985; Duriez et al., in press), approaching religion in a symbolic fashion could be expected to go hand in hand with a more flexible integration of behavioral regulations. Hence, more internalized regulations of religious behaviors would show an analogous continuum-pattern of correlations to (4) a more flexible approach of religious contents, that is, a symbolic approach of the religious contents.

A different pattern of hypotheses can be forwarded on the basis of the match-perspective (e.g., Sagiv & Schwartz, 2000). From this perspective, it can be derived that the association between one's relative degree of internalization of behavioral regulations and outcomes would depend on the match or fit between one's own predominant regulatory style and the regulatory style that is emphasized in one's society. For example, in cultures where conformism and interpersonal harmony are stressed, individuals are expected to "flourish when they are forced to meet pressuring internal or external expectations" (Markus & Kitayama, 2003, p. 4). Given that Polish individuals are more likely to display controlled functioning and such functioning is encouraged in the Polish society, it can be argued that controlled regulations should yield adaptive correlates in the Polish society.

To directly compare the conflicting predictions derived from SDT and the match-perspective, we will investigate the interaction between behavioral religious regulations and country-membership in the prediction of outcomes. Whereas the match–perspective would predict this interaction to be significant, SDT would not. Indeed, whereas the match-perspective would predict a controlled mode of functioning in the religious domain to yield positive correlates in Poland but not in Belgium, the SDT-perspective would predict a less controlled and more autonomous regulations to yield positive correlates, irrespective of the cultural setting and the cultural emphasis on religious norms and values.

Finally, given that we expected a controlled, relative to autonomous, religious regulation to be associated with poorer well-being and that Polish, relative to Belgian, participants would display more controlled functioning, the corollary hypothesis is that both subsamples would also differ in terms of well-being. If so, this opens the possibility to examine in a set of ancillary analyses whether between-country differences in well-being can be accounted for by differences in the relative autonomy of the behavioral regulations. Said differently, we explored whether religious behavioral regulations would mediate the between-country differences in indices of adaptive functioning.

Method

Participants and Procedure

A total of 386 people interested in or committed to Roman Catholic religion participated in this study. The Belgian sample consisted of 127 Dutch-speaking Belgians who are actively engaged in religious activities, such

as being a member of a youth church, singing in a church-choir, or studying or teaching religion among other things (37% males, mean age = 21, *SD* = 3.96). The Polish sample consisted of 259 psychology and philosophy students (16% males, mean age = 21, *SD* = 1.88). A chi-square analysis indicated that gender was unequally distributed across the subsamples (Pearson χ^2 = 21.72, *p* < .001): There were proportionally more females in the Polish than in the Belgian sample. Participants' mean age did not differ between the two samples, $F(1,384)$ = 0.35, *ns.*

Measures

In the Belgian sample, all measures were presented in Dutch, the participant's mother tongue. There was no need to translate scales as all scales had been used in previous studies among Dutch-speaking participants (e.g., Neyrinck et al., 2006). Because various scales were, however, not available in Polish, a team of four Polish psychologists translated the original English versions into Polish. Given that there was no original English version of the religious internalization scale, this scale was first translated into English by the first author. The Post-Critical Belief Scale was translated into Polish and back-translated into English by five Polish researches. Any differences between the orginal and backtranslated regulation- and PCBS-scales were resolved through discussion. Except when otherwise indicated, all items were answered on 5-point Likert scales ranging from 1 *(completely disagree)* to 5 *(completely agree)*. Mean, standard deviation, observed range, and Cronbach's Alpha of each scale in each country can be found in Table 1.

Religious internalization scale. In contrast to Ryan et al. (1993), who assessed participant's motives to engage in a number of a priori defined religious activities (e.g., "turning to God", "praying", "attending church", and "sharing faith with others"), we asked participants to personally generate "the most important religious activity in which your attitude towards religious beliefs is particularly expressed" (see Neyrinck, et al., 2006 for a similar procedure). We used this procedure because, in a secularized society as Belgium (Dobbelaere & Voyé, 2000), many individuals identify themselves as being religious without engaging in religious activities such as the ones defined by Ryan et al. (1993). Examples of activities frequently listed by the participants include "participating in religious community", "reading on religion", and "discussing religious topics". After generating this activity, with three items each, we assessed participants' internalized (e.g., "Because I fully endorse it"), introjected (e.g., "Because I would feel guilty if I didn't") and external regulation (e.g., "Because others put me under pressure to do so") for performing their self-defined religious activity. The items are a further refinement of the measure that was used by Neyrinck et al (2006).

