

# PRELIMINARY EMPIRICAL FINDINGS ON THE ADAPTED FAITH DEVELOPMENT MODEL FOR A MUSLIM CONTEXT

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## Abstract

The theory of faith development was criticized from a Muslim perspective, and a modified bipolar orthogonal dimensional version of the model (low-to-high level of cognitive development vs. low-to-high level of commitment) with eight dimensions was subsequently proposed in two previous studies. The aim of this third study is to provide empirical findings to support the proposed model of religiosity styles (content and structure) in a Muslim context. To this end, two sets of data were employed using a group comparison design. In Study 1, the sample (n = 934) was conveniently selected from the campuses of three different Turkish state universities (454 men and 480 women,

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with a mean age of 22). The instruments used for data collection were adapted from items of previously developed scales aimed at measuring Muslim religiosity. In Study 2, a second mixed sample of 165 participants was selected, comprising university students and members of the general public (54 men and 111 women, with a mean age of 28). The instrument for data collection was constructed by transforming the Likert response format of previously employed scales into a semantic differential format and adding several new items to the battery to measure areas in the proposed model that the available data did not cover. Data were analysed using factor analysis, item analysis, and correlation analyses. The findings from the two studies broadly supported the theoretically proposed eight concepts of religiosity represented in a circumplex model of religiosity styles with the two bipolar dimensions of “High vs. Low Differentiation” and “High commitment vs. High non-commitment”.

*Key Words:* faith development, stage, style, religiosity, scale, Muslim, adaptation

## Introduction<sup>1</sup>

Religious commitment (and non-commitment)<sup>2</sup> is a complex variable in psychological research. Developing a practical, comprehensive theory and a set of instruments to examine it could provide valuable tools for both practitioners and researchers. The theory of faith development is among the most comprehensive approaches to explaining variations in religiosity from a cognitive perspective, comparable to studies by Perry (1970), Kegan (1982), and Kohlberg (1987). While the theory has a robust qualitative foundation,

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<sup>1</sup> This study is the international and extended version of the paper published in Turkish (Ok, 2021). It has been revised, modified, supplemented with additional data set, and aligned with the study's objectives. The paper also constitutes the third (and the final) paper in the series of 3 papers on criticism, new model offer and empirical evidence regarding the theory of faith development (see the text).

<sup>2</sup> The terms *religiosity*, *faith*, *spirituality*, and *worldview* will be used interchangeably and intentionally throughout the text, depending on the contextual requirements. This approach is justified for two reasons. First, the original faith development theory was later revised into a framework of religious styles. Second, the theory encompasses both religious and non-religious forms of 'faith,' defined as a commitment to a set of core values or value centers.

quantitative methods continue to face challenges in effectively measuring the developmental trajectories of faith.

The theory of faith development and the instruments used to measure it in both Christian and Muslim contexts were critically evaluated in a previous study (Ok – Gennerich, 2024a). Building on this critique and drawing on empirical observations conducted in a Muslim context, a new proposal for religiosity styles was introduced (Ok – Gennerich, 2024b). This culturally sensitive, adapted theoretical model incorporates both religious and non-religious content while preserving the emphasis on cognitive structure. It was argued that the theory of faith development neglects the content of religiosity—specifically, levels of commitment and non-commitment—by overemphasizing cognitive structural development. Consequently, critical or even hostile orientations toward religiosity were excluded from the scope of the theory.

It has been argued that the theory of faith development adopts a predominantly secular approach to religious development, with the “developed” styles it promotes tending to favor an uncommitted, secular, and rational perspective on religiosity. However, there is a potential to introduce more sophisticated and developed, yet simultaneously committed, versions of religiosity that evolve from conventional forms of faith. This possibility is supported by observations from the biographies of renowned historical Muslim figures. Furthermore, a new and more comprehensive framework for the theory of religious and anti-religious development has been proposed. This framework offers a more detailed exploration of each religious style identified in earlier studies. The current third study aims to provide empirical evidence supporting this proposed model of religiosity styles within Islam (Ok – Gennerich, 2024b) by presenting the results of quantitative analyses conducted on two sets of empirical data.

Among the hypotheses is the idea that what is referred to as conjunctive faith in the theory of faith development represents a relatively secularized approach to religiosity, emphasizing openness to

diversity and interreligious tolerance. It is also hypothesized that a ‘religious/spiritual’ version of conjunctive faith can be introduced. Conversely, fundamentalism is described in the theory as a characteristic primarily associated with mythic-literal religious individuals. However, an inflexible and aggressive attitude toward religiosity is a widely observed phenomenon in modern times (see Ok, 2023) and should be addressed within an adapted version of the theory of faith development.

This study is partly based on the premise that previous scales developed to measure faith development (see Harris – Leak, 2013; Leak et al., 1999; Leak, 2003, 2008, 2009; Streib et al., 2010; Ok, 2007a, 2009, 2012) have been only partially successful. These scales tend to emphasize certain dimensions of faith development while exhibiting a bias toward committed, conventional religiosity. Moreover, the schema of conventional religiosity—the most prevalent style among religious populations (Fowler, 1981)—has not been independently represented in empirical studies.

