James Fowler’s (1981) *Stages of Faith* has inspired theory and research in the U.S.A. and worldwide to interpret and analyze the developmental changes of individual religiosity. ‘Faith development’ has become the term for a specific structural-developmental perspective which originates in Fowler’s work and which enjoys increasing recognition in the psychology of religion. Because of the roots of Fowler’s (1981) model in the tradition of Piaget and Kohlberg, faith development research was, especially in the early years, searching for evidence of the new structural-developmental model of religious development which ambitiously has claimed consistency with Kohlberg’s (Kohlberg, Levine & Hewer, 1983) criteria for stage models. Today, since plausibility for the structural-developmental paradigm has declined and most colleagues in the field have become rather unenthusiastic with a priori presuppositions for conceptualizing ‘hard stage development,’ theory and research in religious development can be understood – less burdened with presuppositions and empirically more effective – as accounting for and measuring of individual differences in religious styles. Conceptualizing religious development in terms of religious styles and schemata opens new perspectives, qualitative and quantitative. New instrument development and new empirical evidence in the years 2009 and 2010 add to the advancement of the new model.

1 Fowler’s Stages of Faith Model and the Need for Revision

What is the concept of faith development and the construct measured with the faith development interview? For understanding Fowler’s model and its core construct, it is necessary to attend to his definitions of ‘faith’ of 1980 and 1981:

“Faith is: The process of constitutive-knowing underlying a person’s composition and maintainment of a comprehensive frame (or frames) of meaning generated from the person’s attachments or commitments to centers of supraordinate value which have power to unify his or her experiences of the world, thereby endowing the relationships, contexts, and patterns of everyday life, past and future with significance.” (Fowler, 1980, p. 25-26)

And this is the definition in *Stages of Faith*:

“In the most formal and comprehensive terms I can state it, faith is: People’s evolved and evolving ways of experiencing self, others and world (as they construct them) as related to and affected by the ultimate conditions of existence (as they construct them) and shaping their lives’ purposes, meanings, trusts and loyalties, in the light of the character of being, value and power determining the ultimate conditions of existence (as grasped in their operative images - conscious and unconscious - of them).” (Fowler, 1981, p. 92)

The difference between the two definitions is obvious: In contrast to the 1980 text, Fowler draws on a clear theological semantic in his 1981 book publication – a semantic that refers to H.R. Niebuhr, Tillich and to 19th century liberal theological thought. This is an indication that Fowler’s primary project was to convince audiences in theology and religious studies. However, at the same time, the faith development model was supposed to earn the applause of the scientific community around Kohlberg. This ambitious search for a combined structural-developmental and liberal-theological plausibility is not without tension. Something like sitting on the fence became a characteristic of faith development theory.
Fowler’s conceptualizations indicate both strengths and weaknesses. It is a strength and positively distinguishes Fowler’s approach from many rather short-cut conceptualizations of religion and spirituality in psychology, that the concept of ‘faith’ is well-grounded in the works of Tillich and H. R. Niebuhr, but also clearly rooted in Cantwell Smith’s (1963; 1979) distinction between faith, belief and religion. Because of his research on H. R. Niebuhr (Fowler, 1974) it appears as no surprise that Niebuhr plays an important role in Fowler’s model, but also Tillich has structured Fowler's concept of faith. Thus, ‘faith’ is characterized by questions like: What is the ultimate value and power? To whom am I finally loyal? What am I ultimately concerned about? What gives my life meaning? To interpret and clarify such broad and universal conceptualization of faith, the work of Cantwell Smith (1963; 1979) has been also very important for Fowler, because it suggests understanding faith as underlying construct across religious traditions and distinguishing this open universal concept of faith from particular, content-specific belief and institutionalized and organized religion. Faith is conceived by Fowler as a human universal, it is characterized by meaning-making and by interpretation of experiences and loyalty to values in relation to people’s constructions of an ultimate environment. Fowler’s persuasive preference for Cantwell Smith’s concept of ‘faith’ appears far-sighted with respect to the spiritual questing of today that can, but need not, occur outside specific religious traditions (Hood, 2003; Zinnbauer & Pargament, 2005). In Fowler’s (1996a, p. 168f.) own words, the concept of faith “aims to include descriptions of religious faith as well as the less explicit faith orientations of individuals and groups who can be described as secular or eclectic in their belief and values orientations.” One could feel tempted to suggest Cantwell Smith’s and Fowler’s concept of ‘faith’ for use in the scientific study of religion, rather than turning to conceptualizing ‘spirituality.’ Unfortunately, Cantwell Smith’s conceptual framework did not find the resonance in the scientific study of religion discourse, it would deserve.

Fowler’s conceptual comprehensiveness includes also psychoanalytic perspectives. From the beginnings of faith development in the Interpreter’s House, a place for helping people reflect and grow in their faith through a hermeneutic process of communicative interpretation, the search for better ways to understanding changes and transformations in people’s faith has made psychoanalytic perspectives attractive for Fowler. Thus, Erikson’s (1963) psychoanalytic view has made a strong impact on Fowler’s early theory construction. Also psychoanalyst Rizzuto’s (1979) developmental account of God representations has played a significant role; it has even increased in Fowler’s later writings (Fowler, 1996b).

