

Is Religiosity Related to Better Parenting?

Disentangling Religiosity From Religious Cognitive Style

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This study examines associations between parental religiosity and parenting in a sample of 482 mother–child and 453 father–child dyads. Parents complete a religiosity measure that allows disentangling the effects of being religious from the effects of the way in which people process religious contents (i.e., literal vs. symbolic). In addition, parent and adolescent reports of two parenting style (i.e., need support and regulation) and parental goal promotion dimensions (i.e., intrinsic vs. extrinsic and conservation vs. openness to change goal promotion) are gathered. Whereas parental religiosity is positively related to a tendency to promote conservation rather than openness to change goals, a symbolic religious cognitive style relates positively to need support and the promotion of intrinsic rather than extrinsic goals. Hence, whereas relations between parental religiosity as such and parenting are limited and not unequivocally positive, a symbolic religious cognitive style systematically relates to adaptive parenting styles and goals. Implications are discussed.

Keywords: *religiosity; cognitive style; parenting; parenting style; parental goal promotion*

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An important question in research in the psychology of religion is how religiosity affects family functioning in general and parent-child relationships in particular. Although numerous studies addressed the relation between parental religiosity and parenting practices, styles, and goals, few systematic findings have emerged. According to Mahoney, Pargament, Tarakeshwar, and Swank (2001), this lack of clear-cut findings is partly due to the descriptive, atheoretical approach of much research and to poor assessments of religiosity. This study aims to contribute to the literature by studying the link between parental religiosity and parenting from the theoretical perspective of Wulff's (1991) multidimensional model of religiosity. This model disentangles the effects of religiosity as such from the effects of the cognitive style that is used to process religious contents. In this study, we propose and test the hypothesis that both aspects of religiosity will be differentially related to parenting style dimensions and parental goal promotion efforts.

Parental Religiosity and Parenting

Research generally provided evidence for a positive relationship between parental religiosity and adaptive parenting qualities (Mahoney et al., 2001). Pearce and Axinn (1998), for instance, found maternal self-reported importance of religiosity to positively predict mother and child reports of the quality of the mother-child relation. Similarly, King (2003) found religious fathers to be more involved with their children, and Snider, Clements, and Vazsonyi (2004) showed that parents who were perceived to be more religious by their adolescent children were also perceived as more supportive. Gunnoe, Hetherington, and Reiss (1999) expanded on these correlational findings by showing that mother and father reports of religiosity relate positively to observations of authoritative parenting during dyadic problem-solving discussions between parent and adolescent. Although generally suggestive of a positive impact of religiosity on parenting, Mahoney et al. (2001) point out that effect sizes are typically small and that studies generally suffer from methodological problems. Many studies ask undergraduate students how they would treat their children instead of sampling actual parents. Studies that do sample parents often only include mothers so that it is unclear whether the findings replicate across parental gender. In addition, studies often rely uniquely on either parent or adolescent reports of parental religiosity and parenting so that any relation between parental religiosity and parenting may be due to shared method variance. To deal

with these limitations, the present study samples actual parents (mothers and fathers) and includes parent and adolescent reports of parenting.

Apart from these limitations, research typically relied on religiosity measures that do not tap into individuals' deeper rooted religious attitudes (Holden, 2001). This is unfortunate because research on religious conservatism highlights the importance of parents' underlying religious attitudes in predicting parenting practices. With few exceptions (e.g., Jackson et al., 1999), studies converge on the conclusion that parents affiliated with conservative Christian groups are more likely to endorse and use corporal punishment (e.g., Gershoff, Miller, & Holden, 1999). Such findings suggest that a conservative, literal approach to religiosity may negatively affect parents' rearing style. However, because measures of Christian conservatism confound religiosity with religious cognitive style, these findings do not allow one to determine whether it is religiosity as such or religious cognitive style that drives the association with parenting. Therefore, this study uses a multidimensional religiosity measure that was explicitly designed to disentangle the effects of religiosity as such from the effects of religious cognitive style.

A final limitation of extant research is that it used rather limited parenting measures or focused on narrow aspects of parenting, such as spanking, hugging, or corporal punishment (Mahoney et al., 2001). Because of this, research findings cannot be easily integrated and compared. This study relates parental religiosity to a broad and comprehensive framework of parenting styles and goals that is rooted in current socialization theory and research. Before outlining our study hypotheses, we will introduce our multidimensional view on both religiosity and parenting.