Additionally, instruments designed to measure religious styles or faith development often lack specificity, making it difficult to assess each style independently. This has led to controversial findings regarding their validity. In response to these critiques, a new model was proposed in Ok – Gennerich (2024b). This model represents two primary dimensions of religiosity within a bipolar, two-dimensional orthogonal circumplex framework, as follows:

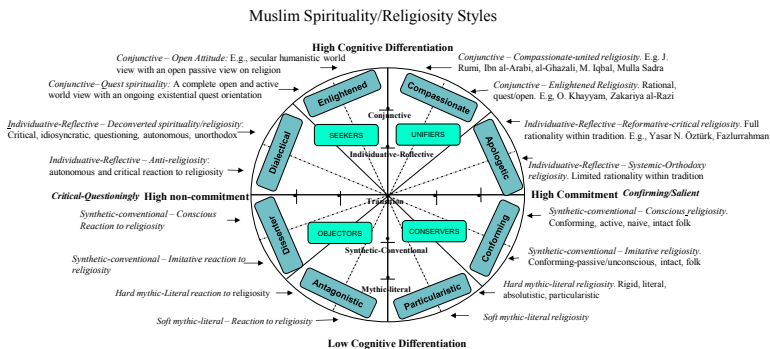


Figure 1. The adapted model of Muslim religiosity styles (cited from Ok – Gennerich, 2024b)

It was proposed that two main dimensions of religiosity—commitment vs. non-commitment and high cognitive differentiation vs. low cognitive differentiation—intersect to form four overarching religiosity quadrants, each containing two distinct styles. These quadrants collectively represent eight primary religiosity constructs: *Seekers* (dialectical and enlightened), *Unifiers* (compassionate and apologetic), *Conservers* (conforming and particularistic), and *Objectors* (dissenting and antagonistic).

Each of these eight constructs also has two non-hierarchical variations. For example, conforming religiosity can manifest as either *conscious* or *imitative*. However, these variations are less critical for inclusion in quantitative measurement.

Given that the newly adapted model is assumed to comprehensively explain variations in Islamic religiosity, it is expected that existing religiosity scales developed within Islamic cultural contexts could be utilized to test the model. Several constructs have been developed to measure various dimensions of Muslim religiosity (see Ok, 2016; 2012; 2011; 2009; 2007a; 2024). These constructs have been validated through exploratory factor analyses and assessments of criterion validity. Theoretically and hypothetically, these scales can be associated with the eight constructs proposed above as follows:

<i>8 Main Dimensions of Religiosity Styles</i>	<i>Detailed two sub dimensions of 8 main religiosity styles</i>	<i>Constructs/measures that are assumed to measure main religiosity styles</i>
<i>Enlightened</i>	Religious openness	• Openness in religiosity
	Quest religious orientation	• Religious pluralism • Religious relativism • Quest religious orientation (Ok, 2008; 2012)

<i>Dialectical</i>	Deconversion	<ul style="list-style-type: none"> <li>• Religious conflict and uncertainty</li> <li>• Deconversion</li> <li>• Atheism</li> <li>• Religious autonomy</li> <li>• Historical reduction (Ok, 2006)</li> </ul>
	Anti-religiosity	
<i>Compassionate</i>	Compassionate-united	(not developed so far but introduced in this study)
	Enlightened religiosity	
<i>Apologetic</i>	Reformative-critical	<ul style="list-style-type: none"> <li>• Historicist hermeneutics (reformative) (Ok, 2009)</li> </ul>
	Systemic-orthodoxy	
<i>Conforming</i>	Conscious religiosity	<ul style="list-style-type: none"> <li>• Religious attitude (Ok, 2011)</li> <li>• Religious saliency (Ok, 2008)</li> <li>• Conservatism (Ok – Goren, 2018)</li> <li>• Conventionalism (Ok, 2008)</li> </ul>
	Imitative religiosity	
<i>Dissent</i>	Conscious reaction to religiosity (i.e. anti-religiosity)	(No scale available)
	Imitative reaction to religiosity	
<i>Particularistic</i>	Hard mythic-literal religiosity	<ul style="list-style-type: none"> <li>• Absolutism (rigidity) and literalism</li> <li>• Mythic thinking</li> <li>• Closed-mindedness (or need for closure)</li> <li>• Proselytising tendency and particularism (Ok, 2012).</li> <li>• Right-wing authoritarianism (Ok – Goren, 2018)</li> </ul>
	Soft mythic-literal religiosity	
<i>Antagonistic</i>	Hard mythic-literal reaction to religiosity	<ul style="list-style-type: none"> <li>• Left-wing authoritarianism (Ok Goren, 2018)</li> </ul>
	Soft mythic-literal reaction to religiosity	

		<ul style="list-style-type: none"> <li>• Unquestioned obedience to secular authority (Ok, 2008)</li> </ul>
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Table 2. Religiosity scales and their theoretical associations with the dimensions of proposed religious styles in Islam

It can be seen in the table that different aspects of Hard Mythic religiosity can be measured by constructs such as absolutism (rigidity), literalism, mythic thinking, need for closure, proselytizing tendency, and particularism. The concepts of dogmatism, closed-mindedness, authoritarianism, and radical conservatism can also be related to this religious thinking style (see Hogg – Vaughan, 2014; Kruglanski et al., 2006).

Additionally, the Conforming Religiosity style can be measured by the Religious Attitude Scale (Ok, 2016) and the Religious Saliency Scale in overall. The constructs of Conservatism, as one of the dimensions of value orientation (Schwartz, 1992), and Conventionalism, as one of the sub-dimensions of authoritarianism (Altemeyer, 1981; Altemeyer – Hunsberger, 1992), may also serve as representative schemas of this type.

Furthermore, as questioning and doubt require a high level of reflectiveness, need for cognition, and rationality, it could be argued that these traits are integral components of the *Individuative-Reflective* (Dialectical) religious style. While religious conflict and questioning have been acknowledged in the theory (i.e., transitions between stages) and have played an important role in the lives of college students (Parks, 1986) and adults (Batson et al., 1993), they have not been sufficiently emphasized, particularly in quantitative measurements.

