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# The relation between identity styles and religiosity in adolescence: Evidence from a longitudinal perspective $\stackrel{\text{\tiny $\stackrel{$}{$}$}}{}$

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#### Abstract

Although recent studies (Duriez & Soenens, 2006; Duriez, Soenens, & Beyers, 2004) investigating the link between Berzonsky's (1990) identity styles and the religiosity dimensions of Exclusion versus Inclusion of Transcendence and Literal versus Symbolic (Duriez, Soenens, & Hutsebaut, 2005) assumed a unidirectional effect of identity styles on religiosity dimensions, this was never tested. In the present 2-wave longitudinal study among Belgian adolescents (N = 724), within-time correlations support previous findings that, whereas Exclusion versus Inclusion of Transcendence is positively related to a normative identity style, Literal versus Symbolic relates positively to an informational and negatively to a diffuse/avoidant style. In addition, cross-lagged analyses examining the direction of effects between identity styles and religiosity dimensions indicate that the effects from identity styles to the religiosity dimensions are dominant. Implications of these findings and discrepancies between the within-time correlations and the cross-lagged effects are discussed.

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Keywords: Identity development; Identity styles; Religiosity; Religious attitudes

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#### 1. Introduction

The main developmental task during adolescence involves forming a stable sense of identity (Erikson, 1968). As a part of this process, adolescents need to establish an integrated personal stance on existential issues, including the role of religion in their lives (Markstrom, 1999). Therefore, an important question is whether identity development relates to the acquisition of religious beliefs and whether personal crises experienced in the process of identity formation go hand in hand with an increased openness toward the divine and, consequently, with religious involvement. According to Parker (1985), anecdotal evidence from the Old and New Testament supports the notion that high religious involvement arises after experiencing profound identity crises (e.g., initially being a prosecutor of the Christian movement, Paul was converted to Christianity in a period during which he experienced severe inner conflicts), suggesting that the experience of conflict in the search for a personal identity (i.e., identity exploration) is a major determinant in developing religious beliefs.

In the past, research on identity formation mainly focused on the outcome of the identity formation process. This outcome has been conceptualized by Marcia (1966) along the orthogonal dimensions of exploration and commitment. Exploration refers to the degree of self-examination about one's values, beliefs and goals and the degree of exploration of various social roles. Commitment refers to the possession of a stable set of values and convictions. These dimensions define four identity statuses: achievement (high commitment, high exploration), moratorium (low commitment, high exploration), foreclosure (high commitment, low exploration), and diffusion (low commitment, low exploration). Differences in identity statuses have been studied in relation to the development of religious attitudes (e.g., Markstrom, 1999; Markstrom, Hofstra, & Dougher, 1994; Tzuriel, 1984). However, this research yielded inconsistent results, and, hence, could not confirm the supposed importance of experiencing identity conflict towards the development of religious beliefs.

In order to shed more light on the identity–religiosity relationship, Duriez and colleagues (Duriez & Soenens, 2006; Duriez et al., 2004) focused on the relation between the social-cognitive processes that Berzonsky (1990) identified in identity development in general and exploration in particular and the two religiosity dimensions along which Wulff (1991) summarized all possible approaches to religion. In this research, Berzonsky's identity styles were shown to mediate the relations between personality dimensions and religiosity dimensions. The underlying assumption was that identity styles would have a unidirectional effect on religiosity dimensions. However, due to the cross-sectional natures of previous studies, this could not be tested. Using longitudinal data, the present study aims to examine the direction of effects between identity styles and dimensions of religiosity in order to get a better view of their potentially dynamic interplay. We will now introduce Berzonsky's (1990) identity style model and the religiosity dimensions proposed by Wulff (1991), after which specific hypotheses will be formulated regarding the relations between these identity styles and these religiosity dimensions.