Such strength in comprehensiveness, inclusiveness and rootedness in the theory of religion as we see it in Fowler’s work may reveal as weakness when it comes to questions of psychological plausibility: Fowler’s term, “constitutive-knowing” or the affectedness by “the ultimate conditions of existence” are examples of concepts that are rather difficult, if not impossible, to operationalize in the empirical framework of scientific psychology. Already early psychological-methodological evaluation of Fowler’s method has pointed out that faith development research may be based on too many too complex theological and philosophical assumptions which make its verification or falsification very difficult, if not impossible (Nelson & Aleshire, 1986). Fowler’s concept of faith has received its most characteristic imprint from the tradition of Piaget and Kohlberg: Faith as meaning-making is understood as special type of knowing, namely "constitutive knowing” and is assumed to develop the same way as cognitive operations develop.

Thus, Fowler (1981) has introduced a model of stages of meaning-making which feature six structurally distinct patterns of faith and which he labeled: intuitive-projective faith (Stage 1), mythic-literal faith (Stage 2), synthetic-conventional faith (Stage 3), individuative-reflective faith (Stage 4), conjunctive faith (Stage 5) and universal faith (Stage 6). Besides the broad description with extensive quotes from interviews in separate chapters in Stages of Faith (Fowler, 1981), later texts (Fowler, 1987) also present summary descriptions with new interpretations in terms of Kegan’s (1982) Evolving Self, or in categories of modernization and postmodern life and with respect to infancy research (Stern, 1985) and Rizzuto’s (1979) psychoanalytic view of God representations (Fowler, 1996b).

It is consistent with his universal and broad definitional starting point, that Fowler found it adequate from the start to include the variety of seven domains all of which he regarded as aspects of faith: form of logic (Piaget), perspective-taking (Selman), form of moral judgment (Kohlberg), bounds
of social awareness, locus of authority, form of world coherence, symbolic function. In regard to empirical assessment, Fowler not only suggests to talk about “windows” to a person’s faith—a formula that can also be found in the Manual (Fowler, Streib, & Keller, 2004, p. 22)—but, according to Fowler (1980, p. 74), a stage has to be viewed as “structural whole,” namely as a “dynamic unity constituted by internal connections among its differentiated aspects.” In 1980, Fowler has presented the heptagon (see Figure 1) which illustrates this view.

**Figure 1. The Seven Aspects of Faith in Fowler’s (1980) Model**

Still in 2001, Fowler (2001, p. 171) asserts that he “strongly believe(s) that the stages, with their complex integration of cognitive, emotional, and imaginative operations, do constitute what, in the Piagetian tradition, is called a typology of structural wholes.” Fowler conceptualized ‘stage’ and ‘development’ primarily along the lines of Kohlberg, Levine and Hewer’s (1983) criteria for hard stage models, and he did not change this assumption: “In continuity with the constructive developmental tradition, the faith stages are held to be invariant, sequential, and hierarchical.” (Fowler, 1996a, p. 169; cf. 2001, p. 167).

Viewed from the contemporary state of the discussion in developmental psychology, this may appear as problematic reduction of complexity in theory and research. We may recall that already in the early times of faith development theory not everyone in the field was convinced that Fowler’s theory in fact can be called a hard stage theory (Power, 1991). Two decades later, we maintain that mono-directional stage models which focus exclusively on cognition and assume one-directional, sequential and irreversible development of “structural wholes” are no longer acceptable. There is evidence—and some awareness within Piagetian and neo-Piagetian discourse—of cross-domain asynchrony or décalage. Of course, the prevalent understanding of décalage indicates an awareness of non-synchronicity of cognitive development, but explains this as only a delay of an assumed developmental progression; and neither Piaget, nor Piagetian scholars have explicated a ‘theory of décalage’ (Cocking, 1979; Chapman, 1988; Case, 1992). Canfield and Ceci (1992, p. 289) however maintain “that horizontal décalage is the rule in development rather than the exception.” This is what we find also in religious development. There is ample evidence from research indicating that children and adults may not be altogether different in their thinking (Boyatzis, 2005).

There are alternative, neo-Piagetian, conceptions of adult development which take the discourse on post-formal operations (Commons, Richards, & Armon, 1984) further and have worked on the integration of the affective and the interpersonal domains—a perspective for which we may
refer to the work of Labouvie-Vief (1982; 1990; 1992; 1994; 1997; 2000; 2010). We may also call attention to another life-span developmental approach (Baltes, Lindenberger, & Staudinger, 1998) which opposes mono-directional, stage-like modeling and assumes that adults may be engaged in coping with decline and loss, rather than in progress and gain. In consideration of such approaches, I suggest to envision greater variety and complexity in religious development (Streib, 2003c).

However, neither of these critical questions or alternative approaches have been taken into account by Fowler, even in his most recent work. Fowler did not change or revise his model, but argued for consistency with theological, ego-psychological and psychoanalytic constructs and addressed primarily a theological audience. The project of reconstructing and operationalizing the faith development perspective in the terms of psychology has only begun.