Experiences such as questioning, reacting to, or protesting against conventional public religiosity are represented in empirical measurements by constructs like (cognitive) uncertainty, deconversion, atheism, and questioning. These can be considered indicators of the Individuative-Reflective religiosity style, at least in its initial stages. Similarly, the constructs of Autonomous religiosity (Ok,

2006) and Historicity in hermeneutics (*Tarihselcilik* in Turkish) (Ok, 2009) may represent more established or committed versions of dialectical religiosity.

Another form of the Individuative-Reflective religiosity style, Deconverted spirituality, is exemplified by individuals who deconvert from committed Synthetic-Conventional religiosity to a secular domain. They deconvert, in a sense, to a new life orientation and religious interpretation as a result of experiencing deep questioning and conflict with their traditional faith. They feel completely spiritually autonomous in their thinking, with idiosyncratic ways of understanding established religions, without concern for whether their perceptions align with the orthodox teachings of traditional religion.

It is assumed that the Enlightened religiosity style has been measured so far by scales such as Religious Openness, Religious Pluralism, Religious Relativism, and Quest religious orientation (see Ok, 2012; 2009). This group of constructs can also be studied using the personality trait of Openness (Costa – McCrae, 1985), Personal Growth, one of the aspects of wellbeing (Ryff Singer, 1996), and the concept of Open-mindedness (Rokeach, 1960).

It appears that no instrument has yet been developed to measure what is referred to in the proposed model as Compassionate (a component of conjunctive faith) religiosity—a committed but simultaneously highly cognitively sophisticated version of religiosity. Similarly, the main constructs of Apologetic, Dissent, and Antagonistic religiosity styles need further scale studies. It is hypothesized that these aspects could be measured using newly formulated, purpose-driven items.

It should be emphasized that the main constructs of religiosity styles and their corresponding scales are not entirely independent of each other. They may overlap significantly within an individual, with one becoming more dominant at a certain period. For instance, people with a strong mythic-literal religiosity may also exhibit a high level of Conforming Religiosity and vice versa.



Below are the results of two empirical studies on validating the multi-dimensional proposed model of religiosity styles, adapted to Islamic culture (Ok – Gennerich, 2024b).

### **Study 1<sup>3</sup>**

The aim of this first study is to determine whether the religiosity constructs previously developed in the Muslim context align well with the content of the proposed bipolar orthogonal model of religiosity styles.

#### **Method**

##### **Participants**

In Study 1, participants were selected from college students. This group is well-suited to test the model because many fundamental changes in religiosity often occur during these critical years (Parks, 1986). A total of 934 students from two different Turkish state university campuses participated in the study (age range = 18–45;  $M = 22.08$ ), including 454 men and 480 women. The sample was conveniently selected using purposive quota sampling to ensure a diverse representation in terms of year of study, gender, age, and academic department.

##### **Instruments**

*Overview:* In 2007 study (Ok, 2007b), based on observations from a previous qualitative study on faith development theory in Turkey, a pool of 63 items was created by collecting items from previously published scales to measure various aspects of religious styles. Second, to allign expressions with the theory of faith development, the word “religion” was replaced with the phrase “faith or worldview” in the wording of items, except for those related to religious commitment. This change was made because, according to Fowler, faith is broader than religion, encompassing both religious and non-religious faith or worldviews.

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<sup>3</sup> The data from Study 1 were published in Turkish (Ok, 2012) solely for the purpose of scale development to measure religiosity and faith development, not for testing a model as it is done here.

All variables were rated on a 5-point Likert scale: Not at all agree, agree slightly, agree moderately, agree much, and agree very much. The Cronbach's alpha values reported for the scales ranged from .79 to .88, with one relatively low score of .62.

The scales developed in that study, along with the number of items they contain, are presented in Table 2 below.

Scales	Item Numbers
Religious commitment	10
Absolute & literal faith	14
Need for closure	4
Cognitive conflict and uncertainty (past and present)	4
Deconversion	4
Individuative religiosity	8
Plural Faith	9
Quest religion (originally by Batson, Schoenrade, and Ventis, 1991)	12
Religious attitude (originally by Ok, 2011)	8
Total	83

*Table 2. Scales Developed in the Measurement of Religiosity in Muslim Context*

To be more specific the developed scales are briefly explained below.

The *Religious Commitment* scale measures individuals' positive attitudes toward religion in general and reflects a commitment to conventional religious values (see Ok, 2016). Example item is "I believe in the fundamental thoughts and values of Islam". As indicated above, it is assumed to be primarily related to the synthetic-conventional (conscious or imitative) religiosity style. However, because it represents a broad and generic attitude toward religion, individuals affirming various commitment styles (compassionate, apologetic, conforming, and particularistic) may agree with the items to varying degrees. In contrast, a total negative attitude toward these items reflects all forms of secular non-commitment faith styles.

*Absolute & Literal Religiosity Scale:* The schema of absolute faith measures one's interpretation of religion as irreplaceable, firm, and unchangeable. Example items include "The values of my faith or

worldview are correct word by word” and “values underlying my faith or worldview is stable and cannot be changed”. Additionally, a literal interpretation of texts is preferred over symbolic or open interpretations. This faith schema primarily represents the rigid form of mythic-literal religiosity (particularistic conservers).

*Need for Closure in Faith Scale:* The scale measures an individual’s tendency to avoid incorporating new ideas into their existing faith (or neophobia and closure). In psychological literature, it is related to the concept of the Need for Closure, defined as “a desire for a definite answer to a question, as opposed to uncertainty, confusion, or ambiguity” (Kruglanski – Fishman, 2009). Example items included “Hearing new comments constantly on my faith and worldview disturbs me” and “I do not enjoy adding new comments on what I knew about my faith or worldviews”. It is assumed that the Need for Closure in Faith Scale reflects the rigid mythic-literal stage (both religious and non-religious), as it aligns with the characteristics described in faith development theory.