## 1.1. A process-oriented approach to identity

Most studies on the relationship between identity and religious attitudes have relied on Marcia's identity status paradigm. Although this paradigm has proven its utility and validity in identity research (Waterman, 1982), it has been criticized for treating identity statuses as static outcomes (Côté & Levine, 1988; van Hoof, 1999). In an attempt to conceptualize individual differences in identity development in general and in the process of exploration in particular in a process-oriented way, Berzonsky (1990) proposed three identity styles. Identity styles are ways of processing information and coping with problems which typically arise in identity crises. As such, they should be considered as social cognitions or as cognitive self-theories through which the adolescent perceives and processes reality. Information oriented individuals deal with identity issues by actively seeking out and evaluating relevant information before making commitments. When confronted with information that is dissonant with their self-conceptions, they will revise these self-perceptions. Normative oriented individuals rely on the norms and expectations of significant others (e.g., parents or authority figures) when confronted with identity-relevant issues. They rigidly adhere to their existing identity structure, into which they assimilate all identity-relevant information. Diffuselavoidant oriented individuals avoid personal issues and procrastinate decisions until situational demands dictate their behavior, resulting in a fragmented identity structure. Research has shown that individuals in the achievement and moratorium statuses tend to use an information oriented identity style, that foreclosed individuals tend to apply the normative identity style, and that individuals in the diffusion status adopt a diffuse/avoidant oriented identity style (e.g., Berman, Schwartz, Kurtines, & Berman, 2001; Schwartz, Mullis, Waterman, & Dunham, 2000).

# 1.2. A process-oriented view on religiosity

According to Wulff (1991), all possible approaches to religion can be summarized along two orthogonal dimensions. The first dimension, Exclusion versus Inclusion of Transcendence, specifies whether the objects of religious interest are granted participation in a transcendent reality, and hence refers to the distinction between being religious or not. The second dimension, Literal versus Symbolic, indicates how religious contents are interpreted. This dimension refers to the way religious contents are processed. These two dimensions define four religious attitudes: Literal Inclusion, Literal Exclusion, Symbolic Exclusion, and Symbolic Inclusion. Literal Inclusion represents a position in which the literal existence of religious objects is affirmed. This position is most clearly embodied in fundamentalism. Literal Exclusion represents a position in which one neither believes in the literal meaning of religious words nor in the possibility that these can have a symbolic meaning. Symbolic Exclusion represents a position in which the existence of the religious realm is rejected, but in which the possibility is taken into account that religious contents might have a symbolic meaning. Finally, Symbolic Inclusion represents a position in which the existence of the religious realm is affirmed, but in which one simultaneously tries to encompass reductive interpretations to find a symbolic meaning with personal relevance. Fontaine, Duriez, Luyten, & Hutsebaut (2003) recently proposed the Post-Critical Belief Scale to measure these constructs in a Christian context. As expected, Exclusion versus Inclusion of Transcendence is highly correlated (r > .60) with traditional religiosity measures such as frequency of church attendance, the importance of religion in life, and degree of belief in a personal God (Fontaine et al., 2003). Apart from this, Exclusion versus Inclusion of Transcendence was also found to relate to cultural conservatism and conservation versus openness to change values (Duriez, Dezutter, Nevrinck, & Hutsebaut, in press), with people scoring high inclusion of transcendence obtaining higher scores

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on measures of cultural conservatism and conservation values. In contrast, Literal versus Symbolic was found to relate to, among other things, prejudice, empathy, self-enhancement versus self-transcendence values, moral competence, and mental health (Duriez et al., in press), with people dealing with religion in a literal way being more prejudiced, less empathic, less morally competent, and more focused on self-enhancement values, and displaying lower well-being.

## 1.3. Relating identity and religiosity

Duriez and colleagues (Duriez & Soenens, 2006; Duriez et al., 2004) reasoned that the fact that the results of the research on the identity–religiosity relation are difficult to interpret could be due to the lack of a common theoretical framework on how adolescents process both identity-relevant information and religious phenomena. By bringing together Berzonsky's (1990) theory of identity styles and Wulff's (1991) model of religiosity, clear hypotheses about this relation can be formulated.

First, information oriented individuals actively seek out and evaluate information in order to integrate identity elements (Berzonsky, 1990). Therefore, this identity style can be expected to relate positively to a personal and symbolic interpretation of religious phenomena, and hence to the Literal versus Symbolic dimension. However, because an evaluation of religious elements may or may not lead people to include these elements into their identity, no relation with Exclusion versus Inclusion of Transcendence is expected. Results of the cross-sectional studies by Duriez and colleagues (Duriez & Soenens, 2006; Duriez et al., 2004) yielded support for these hypotheses.