A Multidimensional View on Religiosity

According to Wulff (1991), the various possible religious attitudes can be summarized along two orthogonal dimensions that are often confounded in religiosity measures. The first dimension, exclusion versus inclusion of transcendence, specifies whether individuals believe in a transcendent (i.e., divine) reality and thus refers to the distinction between being religious and not. The second dimension, literal versus symbolic, indicates whether religious contents are approached in a literal and rigid or in a symbolic and more interpretative fashion. Hence, this dimension is situated at the level of social cognitions and refers to the way religious contents are processed. By crossing these two dimensions, four religious attitudes are defined: literal

inclusion, literal exclusion, symbolic exclusion, and symbolic inclusion. Literal inclusion represents a religious position in which one believes in a transcendent reality and in which one interprets religious contents in a literal fashion: Religious contents are automatically adopted from the religious tradition and are processed in a noncritical and even closed-minded fashion. Literal exclusion represents a nonreligious position in which one rejects the possibility of a transcendent reality on the basis of a literal interpretation of religious contents. Individuals with this orientation fail to see that religious stories and practices might have a deeper, symbolic meaning and will for instance reject religious stories and practices because they do not make sense from a scientific point of view. Symbolic inclusion represents a religious position in which one does search for a deeper, symbolic meaning instead of uncritically adopting religious contents as they are. People with this orientation develop a personalized, interpretative stance toward religiosity. Finally, symbolic exclusion represents a nonreligious position in which the deeper, symbolic meaning of religious messages is acknowledged, but in which its transcendent referent is nevertheless denied. People with this orientation agree that religiosity may represent a way to give meaning to life for some people but they do not need religiosity themselves to obtain a sense of purpose and meaning in life.

To measure these constructs in a Christian context, Fontaine, Duriez, Luyten, and Hutsebaut (2003) developed the Post-Critical Belief Scale. This scale was shown to provide accurate measures of literal inclusion, literal exclusion, symbolic inclusion, and symbolic exclusion. In addition, when individual differences in acquiescence are corrected for, two components were shown to adequately represent the empirical relations between the items. These components could be interpreted in terms of exclusion versus inclusion of transcendence and literal versus symbolic. The external validity of the exclusion versus inclusion of transcendence dimension, which indicates degree of religiosity, is evidenced by high correlations ($r_s > .60$) with traditional measures of religiosity, such as church involvement, frequency of church attendance, and the importance of religion in life. Apart from this, this dimension was also found to relate to cultural conservatism and conservation versus openness to change values, with people obtaining high inclusion of transcendence scores also obtaining higher scores on measures of cultural conservatism and conservation values (Duriez, Dezutter, Neyrinck, & Hutsebaut, in press). Testifying to the external validity of the literal versus symbolic dimension, it has been shown that this dimension is positively related to measures of rigid, dogmatic, and closed-minded cognitive functioning. In addition, this dimension was found to relate to, among

other things, ethnic prejudice, moral competence, empathy, and self-enhancement versus self-transcendence values, with people approaching religion in a literal way being more prejudiced, less morally competent, less empathic, and more focused on self-enhancement values (Duriez et al., in press).

A Multidimensional View on Parenting

Darling and Steinberg (1993) have argued that to understand parental influence, parents' rearing style (i.e., *how* parents socialize their children) should be distinguished from the goals they promote (i.e., *what* parents socialize in their children). Whereas parenting style dimensions provide an indication of the emotional climate within the family (i.e., parental need support) and of whether parents attempt to guide and structure the child's behaviors (i.e., parental regulation), parental goal promotion efforts determine *which* goals and behaviors are encouraged. Following Darling and Steinberg (1993), this study focuses on both parenting style dimensions and parental goal promotion efforts.

Parenting Style Dimensions

For many years, the parenting style construct has been studied from a configurational approach, where parenting styles were defined and operationalized as combinations of parenting style dimensions. The most intensively studied parenting style within this approach is the authoritative style, which represents a combination of high levels of behavioral regulation and responsiveness (warmth). Abundant research has documented the positive developmental outcomes associated with an authoritative parenting style (Lamborn, Mounts, Steinberg, & Dornbusch, 1991; Steinberg, 2001; Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994).

In more recent research, there has been a shift toward a dimensional approach to the assessment of parenting style. Rather than classifying individuals into parenting style groups, studies adopting a dimensional approach focus on the specific correlates, antecedents, and consequences of parenting style dimensions. This approach would allow for a more precise analysis of the dynamics involved in specific parenting dimensions (Barber & Olsen, 1997). In this study, we adopted the dimensional approach. We thereby focused specifically on two parenting style dimensions that are widely acknowledged as underlying the parenting style construct, that is, a dimension pertaining to the affective quality of the parent-child relationship,

which will be referred to as parental need support, and a parenting style dimension that relates to parental regulatory and structuring capacities, which will be referred to as parental regulation. Current socialization research distinguishes different aspects of the affective quality of parents' rearing style, such as support (Davidov & Grusec, 2006), autonomy support (Soenens et al., 2007), and psychological control (Barber, 1996). Accordingly, parental need support is defined in this study as characteristic of parents who develop a warm, affective, and personal relation with their children, who provide autonomy support, and who refrain from intrusive and manipulative parenting techniques such as guilt induction and love withdrawal. Parental need support is thought to foster adjustment and well-being because it would satisfy children's basic psychological needs for autonomy, relatedness, and competence (Niemic et al., 2006). Parental regulation refers to the communication of clear expectations and limits for appropriate behavior and efforts to monitor the behavior of their children (Barber, 1996). Adequate regulation should provide adolescents with clear guidelines for appropriate behavior and teach them to self-regulate and become less susceptible to negative peer influences and hence inhibit them from engaging in delinquent behavior and drug use (Barber, 1996).