*Deconversion in Faith Scale:* The construct of deconversion aims to measure the extent of individuals’ experience of disconnecting from their parents’ conventional faith. Example items include “I gradually disconnected from my previous faith or worldview” and “I think I drifted away from the faith or worldviews that I once learned in my family”. The scale represents the transition from conventional faith to individuated-reflective faith. Therefore, it could be considered part of the Individuated-Reflective style, such as dialectical spirituality/religiosity.

*Uncertainty in Faith Scale:* The scale aims to measure cognitive discord regarding religion at two points in time: in the past and at present. To achieve this, participants were asked to express the degree of uncertainty, doubt, contradiction, and questioning they have experienced regarding their faith by responding to the leading question, “To what extent have you experienced/do you experience the following conditions regarding your religion in the past and at the present time?” Example items included “Contradiction (past) in faith or

worldview” and “Doubt (present) in faith or worldview”. Similar to the concept of deconversion, the scale is intended to capture a transitional period from conventional faith to post-conventional stages, reflecting the onset of Individuative-Reflective (Dialectical) religiosity.

*Quest-Faith Scale:* The *Quest* concept of religiosity, initially developed by Batson, represents openness to change in religious thinking, valuing doubt as positive or valuable rather than avoiding it, and living with existential questions concerning religion and life (Batson – Schoenrade, 1991). People with a Quest orientation are inclined to search for the mysteries of life and existential matters, without being satisfied with ready responses provided by religious authorities. Example items “Questions are far more central to my faith or worldview experience than are answers”, “It might be said that I value doubts and uncertainties in my faith or worldview”. Despite it overlaps overwhelmingly with transitory faith (i.e. doubt, conflict etc.), which is evaluated as a schema of individuative-reflective reasoning, as discussed above, it is assumed that the scale primarily measures Conjunctive faith, in both its committed (the *enlightened religiosity* of Compassion) and uncommitted (*Quest Spirituality* and *Open Attitude* of Enlightined) forms.

*Plural Faith Scale:* The scale aims to measure individuals’ level of agreement with religious pluralism in their society. In other words, it assesses their openness to living alongside people from other faith traditions or cultures. Example items include “There is no problem with the diversity of faith or worldviews” and “People who have such different faith or worldviews as Judaism, Christianity, atheism, Islam can live together in this country”. It is assumed that this construct represents all four dimensions of Conjunctive Faith: open attitude, quest spirituality, compassionate religiosity, and enlightened religiosity, overall. However, dialectical and apologetic religiosity styles may accept religious openness and pluralism conditionally.

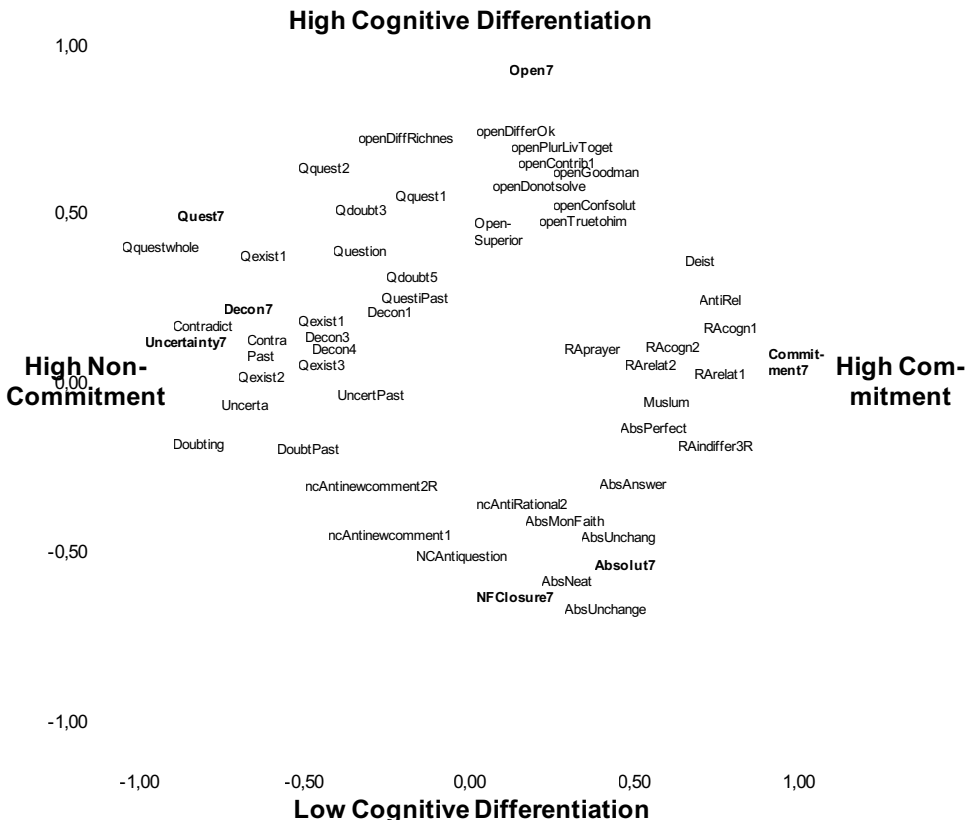
#### **Data Collection Procedure**

The survey, covering the items of the scales mentioned above along with information sheet and consent form, was distributed to

participants by members of a research agency on the campuses of two universities located in different parts of Turkey. It was administered in lecture halls across various departments and faculties, with the completed surveys being collected approximately 30 minutes later. The students participated in the study on a voluntary basis.