2 The Religious Styles Perspective

My own critical interpretation of Fowler’s concepts of faith and faith development (Streib, 1991), could be advanced and elaborated into a revision of faith development theory in terms of religious styles (Streib, 1997; 2001a; 2003b). This revision suggests stronger emphasis on interpersonal, hermeneutical-contextual and biographical dynamics, but it does not intend to re-invent the wheel. Thus by-and-large the revision preserves the characterizations of religious styles as constructed by Fowler for his stages of faith. But it critically relates to the presuppositions for a ‘stage.’

For the new proposal, I find term ‘style’ more adequate, because ‘stage’ has strong associations with Kohlberg’s presuppositions for structural-developmental stages. The most problematic of these presuppositions is the assumption that stages present “structural wholes” across the variety of domains. There is not enough evidence for this assumption, neither theoretical, nor empirical. On the contrary: we have empirical evidence that persons reactivate previous faith styles; we found, for example, stage score differences of more than 1.0 in a considerable number of faith development interviews. We may thus raise doubts that Fowler’s conceptual model fully responds to what is going in such interviews, when the faith development model insists on the irreversibility of structural wholes and veils the difference by calculating a simple average. The religious styles perspective suggests, or at least allows for, another interpretation: that this person is using two or more styles at the same time.

In respect for a more open account of developmental trajectories, the religious styles perspective objects also the premise of irreversibility. Irreversibility may be evident for developmental stages in the cognitive domain, but cannot be established as a necessary premise for the existential domains. Fundamentalist conversions in mid-life, after the development of formal operations, for example, most seriously challenge the assumption of irreversibility (Streib, 2001a; 2001b; 2007). Fundamentalist revivals, but also a variety of other instances of reverting to previous styles, challenge also a related assumption that, at the advent of a new style, the previous style is abandoned and replaced. It is more plausible that previous styles are still existent and available after the emergence of more advanced styles.

Another central premise of stage theories is sequentiality. Structural-developmental models a priori assume a dynamic (or “logic”) of development, according to which there is an invariant sequence of stages – a premise which Fowler has adopted for faith development. At least for the religious domain – and even more so, when a religious stage or style is conceptualized as multi-dimensional construct including psychodynamic and social factors –, the assumption of a psychological or sociological “mechanism” explaining the causality of stage sequence is less plausible. It is then the task of a posteriori evaluation in empirical research to establish some evidence of a sequence of religious styles.

Nevertheless religious development can be conceptualized as a hierarchy of styles, but the hierarchical order of styles in both Fowler’s faith development theory and the religious styles perspective cannot be ascribed to a developmental logic. It is theology, philosophy of religion or philosophical ethics that are to decide and justify which structural patterns of religion should be regarded more advanced and preferable. The justification that, for example, dialog and xenosophia is better than absolutistic claims about the truth of one’s own religion is dependent on propositions from
philosophy of religion, while psychological theory with reference to functions may argue for the opposite.

To complete the list of hard stage presuppositions, we add a word on universality. Since Fowler did not maintain the assumption of universality, there is no need to raise criticism, and there is no dispute whether to leave this question to empirical findings. But it may be important to note that the concept of ‘stage’ eventually includes or invites universality assumptions. For the concept of ‘style,’ in contrast, a priori claims of universality are not only inadequate, but impossible, because styles by definition emerge bottom-up and are the product of individuals.

Despite all objections against the premises for the structural-developmental stage concept, there is, from the religious styles perspective, general appreciation for Fowler’s proposal of individual differences in religiosity. Thus, the religious styles perspective proposes characterizations of the various religious styles which are in general accord with, and only slightly different from, Fowler’s stage descriptions. The style descriptions in Streib 2001 attempt to highlight more strongly the interpersonal dynamic, as is expressed in the adjectives describing the religious styles: subjective (Style 1), reciprocal-instrumental (Style 2), mutual (Style 3), individuative-systemic, and dialogical (Style 5). Fig. 2 illustrates religious development in terms of the religious styles model.

Figure 2. The Model of Religious Styles

The religious styles model suggests that a style is not abandoned upon the advent of another, but resides into the background (or underground) from which it may be recalled and reactivated later, when there is need to do so – as may be the case especially in crisis situations or in fundamentalist revivals. Nevertheless, the model assumes a sequence of styles on the surface – which, however, should be taken as hypothetical and open to empirical falsification or modification.
3 From Religious Styles to Religious Schemata

‘Style’ is a comprehensive, multi-dimensional construct. A style can be identified, in a rather pragmatic and process-oriented mode, by the repetitive use of the same behavioral pattern, e.g. of a certain everyday-aesthetical preference, suggested by Schulze (1992) for life-style research. A religious style, understood along the lines of life style and habitus, is constituted by the repetitive and mostly taken-for-granted use of certain interpretation patterns, coping rituals or attitudinal structures in the religious domain. This means for the assessment of religious styles in empirical research that a religious style (not much different from a faith stage) can be identified in qualitative research, i.e. in an open interpretative process. Therefore, we have used the Manual for Faith Development Research (Fowler, Streib, & Keller, 2004) with its anchor answer system for interpretatively assess religious styles. Qualitative research can identify phenomena such as operational structures, narrative patterns, or object representations.

Though one may envision better procedures also for qualitative research, it is especially for quantitative assessment, that we need a more precise procedure. This is the reason for suggesting a schema approach for the religious styles perspective. With the conceptualization of religious schemata, the religious styles approach opens up for more precision in qualitative research, but especially for valid quantitative research. The move from styles to schemata parallels the introduction and explication of a schema concept in the neo-Kohlbergian approach to moral development (Rest, Narvaez, Thoma, & Bebeau, 1999; Narvaez 2005; Narvaez & Lapsley, 2009).