To investigate the factor-structure of this behavioral regulation measure, we performed a series of confirmatory factor analyses (CFAs) comparing different factor models (Lisrel 8.50®, Jöreskog & Sörbom, 1993). In neither model we did allow cross-loadings or correlations between measurement errors. To compare the fit of the different models, we used standard model fit indices (Quintana & Maxwell, 1999). The SBS-χ^2 should be as

small as possible, the Root Mean Square Error of Approximation (RMSEA) should be less than .08; and the Comparative Fit Index (CFI) should exceed .95. Model 1 consisted of the three hypothesized latent factors (i.e., internalized, introjected and external regulation), each represented by three items. In the total sample, this model provided an acceptable fit to the data, SBS-χ^2 (24) = 81.827, RMSEA = .079; CFI = .962. This 3-factor model was compared to each of three possible alternative 2-factor models, namely a model in which identified and introjected regulation were combined into a single factor (Model 2), a model in which introjected and external regulation were combined into a single factor (Model 3), and a model in which identified and external regulation were combined into a single factor (Model 4). All of these models fitted the data poorly: SBS-χ^2 (26) = 334.659, 419.447and 330.665, RMSEA = .176, .198, and .174, and CFI = .798, .742, and .801 for Model 2, Model 3, and Model 4, respectively. Thus, fit indices clearly favored Model 1 over the alternative two-factor models, indicating that the three types of regulations needed to be treated as distinct constructs. This series of analyses was then repeated in the Belgian and Polish subsamples separately. The 3-factor model provided the best fit to both the Belgian [SBS-χ^2 (24) = 51.35; RMSEA = .095; CFI = .955] and the Polish data [SBS-χ^2 (24) = 65.789; RMSEA = .082; CFI = .956].

Next, to assess whether the factor loadings of these nine items representing three regulatory styles were invariant across country, a multigroup CFA was performed. Using the scaled chi-square difference test, we compared a constrained model (with all loadings set equal across countries) with an unconstrained model (with all loadings allowed to vary across countries). No significant difference emerged, ΔSBS-χ^2 (9) = 12.886, *ns*, indicating that the loadings of the nine items were of comparable strength in both subsamples. To assess whether the correlations between the latent factors were invariant across country, we compared a constrained model (with all three correlations set as equal across both countries) to an unconstrained model (with all correlations allowed to vary across both countries). Using the scaled chi-square difference test, a significant difference emerged, ΔSBS-χ^2 (3) = 60.129, *p* < .001, indicating differences in (some of) the correlations between the latent factors. More detailed model comparisons indicated that the correlation between identified and introjected regulation [ΔSBS-χ^2 (1) = 17.397, *p* < .001] and between external and introjected regulation [ΔSBS-χ^2 (1) = 18.942, *p* < .001] differed in both countries: Whereas identified and introjected regulation were unrelated in the Belgian subsample, *r* (127)= -.04, *ns*, they were significantly positively related in the Polish subsample (*r* (259)= .36, *p* < .001), and while external and introjected regulation were strongly positively related in the Belgian subsample (*r* (127) = .67, *p* < .001), they were only marginally positively related in the Polish subsample (*r* (259) = .17, *p* = .07). The correlation between identified and external regulation did not differ across both countries (ΔSBS-χ^2 (1) = 0.19, *ns*), and was negative in both the Belgian (*r* (127) = -.40, *p* < .01) and the Polish sample (*r* (259) = -.31, *p* < .01. To summarize, as hypothesized, a three-factor model fitted the data best. Furthermore, the nine items assessing the three regulatory styles had equivalent loadings on their respective factor in each subsample, but the correlations between the latent factors differed between the two

subsamples. Specifically, introjected regulation was found to be more closely situated to external regulation and further away from internalized regulation in the Belgian subsample, while the opposite was true in the Polish subsample, suggesting that introjected regulation was experienced as more controlling and less autonomous in the Belgian relative to the Polish subsample. We will discuss these differential correlations in greater depth in the discussion. Given these findings, scores for external, introjected and internalized regulation were computed by averaging the three items that assessed each construct. Cronbach's alphas were satisfactory in both countries (see Table 1). The correlations between these manifest regulatory subscales are shown in Table 2 and mirrored the pattern of intercorrelations that was found between the latent factors.

Subjective Well-being. Three measures were used to tap general well-being: The 15-item Self-Actualization Index (Jones & Crandall, 1986) assessing ability to fulfill one's potential (e.g., "It is better to be yourself than to be popular"), the 10-item Identity Integration subscale from the Multidimensional Self-Esteem Inventory (O'Brien & Epstein, 1987; e.g., "How often do you feel very certain about what you want out of life?"), and the 5-item Satisfaction With Life scale (Diener, Emmons, Larsen, & Griffin, 1985) measuring the extent to which participants cognitively evaluate their current lives as (dis)satisfying (e.g., "In most ways my life is close to my ideal"). Cronbach's alphas were satisfactory (see Table 1).