### Findings

All items were subjected to exploratory component analysis using the varimax rotation method with a two factor solution according to the theoretical model (see Figure 1). The scree plot shows two highly relevant first factors (with eigenvalues of 13.40, 7.91, 4.72, 4.10, 2.94, 2.26, 1.88, 1.61, 1.37, 1.28, 1.13, .96 etc.), which explained 37.9% of the variance. The distribution of the religiosity/faith schemas or scales in total (in bold letters), along with their items, is presented on the proposed bipolar two-dimensional space in the component plot, derived from the results of the conducted factor analysis.



*Note: Expansion of some of the abbreviations: ncAntinewcomment=Need for closure being against new comments; Qdoubt=doubt item of questioning; doubtPast=bad doubt experienced in the past; openGoodman=there could be good people among atheists, agnostics; RAcogn=cognitive component of religious attitude; AbsAnswer=You can find answers to any question in my religion (Absolute religiosity); Muslum=I am a Muslim*

*Figure 2. Plotted factor component loadings after varimax rotation of the items constituting the religious schema scales*

It can be observed that the items and schemas are distributed in a logically meaningful way on the surface of an orthogonal, bipolar two-dimensional model. The horizontal axis represents commitment versus non-commitment, while the vertical axis represents high cognitive differentiation (i.e., openness) versus low cognitive differentiation (i.e., the need for closure and absolute faith). Furthermore, the way the items and schemas are spread across the space confirms four types of religiosity orientations (domains): seekers, unifiers, conservers, and objectors. In this way, the model aligns well in overall with the theoretical expectations outlined above. The descriptive features and intercorrelations of religiosity constructs are presented in Table 3.

Correlational Results						
	Absolute faith	Need for closure	Religious commitment	Uncertainty	Deconversion	Quest
<b>Mythic-Literal Faith Schemas</b>						
Absolute faith						
Need for Closure	.25***					
<b>Conventional Faith Schema</b>						
Religious commit.	.31***	-.05				
<b>Transitional Faith Schemas</b>						
Uncertainty in Faith	-.32***	-.08 *	-.35***			
Deconversion in faith	-.20 ***	-.01	-.46***	.37***		
<b>Conjunctive Faith Schemas</b>						
Quest in faith	-.28***	-.10**	-.36***	.54***	.47***	
Openness in Faith	-.15***	.17***	.02	.15***	.09**	.23***

\*\*\*p < .001, \*\*p < .01, \*p < .05

Table 3. Inter-Correlations of Religious Schemas

It is observed that variables related to committed mythic-literal and synthetic-conventional religiosity styles (Conservers), such as absolute faith, need for closure, and religious commitment, are positively interconnected with each other, except for the variable of need for closure, which has no link with religious commitment. The reason for this disconnection could be that the need for closure, due to its content, could be, as discussed above, an asset of both committed and uncommitted versions of mythic-literal religiosity (or anti-religiosity). These three variables—absolute faith, need for closure, and religious commitment—are altogether negatively connected with uncertainty, deconversion, and the Quest, except for the connection between need for closure and deconversion, likely due to the aforementioned reasons. The latter three variables are assumed to be related to individuative-reflective and conjunctive faith styles. They are also negatively connected with the schema of openness in faith in the conjunctive faith domain, except for the connection between religious

commitment and openness. The reason these two variables have no correlation could be that people with conventional faith may show a type of ‘artificial’ openness, largely due to social desirability, towards ‘others’ in discourse, but this may not hold true in real-life decisions and circumstances. Another possibility is that, as discussed above, conventional committed faith is a rather broad term under which people with particularistic, conforming, apologetic, and compassionate religiosity styles may show varying levels of agreement with openness.

Finally, openness in faith correlates positively with cognitive tension variables (Dialectical faith), i.e., uncertainty, deconversion, and Quest. In this way, the argument that open religiosity styles address the perspective of secularized individuals is confirmed.

To sum up, it is evident that while the religiosity constructs confirm the proposed model, it was also found that the constructed scales are not specific enough to provide a clearer picture of religiosity styles.

## **Study 2**

Study 2 is a pilot project focused on developing a new response format for the instruments previously used to measure religiosity/faith styles. In earlier works, religious schemas were assessed using Likert-type instruments with five options. In the current study, this has been replaced with a semantic-differential scale. Additionally, the previous term “faith/worldview” has been replaced with “religiosity,” which is more appropriate for studying religiosity in a relatively homogeneous society with respect to its religious culture, Islam, and for the theoretical model presented above. With these changes, the aim of Study 2 is to replicate the findings of Study 1 by providing evidence to support the proposed model of religiosity styles in Islam.

## **Methods**

### **Participants and Procedure:**

The sample consisted of 165 non-random participants, including 54 men and 111 women. Their ages ranged from 17 to 64, with a mean age of 28.27 (SD = 10.12). The majority held either a secondary school



diploma (n = 63) or a bachelor’s degree (n = 70). The questionnaire was distributed in 2023 via email or other electronic devices to voluntary participants (convenience sampling). Participants completed the questionnaire by marking their chosen options with an (X) or by coloring the selected option in the Word document.

**Instruments**

*Religiosity Styles-Islam:* The new instrument includes 61 items in a Semantic Differential format. The items were adapted from the Ok-Religious Attitude Scale (Ok, 2011) and the previously constructed Ok-Faith Development Scale (Ok, 2012). Additionally, in line with the theoretical framework and suggestions presented in the literature section of Study 1 (see also Ok – Gennerich, 2024b), which emphasized the need to extend the measurement of faith development to encompass non-commitment to religion, Sufism, anti-religion attitudes, conjunctive/symbolic religious faith, and absolute religiosity, new items were added to the inventory. The resulting scale is relatively comprehensive, covering various aspects of religiosity (content) and cognitive schemas associated with different religiosity styles.