Parental Goal Promotion

Current theory and research on goals point to the importance of distinguishing between goals that are either extrinsic or intrinsic in nature (Deci & Ryan, 2000) and goals that reflect conservation versus openness to change (Schwartz, 1992). The distinction between intrinsic and extrinsic goals is rooted within Self-Determination Theory (Deci & Ryan, 2000). Intrinsic goals (i.e., community contribution, self-development, and affiliation) are considered to reflect an inward orientation and to be inherently satisfying to pursue. In contrast, extrinsic goals (i.e., wealth, social recognition, and physical attractiveness) are considered to reflect an outward orientation and to be pursued for instrumental reasons. Because of this, an extrinsic goal pursuit would hinder the satisfaction of individuals' psychological needs and yield various costs at the (inter)personal level (Kasser, 2002). Research has indeed shown that individuals who pursue extrinsic goals at the expense of intrinsic goals experience decreased well-being and are more likely to adopt a socially dominant, prejudiced, and intolerant attitude (Duriez, Vansteenkiste, Soenens, & De Witte, 2007). Recently, it has been argued that extrinsic and intrinsic goals can not only be pursued to different degrees by individuals but can also be promoted to a different

extent by socialization agents such as parents (Vansteenkiste, Lens, & Deci, 2006). It was shown that the promotion of extrinsic versus intrinsic goals yields personal and social costs similar to those following from the personal pursuit of these goals (Duriez, Soenens, & Vansteenkiste, 2007; Vansteenkiste, Simons, Lens, Sheldon, & Deci, 2004).

A second type of parental goal promotion that is relevant to the present study pertains to conservation versus openness to change. According to Schwartz (1992), conservation values are aimed at stability, certainty, and social order (i.e., values referring to tradition, conformity, and security) and are in conflict with openness to change values that are aimed at novelty and personal independence (i.e., values referring to stimulation and self-direction). Schwartz (1992) found a conservation versus openness to change dimension to be distinct and even largely orthogonal from a self-enhancement versus self-transcendence dimension, which opposes value types referring to the pursuit of selfish interests (i.e., achievement and power) to value types promoting the welfare of both close and distant others (i.e., benevolence and universalism), and which is highly equivalent to the distinction between extrinsic and intrinsic goals (Grouzet et al., 2006). Accordingly, it was deemed important to study the parental promotion of both extrinsic versus intrinsic goals and conservation versus openness to change goals. As is the case with extrinsic versus intrinsic goals, research primarily examined the correlates of *personal* conservation and openness to change goal pursuits, but conservation and openness to change goals can also be promoted by parents. Conservation versus openness to change goal promotion was shown to put adolescents at risk for right-wing authoritarianism (Duriez, Soenens, & Vansteenkiste, 2007), which is associated with indices of defensive functioning, such as a normative identity style (Duriez, Soenens, & Beyers, 2004) and a need for cognitive closure (Van Hiel, Pandelaere, & Duriez, 2004).

Dimensions of Religiosity and Parenting

Parental Religiosity and Parenting Style Dimensions

Studies addressing the link between parental religiosity and parenting style dimensions among parents of adolescents (Gunnoe et al., 1999; Pierce & Axinn, 1998; Snider et al., 2004) indicate that relations between parental religiosity and parental need support, if any, are expected to be positive. However, given that people's style of processing religious

contents was found to be more indicative of the quality of people's (inter) personal functioning than people's religiosity as such (Duriez et al., in press), it is expected that the literal versus symbolic dimension will be more strongly related to parental need support than the inclusion versus exclusion of transcendence dimension, with parents dealing with religion in a symbolic way providing more need support. One mechanism that may explain why a symbolic approach to religiosity relates to more need-supportive parenting is parental empathy. It has been shown that people who process religious contents in a symbolic way are higher in empathy and perspective taking (Duriez, 2004), which in turn have been shown to be essential prerequisites for the provision of effective parental need support (Soenens, Duriez, Vansteenkiste, & Goossens, 2007). Importantly, religiosity as such was found to be largely unrelated to empathic qualities (Duriez, 2004), leading us to hypothesize that religiosity as such will be less strongly related to parental need support compared to a symbolic approach to religiosity.

On the basis of the observation that most religious systems provide clear guidelines and prescriptions concerning an appropriate and pious lifestyle, we expected that parental religiosity would go hand in hand with clear parental communication of rules and expectations and parental efforts to track and monitor the child's behavior. This reasoning was confirmed in the study of Snider et al. (2004), who have shown that parents who are perceived to be more religious are also perceived as providing better monitoring. Thus, we anticipated that the inclusion versus exclusion of transcendence dimension would be primarily important with regard to parental regulation.