For religion, McIntosh (1995) has proposed a religion-as-schema approach with special attention to its relevance for religious coping. This is another contribution to which my model of religious schemata can be related – with some reservations however. While I agree with Paloutzian’s (1995) and Koenig’s (1995) reply to McIntosh’s (1995) proposal that the religion-as-schema concept may be a potential contribution to the psychology of religion, especially in the field of religion and coping (e.g. Taylor, 2001), I also agree to their critical comments that the schema concept is not precise enough and not all dimensions of religion can be subsumed under the schema concept.

My use of the term ‘religious schema’ is less ambitious, more focused and supposedly more precise; it is informed by Schäfer (2003). This definition of ‘religious schema’ rests on the key characteristic that a schema links an experience with an interpretation in such a way as to open up the possibility on transformation of the experience. Thus my schema concept is not primarily concerned with the question of perception, information retrieval or activation of mentally stored schemata for persons, roles and events, as suggested in psychological schema concepts (e.g. Taylor & Crocker, 1981) or in cognitive schema theory (Derry, 1996). Rather, a ‘schema’ is the cognitive interpretation pattern which a person seeks out and prefers in order to come to terms with the specific challenging experience and expects a helpful solution for the stressful experience. Challenging experiences such as personal, social or ecological threat call for an interpretation of hope, for a frame of meaning, for “coming to terms.” The structural patterns for such interpretations are “stored” in long-term memory and may be regarded as habitual disposition which, when retrieved and activated, open a perspective on a positive experience.1 Frequently activated schemata should become chronically accessible and turn into a habitus (Bourdieu, 1979). It is however necessary to emphasize that there is not only one possible schema in response to a challenging experience, but rather a variety of options. Thus my model of religious schemata in particular attends to individual difference in schema activation and preference.

For example – and here I explain the challenge for which the Religious Schema Scale (see below) is especially responsive – the encounter with other religions and their truth claims can become a challenging experience. One of the schemata an individual may seek out and activate for coming to

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1 This understanding of ‘schema,’ as developed so far, can be viewed in the framework of Schäfer’s (2003; 2009) model of the “praxeological square” which he has developed on the basis of Greimas’ (1987) semiotic square. Then the arrow from challenging experience to transforming interpretation is only half of the picture. The other arrow in the schema square starts with the positive experience and seeks out an interpretation which identifies potential dangers, the sources for the challenging experience (causal attribution), and thus motivates action. Since I have not operationalized this in the Religious Schema Scale, I only point to this more comprehensive framework model of the praxeological square.
terms with the challenge could be the interpretation that *there is* absolute truth and that this absolute truth is manifest in the individual’s own religious texts and teachings. This schema then functions for coming to terms with the challenge and envisioning the positive experience of religious certainty. This schema also functions as defense mechanism. Another individual may activate another schema which claims that religious plurality is simply a matter of fact and that differences can should and be dealt with by fairness and tolerance. A third and still other schema could be activated by a third person who comes to terms with the challenge of encountering another religion by the interpretation and expectation that the other religion may be interesting, that it may inspire creativity and that inter-religious dialog may lead to new perspectives on one’s own religion.

To conclude my argument for progressing from styles to schemata: While *schemata* are conceptualized as precise structural patterns of interpretation and praxis, *styles*, according to our pragmatic definition, emerge from the repetitive use of specific schemata. Religious styles resemble – and relate to – life styles and to habitus (Bourdieu, 1979). Religious schemata thus can be used as distinguishing marks for religious styles. Our proposal of how to envision the association of religious schemata, religious styles and stages of faith can be seen in Figure 3.

![Figure 3. The Relation of Religious Schemata, Religious Styles and Faith Stages](image)

The conceptual framework developed so far constitutes the background on which empirical research can build and develop instruments and research strategies. I will demonstrate this in regard to quantitative research and briefly describe the development and validation of the Religious Schema Scale (Streib, Hood, & Klein, 2010), before summarizing recent research with the RSS.

4 **Development of the Religious Schema Scale**

The Religious Schema Scale (RSS) has been designed as a measurement of schemata in order to assess religious styles. The data on the basis of which the RSS has been developed is the Bielefeld-Based Cross-Cultural Study on Deconversion (see Study 1 below). Streib, Hood & Klein (2010) describe the construction and validation of the RSS demonstrating that the RSS has good reliability, considerable discriminant validity, and robust factor structure as is demonstrated by confirmatory factor analysis. The RSS allows for the assessment of three religious schemata, it consists of three subscales. Thereby the RSS thus has a clear focus on a specific dimension of religious styles: on the
spectrum between a more fundamentalist orientation, one the one hand, and tolerance, fairness and openness for dialog on the other – which is most pertinent in face of inter-religious relations in our globalized world. Thus, the model of the RSS resonates with contributions such as studies on tolerance and fundamentalism (Altemeyer & Hunsberger, 1992, 2005) or on religious exclusivism and pluralism (Gennerich & Huber, 2006; Huber & Klein, 2007; Huber, 2009). However, our model highlights something new: the dialogical attitude which we call xenosophia. This appreciation of the wisdom in encounter with the alien of course relates to Fowler’s ingenious idea of assuming stages of faith beyond the individuative-reflective style, thus conceptualizing a style which he called “conjunctive faith” and which features the appreciation of the other and other faith traditions. This can be further grounded and sharpened with reference to Waldenfels’ (1990, 1997) and Nakamura’s (2000) philosophical contributions to a theory of the alien from which the concept of xenosophia has emerged.