The adaptation process involved increasing the number of options from 5 to 7, transforming the Likert scale into a Semantic Differential format by creating new statements for the opposite poles of each previous scale item. Additionally, each of the 9 options in the scale was presented in written form. Finally, the items were constructed as if expressed in the third person. An example of the question format can be seen in Figure 3:

Completely harmful and needless	Mostly harmful and needless	Rarely harmful and needless	<b>No answer, neuter, does not know, does not suit me</b>	Rarely beneficial and needed	Mostly beneficial and needed	Completely beneficial and needed	
O	O	O	O	O	O	O	
Sees religion as harmful and needless for people							Sees religion as beneficial and a need for people

Table 3. Scaling format of the Religiosity Styles-Islam

After gathering the data, the items were exposed to exploratory factor analysis, followed by item analyses.

## Findings

The factor analysis of 61 items initially yielded six factors, each with two dimensions. However, one factor was discarded due to very low internal consistency. The remaining factors were named, along with their opposite poles, as:

*Committed/Religious vs Secular-Atheistic Religiosity/faith:* This dimension is assumed to primarily measure conforming vs. dialectical religiosity/spirituality. Example items include: “Does not care whether his/her life aligns with religious values” vs. “Cares whether his/her life aligns with religiosity”; and “Sees himself/herself as a person with no connection to any religion” vs. “Sees himself/herself as connected to a particular religion”.

*Questioning vs. Intact-Pure (Unquestioned) or Authentic-Original Religiosity/Faith:* This dimension is assumed to measure dialectical or enlightened styles versus conforming or particularistic styles. Example items include: “There was a period in the past when his/her religiosity was seriously questioned” versus “He/She has remained committed to his/her pure and intact faith”. “At one point in his/her life, he/she experienced a period of serious doubt” versus “He/She has remained committed to his/her pure and intact faith”.

*Symbolic vs. Literal Religiosity:* This dimension is assumed to measure primarily conjunctive-enlightened religiosity versus hard mythic-literal religiosity. Example items include: “The verse of the poet, ‘It is natural to sin in this world, and there is no life without sin,’ does not contradict vs. contradict with the spirit of religiosity” and “The verse in the Quran about ‘cutting off the hands of a thief’ should be taken symbolically vs. literally”.

*Mythic vs. Rational-Realistic Religiosity:* This construct represents dimensions of particularistic religiosity (including both hard-mythic-literal and soft-mythic-literal forms) versus two forms of dialectical religiosity. Example items include: “S/he believes that religious miracles actually occurred vs. did not occur in reality” and “S/he believes that prayer causes rain vs. does not cause rain”.

*Sufism vs Individualistic-Rational/Critical Religiosity:* This dimension is assumed to primarily measure religiosity as *Unifiers* vs *Objectors*. Example items include: “S/he contemplates religious matters in a gnostic (irfanî) manner, far beyond a rational approach,” vs. “S/he approaches religious matters in an autonomous and rational way”. Another example is: “The ideal form of religiosity is the one modeled by Jalal al-Din Rumi or Yunus Emre, prominent figures in Islamic mysticism,” vs. “The ideal way of practicing religion is to live according to the principles derived from the Qur’an or Hadith”.

The number of items in each scale, the Cronbach’s Alpha scores concerning the internal consistency of scale items, the mean and standard deviations and inter-correlations of these scales can be seen in Table 5 below. Additionally, with these five scales a new component analysis was conducted. The eigenvalues of 1.28, 1.28, .86, .58, .45 clearly indicate a two-dimensional solution, which explained 62.1% of the variance. The Varimax-rotated component loadings are presented in Figure 4:

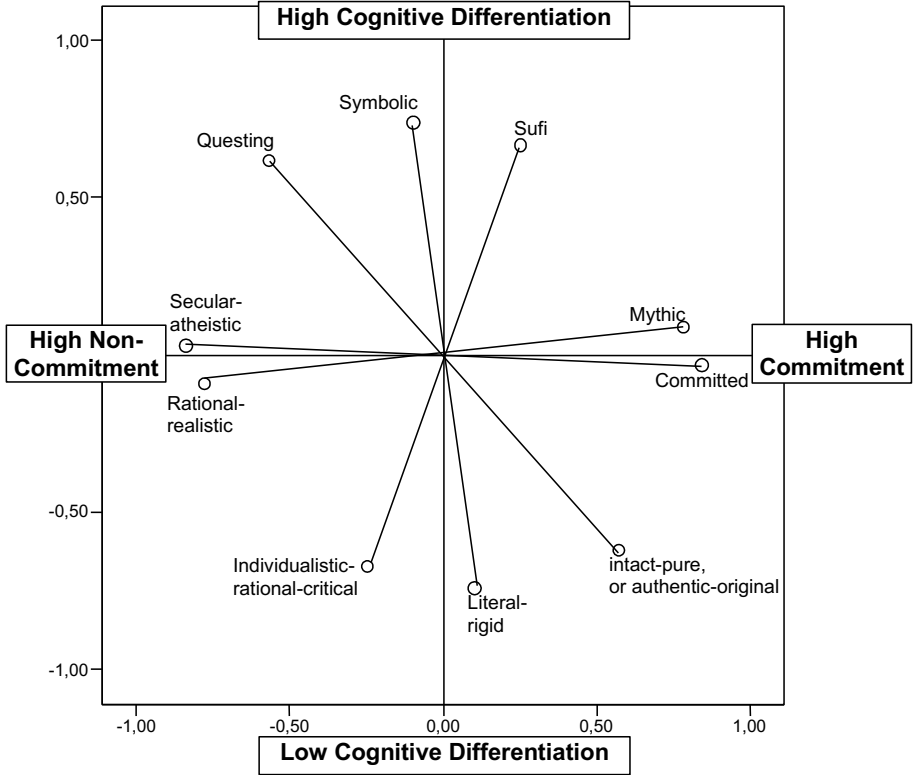


Figure 4. Component loadings of the religiosity style scales in the two-dimensional space