Parental Religiosity and Parental Goal Promotion

We hypothesize that the literal versus symbolic dimension will be the most relevant religiosity dimension with respect to the prediction of parental extrinsic versus intrinsic goal promotion. Specifically, a symbolic way of processing religious contents can be expected to predict the promotion of intrinsic rather than extrinsic goals. By definition, individuals who deal with religious contents in a symbolic way explore and construct a personal sense of meaning. As parents who process religious contents in a symbolic way endorse an "inner orientation" when it comes to existential issues, they are likely (a) to attach importance to intrinsic goals and to promote such goals and (b) to reject goals with an outward orientation. Conversely, as parents with a literal attitude are known to function in more defensive, self-absorbed,

and closed-minded fashion (Duriez et al., in press), they are likely to adopt and promote extrinsic (rather than intrinsic) goals because such goals would provide an immediate yet derivative and short-term sense of protection against feelings of threat and insecurity (Kasser, 2002). In line with this, Fontaine, Duriez, Luyten, Corveleyn, and Hutsebaut (2005) have shown that the literal versus symbolic dimension (but not the exclusion vs. inclusion of transcendence dimension) is related to the conflict between self-transcendence and self-enhancement values, which closely maps onto the distinction between intrinsic and extrinsic goals.

In contrast, we expect the inclusion versus exclusion of transcendence dimension to be more strongly related to differences in conservation versus openness to change goal promotion than the literal versus symbolic dimension. Past research has shown that religiosity as such is more strongly related to the individual endorsement of conservation rather than openness to change goals (Fontaine et al., 2005). Moreover, a number of studies have shown that parental religiosity is positively related to child conformity (Mahoney et al., 2001). Accordingly, it was hypothesized that parents who obtain high inclusion of transcendence scores would be more inclined to promote conservation rather than openness to change goals.

Present Study

The aim of the present study is to relate the outlined multidimensional framework of religiosity to a comprehensive assessment of parenting styles and goals. Parents completed the multidimensional Post-Critical Belief Scale, and to obtain parents' and adolescents' perspective on parenting, we had both parents and adolescents report on parenting style dimensions (i.e., paternal and maternal need support and regulation) and parental goal promotion efforts (i.e., paternal and maternal extrinsic vs. intrinsic and conservation vs. openness to change goal promotion).

Method

Participants

A sample of 905 high-school students (mean age = 14.94; 51.22% male) was recruited during school hours. In Belgium, there exist three types of high schools: (a) professional schools that generally aim to teach a profession and prepare children for the labor market by the time they are 18; (b) technical

schools generally aiming to prepare children for a short, additional technical education at the age of 18; and (c) secondary schools that generally aim to prepare children for university or college studies at the age of 18. The present sample was obtained in six randomly selected secondary schools in the Flemish-speaking part of Belgium. Students filled out a questionnaire themselves. They also received questionnaires for their parents and were asked to invite their parents to fill out these questionnaires. Adolescent participants were asked to return the parent questionnaires in an enclosed envelope within 14 days. In total, 482 mothers (53%) and 453 fathers (50%) filled out the questionnaires, resulting in 482 mother-child and 453 father-child dyads. Independent samples *t* tests showed no significant differences between children of parents who participated and children whose parents did not participate on any parenting variable (all *ps* > .05). Moreover, a comparison of the correlation matrix of each group by means of a chi-square test indicated no significant differences in the pattern of associations ($p > .05$). These analyses suggest that the final sample is not a selective subgroup of the initial sample. All participants had the Belgian nationality, belonged to the Flemish majority, and were baptized Roman Catholics. Eighty-five percent lived in an intact family.

Measures

Religiosity. Parents completed a shortened 18-item Post-Critical Belief Scale (Duriez, Soenens, & Hutsebaut, 2005) containing items referring to literal inclusion, literal exclusion, symbolic inclusion, and symbolic exclusion (see Table 1). Items were scored on a 7-point Likert-type scale ranging from 1 (*completely disagree*) to 7 (*completely agree*). As in Duriez et al. (2005), after correction for acquiescence, the scree test of a principal components analysis (PCA) indicated a two-component solution. Because PCA allows freedom of rotation, structures obtained in different samples cannot be directly compared. Therefore, solutions were rotated toward an average structure using orthogonal Procrustes rotation (Fontaine et al., 2003; see Table 1). Tucker's phi indices >.90 suggested good congruence for mothers and fathers. The components could be interpreted as exclusion versus inclusion of transcendence and literal versus symbolic. A high inclusion score indicates a tendency to believe in a transcendent (i.e., divine) reality. A high symbolic score indicates a tendency to symbolically process religious contents. All of the 18 items had factor loadings greater than .30 or less than $-.35$ on at least one of the two extracted components (component loadings of the target structure can be found in Table 1). Estimates of internal consistency (theta; Armor, 1974) ranged between .80 and .90.