Empathy. Polish participants rated two 7-item subscales from the Interpersonal Reactivity Inventory (Davis, 1983): Perspective-taking, measuring the tendency to adopt the cognitive viewpoint of others (e.g., "I sometimes find it difficult to see things from the other person's point of view" – reverse coded), and Empathic concern, measuring the tendency to experience compassion and concern for others (e.g., "I often have tender, concerned feelings for people less fortunate than me"). Internal consistencies were satisfying (see Table 1).

Approach to Religion. Participants completed the 33-item Post-Critical Belief Scale (PCBS; Fontaine, et al., 2003) measuring four approaches towards religion: Literal Inclusion (8 items; e.g., "I think that bible stories should be taken literally, as they are written"), Symbolic Inclusion (8 items; e.g., "Despite the high number of injustices Christianity has caused people, the original message of Christ is still valuable to me"), Literal Exclusion (9 items; e.g., "Faith is an expression of a weak personality"), and Symbolic Exclusion (8 items; e.g., "I am well aware my ideology is only one possibility among so many others"). All items were scored on a 7-point Likert scale ranging from 1 *(completely disagree)* to 7 *(completely* agree). We examined the factor structure in both samples separately. Before doing so, as in Fontaine et al. (2003), we controlled for individual acquiescence differences by subtracting the individual average score across all 33 items from the raw individual item scores. A Principal Component Analysis (PCA) was then carried out on these corrected scores. In both countries, a scree test pointed to a two-component solution explaining 28% of the variance in the Polish sample and 34% in the Belgian sample. After orthogonal Procrustes rotation towards an average target-structure computed across 16 samples (Fontaine et al., 2003), these two components could be interpreted in terms of (exclusion versus) inclusion (of transcendence) and (literal versus) symbolic. Tucker's Phi indices were then

calculated to index the congruence between the sample-specific and the average configuration. Indices of .95 and .96 in the Belgian sample and of .92 and .85 in the Polish sample suggested an acceptable degree of congruence for inclusion and symbolic, respectively (Ten Berge, 1986; Van de Vijver & Leung, 1997). Finally, we repeated this sequence of analyses on the whole sample. The scree test pointed to a two-component solution explaining 33% of the variance. After orthogonal procrustes rotation towards the average structure, both components could be interpreted as inclusion and symbolic, with Tucker's phi indices of .90 and .98, respectively. The factor scores obtained after Procrustes rotation in the latter analysis are used in all subsequent analyses. A positive inclusion score indicates a tendency to adhere to the Roman Catholic message. A positive symbolic score indicates the tendency to process religious contents in a symbolic fashion.

Results

Preliminary Analyses

Preliminary analyses were conducted to examine relations of the study variables with gender and age. In the Belgian sample, no significant gender differences appeared, Pillai's Trace = 0.06, $F(8,118) = 0.98$, ns. In the Polish sample, a marginally significant multivariate effect of gender was found, Pillai's Trace = 0.07, $F(10,248) = 1.82$, $p = .06$. More specifically, (marginally) significant differences were found for internalized regulation, $F(1,257) = 3.74$, $p = .05$, partial $\eta^2 = .01$, introjected regulation, $F(1,257) = 3.58$, $p = .06$, partial $\eta^2 = .01$, life satisfaction, $F(1,257) = 4.32$, $p < .05$, partial $\eta^2 = .02$, and empathic concern, $F(1,257) = 5.56$, $p < .05$, partial $\eta^2 = .02$. Females obtained higher scores on internalized regulation ($M = 4.25$, $SD = 0.74$), introjected regulation ($M = 3.75$, $SD = 0.93$), life satisfaction ($M = 3.64$, $SD = 0.73$), and empathic concern ($M = 3.87$, $SD = 0.50$) than males ($M = 3.99$, $SD = 0.93$, $M = 3.44$, $SD = 1.12$, $M = 3.39$, $SD = 0.72$, and $M = 3.67$, $SD = 0.54$, respectively). Several variables correlated significantly with age. In the Belgian sample, age was positively correlated with internalized regulation, $r(127) = .29$, $p < .01$, identity integration, $r(127) = .28$, $p < .01$, and inclusion, $r(127) = .22$, $p < .05$. In the Polish sample, age correlated positively with internalized regulation, $r(259) = .15$, $p < .05$, self-actualization, $r(259) = .20$, $p < .01$, identity integration, $r(259) = .23$, $p < .001$, perspective taking, $r(259) = .16$, $p < .01$, and symbolic, $r(259) = .14$, $p < .05$. Given these significant gender differences and relations with age, we controlled for both in each of the subsequent analyses.