As shown in Figure 4, the new conceptualization of the items worked well by providing constructs that align with the theoretical expectations, fitting harmoniously into two bipolar orthogonal dimensions of religiosity: Symbolic vs. Literal and Committed vs. Uncommitted. Additionally, two more diagonal bipolar dimensions—Sufism vs. Individualistic-rational religiosity and Quest vs. Intact-pure (synthetic-conventional) religiosity—emerged as additional components of the model.

Descriptive Results	Correlational Results
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Dimensions	Item numbers	Alpha	M	SD	Committed	Questioning	Symbolic	Mythic
Committed-religious vs secular-atheistic	20	.93	4.94	1.45				
Questioning vs intact-unquestioned	15	.94	3.02	1.46	-.41***			
Symbolic vs literal	6	.74	2.80	1.62	-.08	.36***		
Mythic vs rational-realistic	6	.76	3.86	1.91	.43***	-.27***	.01	
Sufism vs rational-critical	4	.49	2.26	1.58	.11	.17*	.13†	.06

\*\*\*p < .001, \*p < .05, †p < .10.

Table 5. Descriptive characteristics and inter-correlations of Religiosity Styles-Islam

It is observed that, based on their item numbers, the internal consistency of the items in the scale is at an ideal level, except for the Sufism schema, which has a low consistency of .49. The mean score indicates that the religious commitment of the sample is above average, while the level of mythical thinking is moderate. The levels of symbolic thinking and Sufism are low, at 2.80 and 2.26, respectively.

The inter-correlations between variables align with theoretical expectations: religious commitment and mythic religiosity are positively correlated, while both are negatively correlated with questioning. Additionally, there is no significant correlation between these variables and symbolic religiosity.

### Discussion and Conclusion

The results of two empirical studies support the theory (and hypothesis) of a two-dimensional orthogonal model of religiosity styles, namely, high non-commitment vs. high commitment to

conventional religiosity, and low vs. high cognitive differentiation (see also Ok – Gennerich, 2024a, 2024b). This model provides a rich framework for explaining Islamic religiosity in future research. Derived from the theory of faith development, it is comprehensive and valid within the Muslim context with this adaptation. The instrument can be used for individual assessment in clinical settings and to conduct more in-depth research on faith development.

The study first presented the construct validity of several religiosity scales (schemas) assumed to be representing some aspects of religiosity styles. These can be classified as follows:

(a) *Particularistic religiosity schemas* (Hard and soft mythic-literal religiosity): Absolute faith (vs. symbolic faith); need for closure (vs. need for cognition); mythic (vs. non-mythic-rational).

(b) *Conforming religiosity schemas* (Synthetic-conventional): Religious commitment (vs. secular, irreligious, or atheistic).

(c) *Dialectical religiosity schemas* (Individuative-reflective): Conflict/uncertainty (vs. certainty); deconversion (vs. intact/unquestioned belief).

(d) *Enlightened and compassionate schemas* (Conjunctive religiosity): Openness/pluralism (vs. particularism); Quest (vs. intact/pure faith); symbolic (vs. literal); Sufism (vs. individualistic-rational/critical perspectives).

Considering the dimensions of the theoretical model (see Figure 1), to achieve greater accuracy, additional instruments (schemas) need to be incorporated into the Religiosity Styles-Islam battery to measure the following religiosity/spirituality styles: (a) Hard mythic-literal anti-religiosity; (b) Synthetic-conventional – Conscious anti-religiosity; Synthetic-conventional – Imitative anti-religiosity; Synthetic-conventional – Conscious religiosity; (c) Individuative-Reflective – Systemic-orthodoxy religiosity; Individuative-Reflective – Reformative-critical religiosity; Individuative-Reflective – Anti-religiosity; and (d) Conjunctive – Open attitude toward religiosity; Conjunctive – Compassionate – united religiosity.

It has been confirmed for the second time that Compassionate-Unifier's religiosity, which is assumed to represent an advanced form of Sufi faith, can be identified when studied within a highly sophisticated religious Sufi sample. Additionally, the two forms of conventional religiosity—Conscious religiosity and Imitative religiosity—can be distinguished in future empirical studies.

The proposed model has several advantages. In terms of breadth, it combines both religious (committed) and non-religious (uncommitted) reactions to religion, as well as symbolic and mythic-literal forms of religiosity, similar to the post-critical religiosity theory (Hutsebaut, 1996; 1997). Accordingly, all religiosity schemas fall within one of the four main areas mentioned above. Additionally, the model accounts for extreme forms of religiosity, including both religious and non-religious aggressive forms of religiosity/spirituality.