Table 1
Items of the Shortened Post-Critical Belief Scale by Type, Preceded
by Their Position in the Scale and Followed by Their Average
Loading on Inclusion (C1) and Symbolic (C2)

No.	Item	C1	C2
Literal Inclusion			
02	God has been defined for once and for all and therefore is immutable	.483	-.294
05	Even though this goes against modern rationality, Mary truly remained a virgin	.472	-.291
08	Only the major religious traditions guarantee admittance to God	.318	-.381
10	Ultimately, there is only one correct answer to each religious question	.308	-.487
15	I think that Bible stories should be taken literally, as they are written	.199	-.561
Literal Exclusion			
03	Faith turns out to be an illusion when one is confronted with the harshness of life	-.438	-.420
11	The world of Bible stories is so far removed from us that it has little relevance	-.331	-.435
12	Science has made a religious understanding of life superfluous	-.393	-.510
17	In the end, faith is nothing more than a safety net for human fears	-.527	-.362
18	Faith is an expression of a weak personality	-.318	-.459
Symbolic Inclusion			
01	The Bible holds a deeper truth that can only be revealed by personal reflection	.374	.391
04	The Bible is a rough guide in the search for God and not a historical account	.301	.359
07	Even though the Bible was written a long time ago, it retains a basic message	.481	.497
16	Despite the injustices caused by Christianity, Christ's message remains valuable	.407	.522
Symbolic Exclusion			
06	Each statement about God is a result of the time in which it was made	-.257	.355
09	The manner in which humans experience God will always be colored by society	-.286	.365
13	God grows together with the history of humanity and therefore is changeable	-.351	.313
14	My ideology is only one possibility among so many others	-.412	.414

Parenting style dimensions. Both parents and adolescents rated several parenting style dimension items on a 5-point Likert-type scale. Three scales were used to form an index of *parental need support*, that is, parental support (six items from Schaefer's, 1965, Acceptance scale; e.g., "My father makes me feel better after I discuss my worries with him"), psychological control (six items from Barber's, 1996, Psychological Control Scale; e.g., "My father is always trying to change how I feel or think about things"), and autonomy support (six items from Grolnick, Ryan, & Deci's, 1991, Perceptions of Parents Scales; e.g., "My father helps me to choose my own direction in life"). *Parental regulation* was assessed with Barber's (2002) Parental Expectations scale (six items; e.g., "My father has clear expectations for how I should behave in and outside the home"). Parents completed slightly adjusted items (e.g., the item "My father has clear expectations for how I should behave . . ." was modified to "I have clear expectations for how my son/daughter should behave . . ."). The scree plot of an exploratory factor analysis on these four scales pointed to two-factor solutions for parent and adolescent reports. Next Varimax rotation showed that in all cases, support and autonomy support loaded positively ($>.35$) and psychological control loaded negatively ($<.35$) on the first factor, and parental regulation loaded positively ($>.35$) on the second factor. Subsequently, need support scores were computed by averaging the support, autonomy support, and (reversed) psychological control items, and regulation scores were computed by averaging the regulation items (Cronbach's alpha between .70 and .90).

Parental goal promotion. Both parents and adolescents rated a 20-item parental goal promotion scale (Duriez, Soenens, & Vansteenkiste, 2007) on a 5-point Likert-type scale. The extrinsic goals of financial success (e.g., "My father finds it important that I'm financially successful in my life"), social recognition (e.g., "My father finds it important that I'm admired by several people"), and physical attractiveness (e.g., "My father finds it important that I'm physically attractive and appealing for others"), and the intrinsic goals of self-development (e.g., "My father finds it important that I develop my talents"), community contribution (e.g., "My father places high importance on helping other people in need"), and affiliation (e.g., "My father finds it important that I develop close relationships with a few friends") were assessed. In addition, the conservation goals of conformity (e.g., "My father finds it important that I behave properly and avoid doing anything people would say is wrong") and tradition (e.g., "My father finds it important that I try to follow the customs of my family and society as a whole"), and the

openness to change goals of self-direction (e.g., “My father finds it important that I can make my own decisions, be free, and not dependent on others”) and stimulation (e.g., “My father finds it important that I can have an exciting and adventurous life”) were assessed (two items each). As for the parenting style dimension scales, items were slightly modified to make them amenable to parent self-report. As in Duriez, Soenens, and Vansteenkiste (2007), after correction for acquiescence, the scree plot of an exploratory factor analysis pointed to two-factor solutions for parent and adolescent reports. In all cases, after Varimax rotation, intrinsic scales loaded positively ($>.30$) and extrinsic scales loaded negatively ($<-.30$) on the first factor, and openness to change scales loaded positively ($>.30$) and conservation scales loaded negatively ($<-.30$) on the second factor. Subsequently, (perceived) maternal and paternal extrinsic goal promotion scores were computed by subtracting the averaged intrinsic from the averaged extrinsic scales, and (perceived) maternal and paternal conservation goal promotion scores were computed by subtracting the averaged openness to change scales from the averaged conservation scales (Cronbach’s alpha between .70 and .80). A positive extrinsic goal promotion score indicates a tendency to (perceive the parents to) promote extrinsic rather than intrinsic goals, and a positive conservation goal promotion score indicates a tendency to (perceive the parents to) stress conservation rather than openness to change.