Here is a brief description of RSS subscales. Corresponding to three factors, the three subscales have been constructed according to high factor loadings, consistency with marker items, reliability and construct validity. These subscales are: truth of texts and teachings (ttt), fairness, tolerance & rational choice (ftr) and xenosophia / inter-religious dialog (xenos). The ttt subscale (sample item: “What the texts and stories of my religion tell me, is absolutely true and must not be changed.”) corresponds to, and is supposed to be indicative of, the mythic-literal faith of Fowler’s stage two and to the instrumental-reciprocal religious style (Streib, 2001). The ftr subscale (sample item: “We should resolve differences in how people appear to each other through fair and just discussion.”) relates to the individuative-reflective faith of Fowler’s stage four and to the religious style which Streib (2001) labeled individuative-systemic. At first sight, ftr may appear unrelated to religion, but it is, in our view, as strongly related to religion as Fowler’s individuative-reflective faith, namely assessing a tolerant, fair, rational and reflexive dealing with religious pluralism. Finally, the xenos subscale (sample item: “The truth I see in other worldviews leads me to reexamine my current views.”) aims at the conjunctive faith in Fowler’s model or to what Streib (2001) calls the dialogical religious style. The three subscales address three different concerns, three different visions for positive experiences – which, according to my definition of schema, constitute three distinct religious schemata: ttt is preoccupied with the concern for one’s own religion and with the envisioned positive experience of its unchallenged certainty, ftr features the concern and vision of a fair coexistence of the religions, and xenos is concerned with preserving openness and features as positive experience the creative surplus in inter-religious encounters.

To give an impression of the profile of the RSS, it may be helpful to attend to some results on correlations (see Table 1). Positive and negative correlation of the RSS subscales with religious fundamentalism as measured with Altemeyer’s and Hunsberger’s (1992) Religious Fundamentalism Scale are very high: positive with ttt, negative with xenos. This indicates strong parallels between the two measures. In a similar way, but less extreme are the correlations between right-wing authoritarianism (Altemeyer, 1996) and the RSS subscales ttt and xenos. This indicates a greater distance of the RSS to right-wing authoritarian attitudes compared to fundamentalist mentality.

<table>
<thead>
<tr>
<th>Subscale</th>
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<tbody>
<tr>
<td>ttt</td>
<td>-0.33***</td>
<td>-0.34***</td>
<td>-0.13*</td>
<td>0.05</td>
<td>0.14*</td>
<td>0.25**</td>
<td>0.80**</td>
<td>0.81**</td>
<td>0.69**</td>
<td>0.72**</td>
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<tr>
<td>ftr</td>
<td>0.28**</td>
<td>0.32**</td>
<td>0.21**</td>
<td>0.51**</td>
<td>0.13*</td>
<td>0.34**</td>
<td>-0.22**</td>
<td>-0.16**</td>
<td>-0.28**</td>
<td>-0.21**</td>
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<tr>
<td>xenos</td>
<td>0.41**</td>
<td>0.35**</td>
<td>0.21**</td>
<td>0.26**</td>
<td>-0.06</td>
<td>0.06*</td>
<td>-0.69**</td>
<td>-0.42**</td>
<td>-0.62**</td>
<td>-0.42**</td>
</tr>
</tbody>
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Note. *N = 254  bN = 566  cN = 255  dN = 567  tN = 252;  * p < .05  ** p < .01
From the Big Five dimensions (NEO-FFI, Costa & McCrae, 1985), only openness to experience has considerable correlations with the RSS: negative with ttf, positive with xenos and – only slightly lower – with ftr. Finally, from Ryff’s Well-Being Scale (Ryff & Singer, 1996), personal growth and purpose in life correlate with the RSS with noteworthy significance and strength; interestingly, here it is especially ftr which has correlations with both personal growth and purpose in life in the US sample.

5 Research on Religious Development with Religious Schemata

5.1 Deconversion and Religious Styles – Study 1

From the Bielefeld-Based Cross-Cultural Study on Deconversion (Streib et al, 2009), we can report evidence that faith stage is related to deconversion.

5.1.1 Method

Participants. The Bielefeld-Based Cross-Cultural Study of Deconversion (Streib et al., 2009) compared more than one hundred deconverts to over thousand persons who stayed within their tradition (in-tradition members, total N = 1,196). Research participants were, or had been, members in a variety of religious groups including mainstream Christian churches, but also non-Christian minority oppositional religious groups. Besides qualitative instruments such as the narrative interview and the Faith Development Interview, an extensive questionnaire has been administered. With 41% male and 59% female respondents, gender distribution is acceptable. All age groups are present in the sample (M = 29.34, SD = 15.29, Range: 13-84), however 60.2% are less than 25 years old.