Primary Analyses

Mean Level Differences. Between-country differences in the regulations of religious behavior were analyzed using ANOVA-analyses. A multivariate effect was found, Pillai's Trace = 0.36, $F(3,382) = 72.11$, $p < .001$. Specifically, between-country differences were found for internalized regulation, $F(1,384) = 6.80$, $p < .01$, partial $\eta^2 = .02$, and introjected regulation $F(1,384) = 203.93$, $p < .001$, partial $\eta^2 = .35$. No difference in external regulation was observed, $F(1,384) = 0.69$, ns, partial $\eta^2 = .00$. As can be seen in Table 1, Polish participants

scored higher on internalized regulation and introjected regulation compared to Belgian participants, respectively representing a small and big effect size (Cohen's d = 0.28 and 1.55, respectively).

Next, because internalized regulation was positively correlated with introjected regulation in the Polish sample, the obtained elevated score for internalized regulation obtained in the Polish, relative to the Belgian, sample could be due to its shared variance with introjected regulation. Therefore, we examined whether any differences in internalized regulation between both countries would emerge after partialling out the shared variance with introjected regulation. To do so, we performed an ANCOVA analysis examining country-differences in internalized regulation while simultaneously controlling for introjected regulation and vice versa. The difference in internalized regulation was no longer significant $F(1,383) = 0.26$, *ns*, partial η² = .00, while the difference in introjected regulation remained virtually unchanged $F(1,383) = 193.59$, $p < .001$, partial η² = .34. Thus, the only real between–country difference appeared for introjection, with Polish participants scoring higher than Belgian participants.

For all three indices of subjective well-being, a multivariate effect of country-membership was found, Pillai's Trace = .04, $F(3, 382) = 5.49$, $p < .01$. Significant differences were found for self-actualization, $F(1,384) = 15.94$, $p < .001$, partial η² = .04, and identity integration, $F(1,384) = 6.96$, $p < .01$, partial η² = .02, while a marginally significant difference in life-satisfaction was found, $F(1,384) = 3.33$, $p = .07$, partial η² = .01. As shown in Table 1, Polish participants consistently scored lower on all indices of subjective well-being compared to Belgians. Cohen's ds showed these three differences to be small (respectively, 0.43, 0.29, and 0.20).

Similarly, a multivariate between-country effect was found in the PCBS-scores, Pillai's Trace = 0.49, $F(2,383) = 186.19$, $p < .001$. Significant between-country differences were found both for inclusion, $F(1,384) = 168.29$, $p < .001$, partial η² = .31, and symbolic, $F(1,384) = 89.05$, $p < .001$, partial η² = .19. As indicated in Table 1, Polish participants scored higher on inclusion and lower on symbolic than Belgian participants. Both differences are strong effects (Cohen's d = 1.41 and 1.02, respectively). The mean-level differences in regulations, subjective well-being, and PCBS-scores remained after controlling for gender and age differences.

Within-sample correlations. To study the relations between the regulations of religious behavior and well-being, socially adaptive functioning and approaches towards religion, Pearson correlations were calculated within each sample (see Table 2). In both samples, internalized regulation was positively related to all indices of well-being, introjected regulation was negatively related to self-actualization and identity integration, and external regulation showed essentially the same pattern of correlations as introjected regulation, with the exception that the correlation between external regulation and identity integration was not significant in the Polish sample. Moreover, in the Polish sample, we obtained clear relations with adaptive interpersonally functioning: The more autonomous one's regulation, the more adaptive one's interpersonal functioning. Both perspective taking and empathic concern correlated significantly positively to internalized regulation, showed no relation with introjected regulation, and correlated significantly negatively to external regulation. Our

expectations regarding the relations between the regulations of religious behavior and the two PCBS dimensions were generally confirmed as well. The three regulatory styles generally followed a simplex-pattern with the correlations with inclusioin and a symbolic religious approach becoming increasingly less negative and more positive when moving along the internalization continuum.