Results

Preliminary Analyses

Table 2 shows means, standard deviations, and correlations for the mother–child and father–child dyads separately. To preclude small effects from being flagged significant, an alpha level of .01 was used. We first inspected the relations with a number of relevant background variables, including adolescent gender, and parental age and level of education. Univariate ANOVAs showed boys to report lower maternal need support, $F(1, 889) = 7.54, p < .01$. In addition, maternal age related significantly to symbolic and extrinsic goal promotion ($r = .13$ and $-.15, ps < .01$, respectively), and paternal age related significantly to symbolic ($r = .16, p < .01$). Finally, both maternal and paternal education related significantly to symbolic ($r = .42$ and $.38, p < .01$), extrinsic goal promotion ($r = -.17$ and $-.14, ps < .01$) and conservation goal promotion ($r = -.14$ and $-.20, ps < .01$). Given that the background variables were significantly related to the study variables, their effects were controlled for in the primary analyses.

Table 2
Means, Standard Deviations, and Correlations for Mother–Child
(below diagonal) and Father–Child Dyad (above diagonal)

Measures	1	2	3	4	5	6	7	8	9	10
<i>M</i>	0.00	0.00	3.97	4.15	-1.38	-0.16	3.67	3.63	-1.04	-0.05
<i>SD</i>	1.00	1.00	0.45	0.51	0.77	0.73	0.71	0.68	0.87	0.96
1. P-INC		.00	-.03	.10	.11	.27*	-.08	.03	.09	.20*
2. P-SYM	.00		.25*	.00	-.40*	-.15*	.15*	.01	-.23*	-.09
3. P-SUP	-.11	.19*		-.15*	-.33*	-.19*	-.31*	-.03	-.20*	-.12
4. P-REG	.07	-.01	.03		-.01	.33*	-.02	.19*	.01	.04
5. P-EXT	.10	-.34*	-.28*	.06		.19*	-.11	.02	.25*	.15*
6. P-CON	.21*	-.19*	-.16*	.32*	.14*		-.08	.09	.18*	.17*
7. C-SUP	-.01	.10	.25*	-.08	-.06	-.10		-.19*	-.41*	-.27*
8. C-REG	.06	.05	-.03	.17*	.04	.12*	-.22*		.03	.44*
9. C-EXT	.04	-.15*	-.03	.08	.24*	.08	-.32*	-.02		.14*
10. C-CON	.19*	-.05	-.09	.16*	.05	.25*	-.31*	.43*	.08	
<i>M</i>	0.00	0.00	4.17	4.18	-1.54	-0.13	3.92	3.72	-1.01	-0.11
<i>SD</i>	1.00	1.00	0.41	0.53	0.73	0.74	0.69	0.66	0.87	0.96

Note: P = parent report; C = child report; INC = inclusion; SYM = symbolic; SUP = need support; REG = regulation; EXT = extrinsic goal promotion; CON = conservation goal promotion.

* $p < .01$.

Significant correlations were obtained among the parenting constructs. Need support was negatively related to extrinsic goal promotion, conservation goal promotion, and regulation (although the latter association occurred in the adolescent perceptions only). In addition, conservation goal promotion related positively to regulation and extrinsic goal promotion (except in adolescent perceptions of the mother). As for religiosity, inclusion related positively to conservation goal promotion. This correlation was significant for both mothers and fathers and for both parent and child reports of conservation goal promotion. Symbolic related negatively to extrinsic goal promotion in both the mother–child and father–child dyad and in both the perceptions of parents and adolescents. Moreover, symbolic was significantly positively related to need support (except for adolescent perceptions of the mother). Finally, symbolic was negatively related to parent perceptions of conservation goal promotion.