Measures. Besides the initial 78 items from which the religious schema scale has been developed, the questionnaire has included a number of measures which were designed for the assessment of preconditions and outcomes of deconversion: the “Big Five” personality measure in its revised NEO-FFI version (Costa & McCrae, 1985), the Psychological Well-Being Scale (Ryff & Singer, 1996), the Religious Fundamentalism Scale (Altemeyer & Hunsberger, 1992) and the Right-Wing-Authoritarianism Scale (Altemeyer, 1996). All measures are detailed in the research report (Streib et al., 2009). The measures had either an official German translation, or were translated into German and back-translated for control. Most scales have been presented in a 5-point Likert-type format from “strongly agree” to “strongly disagree.”

To 277 persons (100 deconverts and 177 in-tradition members) in the total sample, we have, besides the questionnaire data, also a Faith Development Interview. From a sub-sample of 104 respondents (60 from Germany; 44 from the U.S.A.), we have, besides the responses to the RSS, a Faith Development Interview. Faith Development Interviews have been administered and evaluated according to the Manual for Faith Development Research (Fowler, et al., 2004).

5.1.2 Results

While results of the deconversion study are more comprehensively reported elsewhere (Streib, et al., 2009), I restrict this report to the RSS. From a comparison of the means of deconverts and members on the RSS subscales by an independent sample test using the combined US and German sample, it is especially the subscale truth of texts and teachings that shows considerable relation to deconversion with a mean difference of .87 (Standard Error Difference, SED=12, p<.001); in-tradition members agree (Mean=3.46, on a 5-point rating scale, SD=.84, N=758), but deconverts disagree (Mean=2.59, SD=1.01, N=53) to the ttf subscale. On the RSS subscale xensophia/interreligious dialog, we see a similar, though less strong effect: mean difference between members and deconverts on xenos is .23 (SED=.09, p<.05). Still somewhat weaker is the effect of fairness, tolerance & rational choice: mean difference is .14 (SED=.07, p<.05). In sum, all RSS subscales relate to deconversion; especially agreement/disagreement on the RSS subscale truth of texts and teachings changes with deconversion.

This effect can be demonstrated and visualized in detail for the specific deconversion trajectories. Figure 4 presents a scatter plot in the three-dimensional space which is constructed with
the three RSS subscales. The individual cases of deconverts clearly assemble in the area with low or very low scores on *truth of texts & teachings* and high scores on *xenosophia/inter-religious dialog*.

This result is confirmed by the assessment of faith development scores for the in-tradition members and deconverts in the total sample in which we have 100 Faith Development Interviews with deconverts and 177 with in-tradition members: in the group of in-tradition members, a majority of 74.0% are on Stage Three and 18.6% on Stage Four; in the groups of deconverts, 51.0% are on Stage Four and 44.0% on Stage Three.

Taken together, results indicate that the three subscales or schemata of the RSS are clearly associated with deconversion and that the RSS has considerable predictive power. This is especially the case for the subscale *truth of texts & teachings*, but also for *fainess, tolerance and rational choice* and for *xenosophia/inter-religious dialog*.

### 5.2 Xenophobia, Conflict Mediation and Religious Styles in Adolescence – Study 2

#### 5.2.1 Method

**Sample.** The sample consists of the questionnaire data of 415 12 to 25 year old adolescents who filled out an online-questionnaire in spring and early summer of 2009. Mean age is 18.7 for both male and female participants. With 40.0% male and 60.0% participants, sex is not equally distributed, but acceptable. 94.7% reported German, 4.3% Turkish citizenship; other citizenships are marginal. The part of adolescents who attend middle or high school is with 57.1% rather high. Of the others who do not attend middle school or high school, 8.6% have not started, or have dropped out from, vocational training, 27.4% are in vocational training, 8.6% have completed vocational training, 49.2% attend college or university, 4.6% have a M.A. degree or equivalent. A majority of 80.5% belongs to a Christian denomination, 6.5% identify as Muslims, 0.2% belong to other religions, 5.3% are religiously unaffiliated and 7.5% did not answer the question.

**Measures.** The main section of the online-questionnaire asks for religious experiences and beliefs: mystical experiences, images of God as helper, redeemer, judge, and self-identification of being “religious” or “spiritual.” Also the 15 items of the Religious Schema Scale were included in the religion section. On the basis of the items on religious experiences and beliefs, scales have been
constructed: mystical experiences: 5 items, $\alpha = .61$ (sample item: “I know experiences that all things in the world are connected in a miraculous and mysterious way.”); non-theistic world view: 9 items, $\alpha = .83$ (sample item: “What others call God, is in fact a creative principle in the universe”); certainty of God’s love, 5 items, $\alpha = .94$ (sample item: “God cares about everything in my life, because he loves me”); images of God as helper, 3 items, $\alpha = .89$ (sample item: “God is a friend in heaven”); image of God as redeemer, 4 items, $\alpha = .80$ (sample item: “The blood of Jesus Christ resolves the relation between me and God”); image of God as judge, 5 items, $\alpha = .80$ (sample item: “God is a severe judge who does not allow trespasses”). The reliabilities of Religious Schema Scale were: $\alpha = .88$ for the subscale truth of texts & teachings (ttt), $\alpha = .65$ for fairness, tolerance & rational choice (ftr) and $\alpha = .70$ for xenosophia & inter-religious dialog (xenos).