Regression Analyses. To examine the relative contribution of the three motivational regulations in the prediction of well-being and dimensions of religious attitudes and to examine whether these relations are equivalent across the two countries, hierarchical multiple regression analyses were performed with the three indices of well-being and the two PCBS-scores as dependent variables. In three steps, each of these five dependent variables were regressed on (1) gender, age, and country-membership (Belgian = 0, Polish = 1) in Step 1, (2) the three regulations (centered on their respective mean) in Step 2, and (3) the two-way interactions between each regulation and country-membership in Step 3 by multiplying the centered means of the country-code and motivational variables. The interaction term between motivational regulations and country-code were inserted to examine whether motivational regulations would yield a differential pattern of correlates in Poland compared to Belgium as predicted by the match-perspective but contradicted by SDT.

Regression-coefficients of the different predictors in Step 1 and 2 are shown in Table 3. In Step 2, one can see the generally expected pattern of regulations in the prediction of each outcome variable. Controlling for each other, the two controlled regulations are either unrelated or negatively related to the outcome variables, while internalized regulation was uniquely positively associated with all outcomes. In Step 3, only one interaction turned out to be significant at the .05 level: country-membership interacted with external regulation in the prediction of inclusion, $F(1,376) = 8.08$, $p < .01$, $R^2 = .01$. Analogous to the observed within-sample correlations in Table 2, external regulation was negatively associated with inclusion in the Polish sample ($\beta = -.19$), while both were unrelated to it in the Belgian sample ($\beta = .02$).

Ancillary Analyses

Given that ANOVA-analyses showed significant between-country differences for two well-being outcomes (i.e., self-actualization and identity integration) and for introjected religious regulation, we examined whether group-differences in both well-being indices would be mediated by introjected regulatory style. This would imply that any country-differences in well-being would disappear after inserting introjected regulation in a second step of the respective hierarchical regression analysis. In line with this, the direct negative effect of country-code on identity integration, $\beta = -.13$, $p < .01$, and self-actualization, $\beta = -.20$, $p < .001$, disappeared to no-significance, $\beta = -.03$, ns and $\beta = -.02$, ns, respectively, after inserting introjected regulation in the regression equation which was significantly associated with both identity integration, $\beta = -.18$, $p < .01$, and self-actualization, $\beta = -.30$, $p < .001$.

Discussion

The general aim of this research was to extend Neyrinck et al.'s (2006) earlier established findings with respect to the correlates of religious regulations to a different culture in terms of religiosity, that is, Poland. Nowadays, Poland is, in contrast to Belgium, still characterized by a stronger and more conservative Christian culture. This research addressed two central issues. First, we investigated between-country differences in approach to religion and regulations of religious behavior. Second, we examined the cross-cultural comparability of the structural relations between regulations of religious behaviors and well-being and cognitive approaches towards religion. The main findings relating to these two issues are discussed in greater detail below.

Mean-level Differences between Poland and Belgium

In line with our theorizing that Poland and Belgium represent a more traditional Catholic versus a more secularized society, respectively, Polish participants scored higher than Belgians on a literal approach of belief contents and on inclusion, that is, adherence to Catholic religious contents. These findings suggest that core dogmas are still accepted in contemporary Poland, while in the Belgian secularized society, these dogmas have been largely abandoned and are more often replaced by more liberal, personal interpretations. The extent to which the PCBS-item "Even though this goes against modern rationality, I believe Mary truly was a virgin when she gave birth to Jesus" is subscribed by participants illustrates perhaps most accurately participants' views on the dogma of the Immaculate Conception. Both samples were found to strongly differ in their endorsement of this item, with the Polish participants strongly acknowledging this statement (M = 5.87, SD = 1.43) and the Belgian participants generally disagreeing with this statement (M = 2.75, SD = 1.73, $F(1,384)$ = 354.67, p < .001, partial η^2 = .48; Cohen's d = 2.04).

In addition to these mean differences in adherence to and approach towards Catholic religious contents, an interesting pattern of differences emerged with respect to motives underlying religious behavior. In contradiction to our hypothesis, Polish adolescents did not score higher on external regulation. This null-finding might be due to the fact that the social pressure inherent in a stronger Catholic tradition is subtle rather than overt in nature. Alternatively, socially desirable response tendencies may not allow blatant admittance of the personal reason of only performing religious behaviors (only) because one has to. In contrast, given the development towards secularization in Belgium, it is possible that the score on external regulation could have increased over time. This could result in a leveling out of possible differences between both countries. Future research might want to control for respondents' social desirability tendency to cancel out the latter interpretation.

Consistent with our hypothesis that traditional Catholic societies more strongly emphasize guilt (e.g.,

Sheldon, 2006), the Polish sample scored higher than the Belgian sample on introjected (i.e., guilt- and shame-driven) regulation of religious behaviors. Interestingly, Catholic theology stresses the necessity of feelings of guilt and shame not only for norm-transgressing behaviors; even mere forbidden thoughts are likely to be associated with such negative feelings. Further research could examine possible antecedents of these introjected regulations, including the extent to which Catholic stresses guilt and shame and the extent to which one adopts a conditionally approving God image.