Second, normative oriented individuals are expected to rely on and conform to the prescriptions and standards of significant others and various reference groups (Berzonsky, 1990). Given the fact that the Flemish-Belgian society is characterized by a strong Roman Catholic tradition and given the fact that this Roman Catholic religion can be considered part of this society's inheritance (Dobbelaere, 1995), normative oriented individuals can be expected to be sensitive to this pro-religious climate, and to show higher Exclusion versus Inclusion of Transcendence scores. Moreover, the normative oriented identity style can be expected to relate negatively to the Literal versus Symbolic dimension. Individuals with this identity style can be expected to literally accept the prescriptions and dogmas of the Roman Catholic Church because they would be closed to information that is discrepant with the prevailing (religious) tradition (Berzonsky, 1990). The studies by Duriez and colleagues (Duriez & Soenens, 2006; Duriez et al., 2004) yielded support for a concurrent association between the normative identity style and Exclusion versus Inclusion of Transcendence. However, no evidence was found for such association between the normative identity style and the Literal versus Symbolic dimension.

Third, for different reasons, a negative association between the diffuse/avoidant identity style and Literal versus Symbolic can also be expected. Instead of conforming to existing traditions, people with a diffuse/avoidant identity style are likely to avoid questioning difficult issues such as religion. However, no relation is expected with Exclusion versus Inclusion of Transcendence because an avoidance to question religious issues may go hand in hand with either an unquestioned rejection or an unquestioned acceptance of the existence of a transcendent reality. The correlations reported in Duriez et al. (2004) and Duriez & Soenens (2006) supported these hypotheses. However, regression analyses showed that the association between the diffuse/avoidant identity style and Literal versus Symbolic is no longer significant when taking into account differences in information orientation.

## 1.4. The present study

The assumption in previous studies relating identity styles to religiosity (Duriez & Soenens, 2006; Duriez et al., 2004) was that identity styles have a unidirectional effect on religiosity dimensions. Although this is in line with the assumption that the experience of conflict in the search for personal identity (i.e., identity exploration) is a major determinant in developing religious beliefs, one might also argue that religiousness will determine whether and to which extent adolescents will engage in identity exploration. Due to the cross-sectional nature of previous studies, the direction of effects between the identity styles and religiosity could not be tested. Therefore, using longitudinal data, the present study aims to examine the direction of effects between identity styles and dimensions of religiosity in order to get a better view of their potentially dynamic interplay.

## 2. Method

#### 2.1. Participants

Data were collected during regular school hours in secondary schools in the Flemish-speaking part of Belgium. The first wave of the data collection was conducted in the fall of 2004 (=Time 1) and consisted of 905 10th grade high school students following the academic track (mean age = 14.94; 51.22% male). The second wave was conducted in the fall of 2005 (=Time 2) and consisted of 867 11th graders (mean age = 15.96; 50.69% male). Approximately 80% of the initial sample participated at Time 2. All participants in the longitudinal sample (N = 724; 49.17% male) were born in the Flemish-speaking part of Belgium, had the Belgian nationality, and had parents of Belgian nationality. Eighty-five percent lived in an intact family. Thirteen percent had divorced parents, and 2% had at least one deceased parent of which only one was an orphan. Drop-out at Time 2 was mainly due to people having moved to another school, which is not uncommon given that the transition to the 11th grade is a time in which students have the option to change their major, which may imply having to search for a school in which the newly chosen major is taught. Additionally, a few students may not have passed their 10th grade or might have been absent at the time of the second data collection.

A logistic regression analysis tested if sample attrition (drop-out = 0; retention = 1) was predicted by the study variables at Time 1. These variables did predict sample attrition (Model  $\chi^2$ (5) = 28.70, p < .001). Drop-out was predicted by high scores on the informational and the diffuse/avoidant identity style. Hence, drop-out in our study does not seem fully at random. Lack of commitment to a previously chosen major among diffuse/avoidants and some of the information oriented in combination with active exploration of the latter might have led part of our sample to change schools.