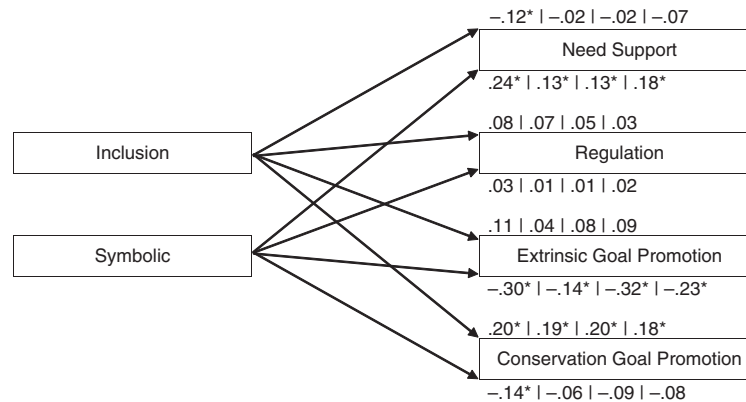
Primary Analyses

Structural equation modeling was used for this purpose. The reason for conducting this type of analyses was that in contrast to regression analyses,

it allows to test multiple independent and dependent variables using one single model, thereby simultaneously controlling for the associations among the independent variables and for the associations among the dependent variables. In this way, relationships between independent and dependent variables reflect more pure relationships between the core aspects of these variables. Analyses of the covariance matrices were conducted using Lisrel 8.54, and solutions were generated with maximum-likelihood estimation. Four models were tested. Model 1 included mother reports of religiosity and parenting, Model 2 included mother reports of religiosity and adolescent reports of maternal parenting, Model 3 included father reports of religiosity and parenting, and Model 4 included father reports of religiosity and adolescent reports of paternal parenting. Models included all possible paths from the independent (inclusion and symbolic) to the dependent variables (need support, regulation, extrinsic goal promotion, and conservation goal promotion). To control adolescent gender and parental age and education, these variables were allowed to correlate with the religiosity dimensions and served as predictors of the parenting constructs. To control for shared variance among the independent variables on one hand and among the dependent variables on the other, correlations were allowed among all independent variables and among all dependent variables. Hence, all models are fully saturated with a perfect fit, $\chi^2(0) = 0$. In all models, need support related to extrinsic goal promotion ($r = -.20, -.24, -.21, \text{ and } -.36, ps < .01$) and regulation related to conservation goal promotion ($r = .29, .43, .30, \text{ and } .45, ps < .01$). In addition, in Models 2 to 4, need support related to regulation ($r = -.26, -.15, \text{ and } -.17, p < .01$) and conservation goal promotion ($r = -.29, -.12, \text{ and } -.26, p < .01$). In Model 1, adolescent gender (1 = *male*, 2 = *female*) and maternal education related to conservation goal promotion ($\beta = -.19 \text{ and } -.16, p < .01$, respectively) and maternal age related to extrinsic goal promotion ($\beta = -.12, p < .01$); in Model 2, adolescent gender related to need support ($\beta = .18, p < .01$), extrinsic goal promotion ($\beta = -.15, p < .01$), and conservation goal promotion ($\beta = -.12, p < .01$); in Model 3, paternal education related to conservation goal promotion ($\beta = -.13, p < .01$); and in Model 4, adolescent gender related to extrinsic goal promotion ($\beta = -.18, p < .01$) and paternal age related to need support ($\beta = -.15, p < .01$).

Figure 1 presents paths between the religiosity dimensions and the parenting constructs. Apart from a small and inconsistent effect of inclusion on need support, which only surfaced in mother reports, inclusion was related (positively) to conservation goal promotion only. This relationship showed up in mother and adolescent reports of maternal parenting and in father and

Figure 1
Structural Relations Between Parental Religiosity
and Parenting Reports



Note: The figures above each parenting construct refer to the standardized estimates of inclusion to, respectively, (a) mother-reported parenting, (b) child-reported maternal parenting, (c) father-reported parenting, and (d) child-reported paternal parenting. The figures below each parenting construct refer to the standardized estimates of symbolic cognitive style to, respectively, (a) mother-reported parenting, (b) child-reported maternal parenting, (c) father-reported parenting, and (d) child-reported paternal parenting. For reasons of clarity, effects of adolescent gender and parental age and education are not shown.

* $p < .01$.

adolescent reports of paternal parenting. In contrast, symbolic was systematically related to need support and extrinsic goal promotion. In mother and adolescent reports of maternal parenting and in father and adolescent reports of paternal parenting, symbolic related positively to need support and negatively to extrinsic goal promotion. In addition, a negative effect was found of symbolic on conservation goal promotion. However, this effect was small and inconsistent and appeared in mother reports only.

Discussion

This study aimed to shed light on the relation between parental religiosity and parenting by using multidimensional measures of religiosity and parenting and by using parent and child reports of parenting. Parents completed the

Post-Critical Belief Scale, which allows the disentanglement of the effects of religiosity as such (exclusion vs. inclusion of transcendence) from the effects of religious cognitive style (literal vs. symbolic). Parents and adolescents reported on both parenting style dimensions (i.e., need support and regulation) and parental goal promotion efforts (i.e., extrinsic vs. intrinsic goal promotion and conservation vs. openness to change goal promotion).