Regarding the concept of 'religious maturity,' considering that open faith lacks a positive correlation with committed religiosity and has positive correlations with Quest and uncertainty, it appears to be more of an asset in secular or secularized orientations than part of a more mature form of committed "religiosity". The schemas of advanced Sufism (as opposed to lay Sufism) and religious pluralism could be indicators of a committed form of maturity, though they do not show positive correlations with a committed conventional faith orientation. Thus, it could be argued that religiosity, in its traditional sense, does not have a typical 'mature form'—a construct that is both 'religious' and 'mature or conjunctive' at the same time. Alternatively, it may not have been shown yet, due to the lack of representative samples and instruments. In line with the hypothesis of the study, whatever has been considered a 'mature' form of religiosity in studies conducted so far, including the present one, has turned out to be correlated with aspects of secularism or indifference to religion, rather than being part of a more sophisticated form of 'religiosity' in its traditional sense.

Our solution, which involves two different developmental goals in the religious field, aligns well with the life-span theory of development. According to Baltes et al. (1998), life-span development

cannot be understood from a single endpoint. Rather, different developmental goals are meaningful in different contexts. Therefore, the plurality of Islamic theological approaches, as outlined in Ok and Gennerich (2024b), could be considered valuable resources for an individual's pursuit of maturity.

However, the results of this correlational study do not allow religious schemas to be placed on a developmental continuum. Accordingly, longitudinal designs are needed to predict the trajectory of faith development. In this context, it is possible to speculate that transitions may occur diagonally, i.e., from a conventional religiosity style to a highly differentiated questioning faith (i.e., deconversion), or from a lower-differentiated, critical-reflective, rational anti-religiosity to a highly committed and differentiated or sophisticated form of religiosity, i.e., Compassionate faith. The latter is referred to as conversion to religion. Transitions could also occur vertically, e.g., from conforming religiosity or critical-reflective anti-religiosity styles to their corresponding higher levels, or horizontally, e.g., from Rationally Enlightened to Religiously Compassionate, and vice versa (conversion and deconversion without the experience of a transitional period, and thus without experiencing cognitive dissonance).

Another point is that the revised instrument, *Religiosity Styles-Islam* in Study 2, is quite useful in clinical settings for those familiar with the theory of faith development. It allows clinicians to empirically observe the current state of an individual's faith style by examining individual difference scores based on these religious schemas. For instance, a person who scores low on the conforming and dialectical scales (e.g., doubt) as well as on the compassionate and enlightened faith schemas may be profiled as critical or absolutist anti-religious (see also Ok, 2012, for an application of determining faith stages for individual assessment). However, such measurements should be confirmed through follow-up faith development interviews. Additionally, the *Religiosity Styles-Islam* instrument could be standardized with further research.



Finally, regarding how common these religiosity styles are, it seems plausible to argue that the religiosity styles model and its instruments, particularly those that are on the side of commitment dimension, could be considered more meaningfully if they were put on a normal distribution curve, or a bell-shaped curve. This could be substantiated by examining the nature and characteristics of religious groups that have historically emerged in Islam, with the assumption that social religious movements in the history of Islamic thought naturally represent different religiosity styles, and that their size dispersion follows a normal distribution (Figure 5).

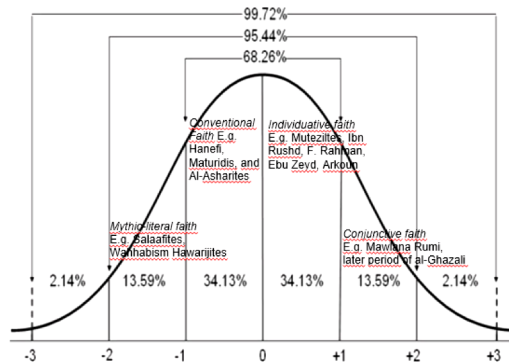


Figure 5. Theoretical distribution of faith stages on a normal distribution curve

Although the validity of the normal distribution in social behaviors and attitudes, such as religious schemas or religiosity styles, remains debatable, many statistical operations are predicated on this assumption. Theoretically, it is possible to propose that 68% of religious populations may fall within the categories of conventional and individuative religiosity. Conversely, mythic-literal faith and conjunctive faith together might occupy approximately 27% of this distribution at opposite ends. It should be noted that the group and individual names presented in Figure 5 were drawn from Islamic thought schools as illustrative examples. This approach is based on the assumption that differentiations or schisms within mainstream religious groups throughout history tend to follow a normal distribution. This pattern reflects their representation across varying

levels of cognitive differentiation and commitment within a well-established religious tradition in society.

Although an advanced and sophisticated form of religiosity, characterized by symbolic thinking, emerged as a construct in the present study, Sufism was not fully represented within the identified religiosity styles. Therefore, the instrument measuring these styles can be further refined. Future studies might focus on specific sample groups that hypothetically represent such styles and provide illustrative examples of “mature religiosity”.

In addition, it is worth exploring whether an imitative, conformist form of uncommitted secular faith exists, a question that future studies could address. In other words, do Objectors construct their identity solely through criticism of established faith traditions or authorities, or do they also demonstrate a commitment to their chosen set of non-religious values? This study identified distinct religiosity styles based on several related variables, aligning with the Muslim adaptation of the theory of faith styles. In subsequent research, the instruments developed for Study 2—namely, the religiosity style scales—can be further refined and improved.

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No potential conflict of interest was reported by the authors.

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### **DECLARATION OF ETHICS**

In this study, all the rules specified under the "Higher Education Institutions Scientific Research and Publication Ethics Regulation" have been followed. None of the actions listed under the second section of the regulation, titled "Actions Contrary to Scientific Research and

Publication Ethics," have been carried out. Ethical approval information for a previous study with the same topic, religiosity, is provided below.

Ethical approval information:

Ethical review board name: Cumhuriyet University Social Research Ethics Committee

Date of ethical review decision: 27.08.2013

Ethical review decision document number: 2013/4

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