#### 2.2. Measures

#### 2.2.1. Identity styles

Participants completed the Dutch version (Duriez et al., 2004) of the Identity Style Inventory (ISI-3; Berzonsky, 1992). The ISI-3 contains an informational scale (INFO; 10 items, e.g., "I've

spent a great deal of time thinking seriously about what I should do with my life"), a normative scale (NORM; 10 items, e.g., "I prefer to deal with situations where I can rely on social norms and standards"), and a diffuse/avoidant scale (DIFF; 10 items, e.g., "I'm not really thinking about my future now; it's still a long way off"). Items were scored on a 5-point Likert scale. Cronbach alpha's were .68 and .69 for INFO, .56 and .57 for NORM, and .72 and .74 for DIFF at Time 1 and 2, respectively. Although reliability was low for NORM, this is in line with previous findings (e.g., Berzonsky, 1992; Duriez et al., 2004). Scores for each scale were obtained by averaging its item scores.

#### 2.2.2. Religiosity

Participants completed a shortened Post-Critical Belief Scale (Duriez et al., 2005; 18 items), which contains items measuring Literal Inclusion (e.g., "Only a priest can answer important religious questions"), Literal Exclusion (e.g., "In the end, faith is nothing more than a safety net for human fears"), Symbolic Exclusion (e.g., "There is no absolute meaning in life, only giving directions, which is different for every one of us") and Symbolic Inclusion (e.g., "The Bible holds a deeper truth which can only be revealed by personal reflection"). Items were scored on a 7-point Likert scale. As in previous research (e.g., Duriez et al., 2004), a level of acquiescence estimation was subtracted from the raw scores, after which a principal component analysis (PCA) was performed. Using multiple methods (i.e., the scree test, parallel analyses, and the saturation and interpretability of the components), two-component solutions were selected at Time 1 and 2. Eigenvalues for the first six components were 4.02, 2.73, 1.27, 1.15, 0.99, and 0.87 at Time 1, and 4.16, 3.48, 1.07, 0.97, 0.88, and 0.84 at Time 2, accounting for 38% and 42% of the variance at Time 1 and 2, respectively. Because PCA allows freedom of rotation (as a result of which structures obtained in different samples cannot be directly compared), components were subjected to orthogonal Procrustes rotation towards the structure reported by Duriez et al. (2005). Both at Time 1 and 2, Tucker's Phi indices exceeded .90, suggesting good congruence (Bentler & Bonett, 1980). The two components could be interpreted as Exclusion versus Inclusion of Transcendence and Literal versus Symbolic. A high Inclusion score indicates a tendency to include transcendence. A high Symbolic score indicates a tendency to deal with religion in a symbolic way.

# 3. Results

#### 3.1. Preliminary analyses

Means, standard deviations, and correlations among the measures can be found in Table 1. Stability coefficients for the constructs ranged from .44 to .67. Both at Time 1 and Time 2, INFO related positively to NORM and negatively to DIFF. Additionally, a significant but small positive correlation occurred between NORM and DIFF at Time 2. In line with previous research, positive correlations were found between INFO and Symbolic and between NORM and Inclusion, and negative correlations were found between DIFF and Symbolic. Significant but small additional correlations emerged between INFO and Inclusion (positive at Time 1), between NORM and Symbolic (negative at Time 2), and between DIFF and Inclusion (negative at Time 1).

| Variables              | Mean | SD   | 01.    | 02.        | 03.      | 04.    | 05.    | 06.   | 07.    | 08. | 09.    |
|------------------------|------|------|--------|------------|----------|--------|--------|-------|--------|-----|--------|
| 01. INFO (Time 1)      | 2.92 | 0.53 |        |            |          |        |        |       |        |     |        |
| 02. INFO (Time 2)      | 2.96 | 0.52 | .55*** |            |          |        |        |       |        |     |        |
| 03. NORM (Time 1)      | 2.99 | 0.48 | .37*** | .21***     |          |        |        |       |        |     |        |
| 04. NORM (Time 2)      | 2.98 | 0.46 | .19*** | .35***     | .44***   |        |        |       |        |     |        |
| 05. DIFF (Time 1)      | 2.82 | 0.59 | 23***  | $20^{***}$ | 07       | 07     |        |       |        |     |        |
| 06. DIFF (Time 2)      | 2.77 | 0.58 | 22***  | $11^{**}$  | $09^{*}$ | .13*** | .52*** |       |        |     |        |
| 07. Inclusion (Time 1) | 0.00 | 1.00 | .15*** | .06        | .26***   | .16*** | 13**   | 03    |        |     |        |
| 08. Inclusion (Time 2) | 0.00 | 1.00 | .03    | .05        | .16***   | .19*** | 04     | .05   | .66*** |     |        |
| 09. Symbolic (Time 1)  | 0.00 | 1.00 | .26*** | .19***     | 00       | 05     | 33***  | 25*** | .01    | .02 |        |
| 10. Symbolic (Time 2)  | 0.00 | 1.00 | .26*** | .28***     | 03       | 12**   | 29***  | 33*** | .07    | .00 | .67*** |

| Table 1 |          |             |     |              |
|---------|----------|-------------|-----|--------------|
| Means,  | standard | deviations, | and | correlations |