Furthermore, in contrast to our hypothesis, the Polish, relative to the Belgian, sample scored slightly higher on a personal commitment (i.e., internalized regulation) towards one's religious activities. However, this difference appeared to be an artifact of the shared variance between internally volitional (i.e., internalized) and internally controlled (i.e., introjected) regulation, as the observed mean level differences in internalized regulation were reduced to non-significance after controlling for the shared variance with introjected regulation. This again points to the most important between-country difference in introjected regulation.

Within SDT, it is suggested that these three types of regulation lie next to each other on an autonomy-continuum. Empirically, this implies that regulatory types closer to each other (e.g., external and introjected) should correlate more strongly than regulatory styles further apart (i.e., external and identified). Although the correlational pattern generally followed such a simplex-pattern in both countries, multi-group CFAs indicated an interesting between-country difference in this correlation pattern. Specifically, in the Belgian sample, introjected regulation showed a high positive correlation with external regulation, while it was uncorrelated with identified regulation. In the Polish sample, in contrast, introjected regulation correlated significantly positive with internalized regulation, while only a slight positive correlation with external regulation was found. In sum, introjected regulation is experienced as far more controlling and less autonomous in the Belgian sample compared to a seemingly less controlled and more autonomous experience in the Polish sample. Thus, in addition to being a stronger motivator of the engagement in religious behaviors in Poland, the avoidance of guilt was found to covary more strongly with the personal endorsement of these religious behaviors in Poland, relative to Belgium. To our knowledge, no prior study within the SDT-tradition has examined these issues; hence, the current results deserve replication. We tentatively suggest that the location of introjected regulation on the SDT-continuum more towards external or identified regulation depends on the extent to which the culture emphasizes the engagement in the behavior. In the case of Poland, there is a strong cultural emphasis on the behavior at hand, which might explain why internally pressuring regulations might not only become more prevalent but also more closely aligned to one's personal values.

The Pattern of Correlates Associated with Motivational Regulations

Furthermore, we examined the correlates of one's behavioral regulation. In doing so, we extended Neyrinck et al.'s (2006) findings by showing that a more internalized regulation of religious behaviors not only positively relates to intrapersonal well-being, but also to more open interpersonal functioning, as indexed by

empathic concern and cognitive perspective-taking. A simplex-pattern between the three regulations and empathy and well-being emerged, with internalized regulation positively predicting well-being and empathy, while more controlled regulations related negatively to these indices. Concerning the relations between introjected regulation and adaptive functioning in the Polish sample, it should be noted that introjected regulation, although it seems tho have a less controlling character in the Polish compared to the Belgian sample, it was also in the Polish sample either unrelated or negatively related to adaptive outcomes. For instance, introjected regulation was found to be negatively related to and perspective-taking (β = -.20, p < .01) after controlling for identified regulation. Following Deci and Ryan (1985), internalization of behavioral regulations brings about human's natural tendency towards optimal functioning As such, more internalized regulations of religious behaviors correlate more strongly to adaptive intra- and interpersonal functioning.

Furthermore, the different regulations showed a similar continuum-pattern to symbolic approach to religious contents. These findings illustrate Deci and Ryan's (1985) general point that more integrated self-structures allow for a more flexible functioning. The full internalization of religious behavioral regulations relates to a flexible, symbolic and, hence, more adaptive approach of religious contents. The relation between both constructs is likely to be bidirectional, as flexibility in cognitive functioning is needed to attain integration and integrated self-structures will lead to a flexible approach of new information. More controlled regulations are associated with the opposite pattern of cognitive functioning, as they relate to a more rigid and defensive pattern. Essentially, external regulation relates negatively, while introjected regulation did not predict a literal approach. These findings are in line with previous research which has shown that a controlled causality orientation relates to several indices of defensiveness such as normative identity style (Soenens, et al., 2005), right-wing authoritarianism and social dominance orientation (Neyrinck, Lens, Vansteenkiste, Duriez, Luyckx, & Soenens, 2007).