A third section of the questionnaire contains: 1) a bi-polar scale for values originated by Schwartz (1992) and used by Gennerich (Feige & Gennerich, 2008; Gennerich, 2010); 2) two scales for immanent and eschatological justice (items were taken from: Maes, Schmitt, & Seiler, 1998); 3) three scales for inter-religious xenophobia between the Abrahamic religions which were, in part, taken from Heitmeyer’s (2002; 2007) construct of „Group-focused Emnity.“ The items for antisemitism and islamophobia (four items each; sample items: “Judaism is a distortion of true religion;” “Because of the many Muslims, I feel like a stranger in my own country”) could be condensed into two variables; reliabilities are: $\alpha = .83$ for islamophobia, and $\alpha = .80$ for antisemitism. 4) In the questionnaire, we included also the items for dealing with conflict from the Greifswald questionnaire for violence of ninth-graders (Dünkel, Gebauer, & Geng, 2007). From the 15 items, two scales have been constructed: aggressive-escalating conflict behavior (4 items, $\alpha = .75$; sample item: “I hit out to make myself respected.”) and active-mediative conflict behavior (6 items, $\alpha = .75$; sample item: “I put myself in the other’s place, in order to understand the other.”).

5.2.2 Results

Comprehensive results, including correlation and regression analyses are presented elsewhere (Streib & Gennerich, 2011; Streib, 2011). Here I focus on the most important result: the effect of the RSS subscales on xenophobia and conflict management/mediation as could be demonstrated by structure equation modeling using AMOS Graphics 17 software. The intention was to identify and detail the most elementary and most powerful effects of religious cognition on both xenophobia and conflict behavior. Thereby the negative outcome variables (aggressive-escalating conflict behavior; islamophobia; antisemitism) have been turned into their positive counterparts by reverse coding in order to allow the calculation to work with positive values – and to point to a potential effect of religion for a positive outcome that may indicate potential transformation and learning processes. Further, the variants of conflict behavior and xenophobia have been constructed as latent variables. How these latent constructs relate to and combine the single conflict behavior resp. xenophobia items, can be seen on the right side of Figure 5 which presents the example model for Islamophobia.

On the side of the predictor variables, theoretically all religiosity variables would have their place. Here it has been necessary to restrict the selection to the most elementary and most powerful variables. The choice was relatively easy however, since the RSS subscales emerged as the most effective factors in previous correlation and regression analyses. This also has the effect that we are able to demonstrate of religious cognition, as measured by the RSS, on deviant behavior and undesirable attitudes.
Figure 5. Model for Testing the Effects of Subscales of the Religious Schema Scale on Disagreement with Islamophobia
Four models have been tested. The difference between them is the right part of the model. Latent target variables were: active- mediative conflict behavior, (disagreement with) aggressive- escalating conflict behavior, (disagreement with) islamophobia, and (disagreement with) antisemitism. Figure 5 presents the example for the first model only. Results for all four models are summarized in Table 2 in which the parameter estimates and also the most important criteria for the model fit are presented which indicate at least a reasonable fit of our four models.²

Table 2. Parameter Estimates and Fit Statistics for Models to Test the Effects of the RSS-Subscales on Active-Mediating and Aggressive-Escalating Conflict Behavior and on Islamophobia and Antisemitism

<table>
<thead>
<tr>
<th>Latent target variable</th>
<th>Multiple squared correl.</th>
<th>ttt</th>
<th>ftr</th>
<th>xenos</th>
<th>χ²</th>
<th>DF</th>
<th>p</th>
<th>CFI</th>
<th>RMSEA</th>
<th>90% CI RMSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active-mediative conflict behavior</td>
<td>.23</td>
<td>.33</td>
<td>.24</td>
<td>.24</td>
<td>411.172</td>
<td>165</td>
<td>.000</td>
<td>.881</td>
<td>.064</td>
<td>.056 - .072</td>
</tr>
<tr>
<td>(Disagreement with) aggressive-escalating conflict behavior</td>
<td>.20</td>
<td>.22</td>
<td>.27</td>
<td>.25</td>
<td>403.940</td>
<td>147</td>
<td>.000</td>
<td>.881</td>
<td>.069</td>
<td>.061 - .077</td>
</tr>
<tr>
<td>(Disagreement with) Islamophobia</td>
<td>.46</td>
<td>-.20</td>
<td>.38</td>
<td>.32</td>
<td>517.518</td>
<td>146</td>
<td>.000</td>
<td>.852</td>
<td>.083</td>
<td>.076 - .091</td>
</tr>
<tr>
<td>(Disagreement with) Antisemitism</td>
<td>.23</td>
<td>-.11</td>
<td>.26</td>
<td>.25</td>
<td>460.572</td>
<td>147</td>
<td>.000</td>
<td>.862</td>
<td>.076</td>
<td>.068 - .084</td>
</tr>
</tbody>
</table>

Results generally indicate considerable effects of the RSS subscales on all four targets. With values of .20 and .23 for squared multiple correlations (which indicates that 20% resp. 23% percentage of the variance is explained) for the variants of conflict behavior and antisemitism, the model demonstrates a considerable effect of religious cognition. For islamophobia this effect is much stronger (.46). This is noteworthy in particular for the variants of conflict behavior, because these are without doubt non-religious constructs.