*Note*: INFO = information oriented identity style; NORM = normative identity style; DIFF = diffuse/avoidant identity style. \*p < .05; \*\*p < .01; \*\*\*p < .001.

## 3.2. Primary analyses

Structural equation modeling with manifest variables was used to examine direction of effects. Analysis of the covariance matrices was conducted using LISREL, and solutions were generated on the basis of maximum-likelihood estimation. To evaluate model fit, we inspected the Satorra–Bentler Scaled chi-square (SBS- $\chi^2$ , Satorra & Bentler, 1994) instead of the regular chi-square because the former corrects for data non-normality. An SBS- $\chi^2$  to degree of freedom ratio (SBS- $\chi^2/df$ ) close to 3.0 indicates good model fit (Kline, 1998). To further evaluate model fit, the comparative fit index (CFI) and the standardized root mean square residual (SRMR) were selected. According to Hu and Bentler (1999), combined cut-off values close to .95 and .09, respectively, indicate good fit.

In a first step, we estimated a baseline autoregressive model specifying only autoregressive effects and within-time correlations between the identity styles and the religiosity dimensions. As such, this model assumes that cross-lagged effects do not exist. The baseline autoregressive model yielded an acceptable fit (SBS- $\chi^2$  (21) = 72.79; CFI = 0.975; SRMR = .044). In a second step, we estimated two unidirectional cross-lagged models, that is, an identity main-effects model, in which the identity styles at Time 1 are assumed to effects the religiosity dimensions at Time 2, and a religiosity maineffects model, in which the religiosity dimensions at Time 1 are assumed to effects the identity styles at Time 2. The identity main-effects model (SBS- $\chi^2$  (15)=43.56; CFI = 0.986; SRMR = .033) provided a better fit to the data compared to the baseline model (SBS- $\chi^2_{diff}$  (6) = 29.62; p < .001). Similarly, the religiosity main-effect model (SBS- $\chi^2$  (15) = 54.66; CFI = 0.918; SRMR = .033) fitted the data better compared to the baseline model (SBS- $\chi^2_{diff}$  (6) = 18.20; p < .01). In a third step, a reciprocal model specifying cross-lagged paths from the identity styles to the religiosity dimensions and vice versa was estimated. The reciprocal model (SBS- $\chi^2$  (9) = 26.10; CFI = 0.992; SRMR = .026) was found to provide a better fit to the data than either the identity main-effects model (SBS- $\chi^2$  (6) = 17.46; p < .01) or the religiosity main-effects model (SBS- $\chi^2_{diff}$  (6) = 28.86; p <.001). Stability-coefficients were significant ( $\beta = .53$ , .43, .50, .58, and .62 for INFO, NORM, DIFF, Inclusion, and Symbolic, respectively). Cross-lagged effects and within time-correlations at Time 2 that indicate correlated change can be found in Table 2. Significant cross-lagged paths emerged from Table 2

Cross-lagged paths from the identity styles at Time 1 to the religiosity dimensions at time 2 (A) and from the religiosity dimensions at Time 1 to the identity styles at Time 2 (B), and within-time correlations at Time 2 (C) for the relevant variable pairs

| Variable pair    | А          | В        | С          |
|------------------|------------|----------|------------|
| Inclusion & INFO | 07         | 03       | .05        |
| Inclusion & NORM | .04        | .06      | .09***     |
| Inclusion & DIFF | .02        | .05      | .04        |
| Symbolic & INFO  | .11***     | .05      | .11***     |
| Symbolic & NORM  | $09^{***}$ | 06       | $08^{***}$ |
| Symbolic & DIFF  | $06^{*}$   | $08^{*}$ | 12***      |

*Note*: INFO = information oriented identity style; NORM = normative identity style; DIFF = diffuse/avoidant identity style. Coefficients are standardized estimates. \*p < .05; \*\*p < .01; \*\*\*p < .001.