Importantly, in the prediction of well-being and symbolic approach, we did not obtain interaction-effects between group-membership and regulatory styles. This implies that the relations of regulations to the outcome variables were invariant across both samples, thus following the expected continuum-pattern in both countries. That is, a more controlled religious regulation showed a maladaptive pattern and more autonomous religious regulations a rather adaptive pattern of well-being outcomes. This cross-national consistency in findings clearly supports SDT's claim that autonomous functioning should universally predict adaptive functioning. The current findings are thus also in contrast with a match-perspective, which would predict the effect of controlled or autonomous regulations to depend on the match between one's predominant regulatory style and the type of regulations that is promoted within ones closer or broader social environment. If this were true, the Polish participants, who functioned on average more on the basis of introjected reasons, should benefit from doing so, such that introjected regulations should be characterized by a positive pattern of outcomes in the Polish subsample. Introjected regulation did, however, fail to interact with country-code in the prediction of the

outcomes. ; More generally, the present findings contract Markus and Kitayama's (2003) claim that a more pressured regulation should be associated with adaptive functioning because these pressures are highly salient in one's society. Vansteenkiste (2005) suggested that the match-prediction that motivational regulations should yield a different association with outcomes if they are more strongly present to be based on a logical mistake. This is because no predictions per se can be inferred regarding different structural relations between (regulatory) constructs and adaptive functioning on the basis of mean-level differences in these motivational regulations.

Interestingly, introjected regulation could even account for the country-level differences in well-being. Polish participants scored significantly lower on self-actualization and identity integration compared to Belgian participants. As expected, these differences in well-being were fully mediated by the elevated presence of an internally pressured mode of functioning in the Polish, relative to the Belgian, sample. Thus, differences in outcomes such as well-being are attributable to more internally controlling, that is, introjected regulation, further testifying to the importance of differentiating qualitatively different regulatory styles.

Interestingly, we did find regulatory styles to interact with group-membership in the prediction of inclusion of transcendence. That is, external pressure showing a stronger negative regulation to inclusion in the Polish compared to Belgian sample. Remark the slight positive relation between introjection and inclusion in the Polish sample to be a spurious correlation, being non-significant controlling for its shared variance with identified regulation. An explanation of these findings can be found in the Catholic tradition being more ingrained in Polish society. Given the PCBS measuring adherence to and approach towards Catholic religious belief contents, the Catholic interpretation of belief contents is more strongly related to regulations in the Polish sample. More liberal, personal interpretations would be more present in the Belgian secularized society, giving less strong relations to a traditional Catholic interpretation as measured in the PCBS.

Limitations

However, some shortcomings of this research need to be mentioned. First, although both samples consisted of similarly aged adolescents, they were likely to vary in their degree of quantitative engagement in religious activities. Indeed, we had to search intensively for religiously active people in the Belgian sample, while we supposed the modal Polish university student to be at least moderately active in for example church-attendance. Unfortunately, the failure to include an index of the religious activity in the Belgian sample precludes the possibility to control for this variable when examining mean level differences between both countries. Furthermore, an index of the central importance attached to (Catholic) religion itself and relatively to other life domains could have enhanced the comparability of both samples and might need to be included as a covariate in future research to examine whether any differences in motivational regulation of religious behaviors would emerge above and beyond the the importance attached to religion in one's life. Moreover, it might be the case that centrality of religion interacts with motivational religious regulations in the prediction of general well-

being outcomes. Furthermore, we used adolescents in both our samples. Given the limited age-range, an extension of this research to older religiously active people could shed more light on the generalizability of our findings. Given positive correlations between literal approach and age (e.g., Neyrinck, et al., 2006), this would give us simultaneously a view on people adhering Catholic religious contents more literally.

Given the cross-sectional nature of our research, we cannot infer any causality. Although it is difficult to manipulate approaches towards religion, experimental research that induces an autonomous versus a controlled orientation could shed more light on possible causal directions in our conclusions. Motivational orientations have been shown to be manipulated by written instructions (e.g., Vansteenkiste, Simons, Lens, Soenens, & Matos, 2005), and primed by word-sentence tasks (e.g., Hodgins, Yacko, & Gottlieb, 2006). This work showed more openness and defensiveness after priming autonomous and controlled orientations, respectively. Examining analogous issues with respect to the flexibility versus defensiveness in processing religious information after priming autonomous and controlled functioning would constitute an interesting next step. Not only defensiveness in processing information, but also in approaching other people differing in religious outlook could be the result of being primed differently.

Finally, a clearer view on the mediating mechanisms between motivational regulation and outcomes could provide further insight in the reason why autonomous and controlled regulations yield a differential association. In other life-domains, basic need satisfaction has been presented as such a mediating mechanism (e.g., Niemiec, Lynch, Vansteenkiste, Bernstein, Deci, & Ryan, 2006). In the domain of religious behavior, Baard (2002) described a first operationalisation of basic need satisfaction in religion.