Although previous research suggested that religiosity is associated with better parenting among parents of adolescent children, results show that it is important to separate the effects of religiosity as such from the effects of religious cognitive style. Both dimensions appear to affect different parenting aspects. Differences in religiosity as such related to conservation versus openness to change goal promotion only, with more religious parents being more inclined to promote conservation goals at the expense of openness to change goals. This finding confirms research showing that religious parents put more emphasis on obedience and conformity (Mahoney et al., 2001). Contrary to expectations and to earlier findings by Snider et al. (2004), however, religiosity was not found to relate to parental regulation. Thus, our findings suggest that religiosity primarily affects parents' inclination to foster conservation goals. It is possible that such goals, in turn, relate to higher levels of parental regulation and that parental religiosity thus relates indirectly to parental regulation through its influence on conservation goals. Consistent with this, we found strong positive correlations between the promotion of conservation goals and parental regulation. Given the dearth of studies on the link between parental religiosity and parental regulation, however, more research is needed. To the extent that future research confirms the existence of a link between parental religiosity and parental regulation (either direct or indirect), parental religiosity can be said to relate to adaptive parenting, as parental regulation was shown to decrease the likelihood of externalizing problem behaviors in children (Barber, 1996). At the same time, however, there may be a downside to parental religiosity when it comes to adolescent adjustment. Past research has shown that a focus on conservation rather than openness to change goals relates to decreased well-being (Sagiv & Schwartz, 2000) and increased authoritarianism (Duriez, Van Hiel, & Kossowska, 2005), which is in turn related to defensiveness (Duriez et al., 2004; Van Hiel et al., 2004). Hence, although adolescents of religious parents may be less likely to engage in problem behaviors, this might be accompanied by a rigid and closed-minded functioning. Future research should test whether parental religiosity actually relates to defensive functioning in children and whether this relation can be explained by conservation rather than openness to change goal promotion.

Compared with the effect of religiosity as such, an open-minded religious cognitive style seems to have a more pervasive and straightforward positive effect on parenting, as it relates to both the quality of parenting style (i.e., need support) and parental goal promotion (i.e., extrinsic goal promotion). As expected, a symbolic approach to religion was found to relate to the provision of need support. An explanation for this is that parents with a symbolic approach to religiosity have greater empathic skills (Duriez, 2004). Past research has shown that such skills are essential to the quality of parents' rearing style (Soenens et al., 2007). Future research may build on the present findings by testing the hypothesized mediational role of parental empathy in associations between parents' symbolic religious style and need-supportive parenting. Furthermore, a symbolic parental approach to religiosity was related to the promotion of intrinsic rather than extrinsic goals. This finding confirms our reasoning that parents with a symbolic religious approach, as they are oriented toward finding a personal sense of meaning in existential issues, would endorse and promote intrinsic goals. Conversely, parents with a literal religious cognitive style tend to promote extrinsic goals. Research has shown that literal religious thinking relates to a social dominance orientation (Duriez et al., in press), which involves a view of the world as a ruthless jungle (Duckitt, Wagner, du Plessis, & Birum, 2002). In addition, research has shown that people with a social dominance orientation are more likely to be oriented toward extrinsic signs of worth such as status and financial success and hence to endorse extrinsic goals (Duriez, Vansteenkiste, et al., 2007). Future research may therefore want to examine the potential explanatory role of a social dominance orientation in the relation between literal religious thinking and extrinsic versus intrinsic goal promotion.

Our findings suggest that although the effects of parental religiosity as such on adolescent adjustment are limited and not unequivocally positive, a symbolic (vs. literal) parental approach to religiosity is uniformly beneficial vis-à-vis parenting and subsequent adolescent adjustment. Abundant evidence shows that need-supportive parenting relates to behavioral and emotional adjustment (Gray & Steinberg, 1999; Niemiec et al., 2006). Similarly, the promotion of intrinsic rather than extrinsic goals has been shown to facilitate achievement (Vansteenkiste et al., 2004) and tolerance toward minority groups (Duriez, Soenens, & Vansteenkiste, 2007). As such, enhancing parents' open-mindedness toward existential issues such as religiosity may provide an important pathway through which their parenting skills and their children's well-being and tolerance can be improved.

This study advances past research in a number of ways. An important contribution at the methodological level is the inclusion of parent and

adolescent reports of the parenting constructs. As shown in Figure 1, most of the hypothesized associations were consistent across reporters, indicating that the present findings cannot be attributed to shared method variance. Because of the sampling of mothers and fathers, we were also able to replicate our findings across parental gender. In general, findings are consistent across gender, suggesting that the processes underlying the associations obtained are basic and general rather than gender-bound. Despite these strengths, the cross-sectional design of this study should be noted as an important limitation. Because of this, no causal conclusions can be inferred. Future research might therefore want to investigate whether differences in religiosity and religious cognitive style actually cause people to raise their children in a certain way. In addition, our study was limited to a cultural setting characterized by a highly secularized Roman Catholic tradition. Future research might want to examine whether results generalize to cultures that are less secularized as well as to cultures in which other religious denominations prevail.

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