INFO, NORM and DIFF to Symbolic and from Symbolic to DIFF. The within-time correlations pointed to the existence of correlated change between INFO and Symbolic, between NORM and both Symbolic and Inclusion, and between DIFF and Symbolic.

#### 4. Discussion

Previous studies (Duriez & Soenens, 2006; Duriez et al., 2004) have shown the existence of a positive relation between INFO and a symbolic approach of religious contents, a positive relation between NORM and the inclusion of transcendence, and a negative relation between DIFF and a symbolic approach of religious contents. At the same time, these studies failed to support the existence of a theoretically plausible negative relation between NORM and a symbolic approach of religious contents. Additionally, although these studies assumed the identity styles to have a unidirectional effect on the religiosity dimensions, this direction of effects was never actually tested. The present study explicitly aimed to examine the direction of effects between identity styles and religiosity dimensions in order to get a better view of the potentially dynamic interplay.

Within-time correlations support the findings of previous studies (Duriez & Soenens, 2006; Duriez et al., 2004). The positive relations between INFO and Symbolic and between NORM and Inclusion as well as the negative relation between DIFF and Symbolic were confirmed at both Time 1 and Time 2. Other relationships (e.g., between NORM and Symbolic) were small and inconsistent across time. In spite of a rather small cross-lagged effect of DIFF on Symbolic, cross-lagged analyses examining the direction of effects generally support the idea that identity exploration shapes religious beliefs rather than that religious belief affect the way in which people process identity-relevant information. Although there is no indication that identity styles affect religiosity as such (i.e., Exclusion versus Inclusion of Transcendence), the identity styles seem to cause changes in the way in which people process religious contents (i.e., Literal versus Symbolic). More specifically, compared to people with low scores on INFO at a given point in time (i.e., Time 1), people obtaining high scores on INFO are more likely to treat religious contents in a symbolic fashion at a later point in time (i.e., Time 2). In contrast, compared to people with low NORM and DIFF scores at Time 1, people obtaining high scores on NORM and DIFF are more likely to process religious contents in a literal fashion at a later point in time (i.e., Time 2).

These results suggest that, if people would be supported to actively seeking out and evaluating new, identity-relevant information, chances would go up that they will develop a more openminded and symbolic approach to religion, which, in turn, is supposed to not only decrease prejudice, but also increase empathy, moral competence, a focus on self-transcendence values, and even one's well-being (Duriez et al., in press). It should be noted that these results should be handled with care because drop-out at Time 2 did not occur fully independent of identity style. In addition, although the identity styles showed significant cross-lagged effects on Symbolic, the possibility still exists that an unknown third factor accounts for these effects. For instance, these effects may be accounted for by openness to experience. Although there is evidence from crosssectional studies that identity styles account for variation in Symbolic, even after taking openness to experience into account (Duriez & Soenens, 2006; Duriez et al., 2004), future research may address the role of openness to experience at the longitudinal level. In addition, future research may also examine the role of other potential third factors such as the need for closure, which was shown to relate to INFO and NORM (Soenens, Duriez, & Goossens, 2005) as well as to Symbolic (Duriez et al., in press).

Finally, it should be noted that the cross-lagged analyses seem inconsistent with both previous findings and the within-time associations in our study when it comes to the normative identity style. Although previous studies failed to support the theoretically expected negative relation between the normative identity style and a symbolic approach of religious contents, cross-lagged analyses show that, in spite of the absence of a correlation between NORM and Symbolic at Time 1, the normative identity style does predict changes in the way people process religious contents. In contrast, in spite of within-time correlations of NORM and Inclusion, cross-lagged analyses show that the normative identity style does not predict changes in inclusion of transcendence. In spite of the absence of causality that these findings suggest, cross-lagged analyses do support the idea of correlated change. In sum, our data do provide some support that the normative identity style is related to both religiosity as such and the way in which people process religious contents. The lack of more consistent support for both hypotheses might be due to the fact that the reliability estimates of the normative identity style scale were rather low. This may have caused an underestimation of relations with the normative identity style scale in both present and past research. Therefore, it is important for future research to develop a more internally consistent measure of the normative identity style.

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