Conclusion

Across the globe, a significant cross-cultural diversity in religious behaviors can be observed depending on, amongst many other things, the centrality of the Catholic belief system in people's religious experience. In this vein, earlier findings relating autonomous versus controlled regulations of religious behaviors to a variety of outcomes in a secularized society as Belgium were in need of examination in a more traditional Catholic society as Poland. Although Polish participants seem to more strongly adhere to and more literally interpret the Christian message and although their religious practices are more driven by avoiding feelings of guilt and shame, the structural relations of behavioral regulations and different outcome variables were not moderated by group-membership. Said differently, even strong Polish believers who function in a controlled fashion in the religious domain do seem to suffer from doing so, while a more flexible and volitional endorsement of religious behaviors and belief contents goes hand in hand with a more flexible and less defensive interpretation of it, higher well-being and more empathic functioning. Thus, the present research represents an important cross-cultural extension of former research on the regulation of religious behaviors and provides further evidence for SDT's claim that autonomous functioning yields universal benefits, regardless of one's religious background.

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Table 1

Mean, Standard Deviation (SD), Range, Internal Consistency (Cronbach's Alphas) in the Belgian and Polish Subsample

Variable	Belgian subsample				Polish subsample			
	Mean	SD	Range	Alpha	Mean	SD	Range	Alpha
Regulatory Styles								
Internalized regulation	3.99	0.72	1.67 - 5.00	.70	4.21	0.78	1.00 - 5.00	.76
Introjected regulation	2.21	0.96	1.00 - 5.00	.73	3.70	0.96	1.00 - 5.00	.80
External regulation	1.66	0.87	1.00 - 5.00	.86	1.73	0.88	1.00 - 5.00	.81
Subjective Well-being								
Self-actualisation	3.56	0.49	2.07 - 5.00	.78	3.36	0.11	2.27 - 4.93	.66
Identity integration	3.39	0.55	2.00 - 4.50	.74	3.20	0.69	1.00 - 4.80	.82
Life satisfaction	3.74	0.64	1.40 - 5.00	.78	3.60	0.73	1.60 - 5.00	.76
Interpersonal Functioning								
Perspective-taking	-	-	-	-	3.66	0.57	2.29 - 5.00	.69
Empathic concern	-	-	-	-	3.84	0.51	2.00 - 5.00	.60
Approach to religion								
Inclusion	-0.79	0.76	-2.99 - 1.36		0.39	0.87	-2.76 - 1.95	
Symbolic	0.62	1.03	-2.38 - 2.56		-0.30	0.83	-3.09 - 1.80	

Table 2

Within-Country Correlations Between Regulations of Religious Behavior and Other Variables

Variable	Belgian subsample (N = 127)			Polish subsample (N = 259)		
	Internalized	Introjected	External	Internalized	Introjected	External
Regulatory Styles						
Internalized regulation						
Introjected regulation	.05			.30***		
External regulation	-.25**	.57***		-.25***	.13*	
Subjective Well-being						
Self-actualisation	.18*	-.24**	-.32***	.13*	-.25***	-.29***
Identity integration	.19*	-.19*	-.23*	.19**	-.13*	-.09
Life satisfaction	.21*	.00	-.04	.19**	-.00	-.11
Interpersonal Functioning						
Perspective-taking	-	-	-	.26***	-.10	-.25**
Empathic concern	-	-	-	.26***	.01	-.21**
Approach to religion						
Inclusion	.45***	.00	-.11	.59***	.19**	-.38***
Symbolic	.24**	-.14	-.26**	.26***	.03	-.32***

Note: * *p* <.05; ** *p* <.01; *** *p* <.001

Table 3

Regression Analysis of Well-being and Religious Attitude Onto Background Variables, Country-code, Regulatory Styles and Interactions between The Latter Two

	Self-actualization		Identity Integration		Life Satisfaction		Inclusion		Symbolic	
	Step 1	Step2	Step 1	Step2	Step 1	Step2	Step 1	Step2	Step 1	Step2
Gender	.01	.01	.01	.00	.04	.03	.04	-.01	.10*	.08
Age	.15**	.09	.22***	.17**	.08	.04	.12**	.04	.12**	.07
Country	-.20***	-.06	-.13*	-.03	-.10	-.10	.55***	.46***	-.46***	-.46***
Internalized		.13*		.19***		.18**		.40***		.15**
Introjected		-.26***		-.21**		-.04		.09		.00
External		-.20***		-.02		-.03		-.17***		-.22***
	.06***	.18***	.07***	.12***	.02	.05**	.32***	.54***	.21***	.30***

Note: * *p* <.05; ** *p* <.01; *** *p* <.001.