In the models for the variants of xenophobia, regression weights of both ftr and xenos are considerable, the regression weights of ttt is lower and negative. While high agreement to fairness and

² In Table 3 also the fit statistics for the models are reported. The table present the most important indicators, χ², degrees of freedom (DF), probability level (p), comparative fit index (CFI) and root mean square error of approximation (RMSEA) with 90% confidence intervals (90% CI RMSE). They indicate an overall reasonable model fit for all four models. The χ²-test results yield significant results indicating that an exact fit of the models could not be found. A ratio between χ² and the DF of 2 to 1 or 3 to 1 is usually regarded as indicating an acceptable fit; this criterion is met by all model except that for islamophobia which is slightly higher (χ²/DF = 3.545). The comparative fit index (CFI) should, according to the standards in confirmatory testing, e.g. confirmatory factor analysis, be higher than .90 for indicating a reasonable fit. With CFI = .881, our models for conflict behavior are close to meeting even these high standards, the xenophobia models are with CFI = .852 for isamophobia and CFI = .862 for antisemitism slightly lower. Because our analyses however do not aim at confirmatory analyses, but are estimating regression paths, and if the fact is taken into account that our four models include and relate a variety of otherwise rather unrelated variables, the fit estimates can be regarded as indication a satisfactory model fit. Finally, the root mean square error of approximation (RMSEA) for which a value of less than .08 and certainly not higher than .10 is suggested in order to reach a reasonable model fit (Browne & Cudeck, 1992, p. 239). With RMSEA = .064 and RMSEA = .069, the models for the two conflict behavior model are meeting these criteria; the values for the two xenophobia models are slightly higher, but certainly below RMSEA = .10. Thus it can be concluded that the model fit of our four models is reasonable.
tolerance together with an appreciation of the strange religion and the readiness for dialog strongly and positively predicts xenophilia (in our models: disagreement with islamophobia and disagreement with antisemitism), the insistence on the absoluteness of the truth of the teachings of one’s own religion predicts the opposite, namely xenophobia. But in the structure equation model, the effect of ttt on both xenophobic attitudes comes visible. This, in contrast to ftr and xenos, negative effect of ttt indicates that we need to pay attention to the different kinds of religious cognition or different religious schemata.

For the latent variable for mediation, the effects of religious cognition are strong. As expected, the model demonstrates a positive effect of ftr and xenos on both variants of mediation. This means that the adolescents in our sample associate fairness and tolerance, but also readiness for inter-religious encounter and dialog with the readiness for mediation and disagreement with aggressive behavior. However, it is surprising that also ttt has a positive effect. This indicates that the claims of absoluteness for one’s own religion associate positively with readiness for mediation and disagreement with aggressive conduct. Insofar ttt relates to religious cognition which is preferred by fundamentalists, this may also point to the prosocial consequence of fundamentalist orientation.

Taken together, considerable effects of religious cognition on mediative and non-aggressive conflict behavior and on the two versions of xenophobia are demonstrated by structure equation modeling. But, as is obvious with the ttt schema, specific religious cognition may have different effects.

6 Conclusion and Outlook

The two studies presented above demonstrate the indicative and predictive effect of the Religious Schema Scale in two separate domains. Study 1 shows that religious style assessment may help to sharpen our understanding of deconversion. The RSS shows discriminant power in regard to deconversion. Changes on the RSS subscale truth of texts & teachings from agreement to disagreement and increase in consent to the items of xenosophia/inter-religious dialog corroborate the association of deconversion with openness to experience which was also a central result of the deconversion study (Streib et al., 2009).

Study 2 demonstrates that religiosity has considerable effects on conflict behavior and xenophobic attitudes. Thereby the preventive effect of religiosity for aggressive behavior and xenophobia stands in the foreground. Thus our results generally agree with and confirm, for German adolescents, the tendency of research in the U.S.A. which demonstrates, as Baier & Wright’s (2001) meta-analysis and also most recent research (Pickering & Vazsonyi, 2010) show, a significant impact of religiosity on the prevention of deviant behavior. It is especially in Study 2 that the RSS proves as measure for religious schemata with specific focus on the tension between the absolutistic and the dialogical/xenosophic schemata.

The results from the two studies demonstrate that the Religious Schema Scale is an empirically effective measure of individual differences in religious styles. Thereby the RSS proves as independent measure which parallels the Faith Development Interview assessment to some extent, but reveals as more than simply another “Fowler scale.” It may nevertheless be revealing and may be even more effective to combine and triangulate the RSS and faith development interview.

Of course it would be necessary to engage in longitudinal research, if we intend to evidence developmental changes for the individual person over time. This appears even more imperative, since the plausibility of the deductive application of structural-developmental presumptions has declined and the account of religious development can be expected from empirical evidence alone.

Because the assembly of religious styles is based on a broad definition of religion (or ‘faith’ sensu Cantwell Smith, or ‘spirituality,’ as many colleagues would label it) and includes, as suggested already in Fowler’s model, the “higher” styles of dialog, inter-religious encounter and concern for humanity, research in religious styles appears especially helpful for adult religious development in the contemporary multi-religious situation.
References


