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 in two previous studies, 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. The aim of this third study was to provide empirical findings to support the proposed model of religiosity styles (for both content and structure) in a Muslim context. To this end, two sets of data were employed via 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

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480 women, 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, comprising university students and members of the general public (54 men and 111 women, with a mean age of 28), was selected. 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. The data were analyzed via factor analysis, item analysis, and correlation analyses. The findings from the two studies broadly supported the eight theoretically proposed 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 noncommitment".

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

Introduction¹

Religious commitment (and noncommitment)² is a complex variable in psychology research. The development of 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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¹ 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).

² 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 nonreligious forms of "faith", defined as a commitment to a set of core values or value centers.

there are continuing challenges in effectively measuring the developmental trajectories of faith using quantitative methods.

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 a model of religiosity styles was introduced (Ok - Gennerich, 2024b). This culturally sensitive, adapted theoretical model incorporates both religious and nonreligious 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 noncommitment- 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 tends 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:

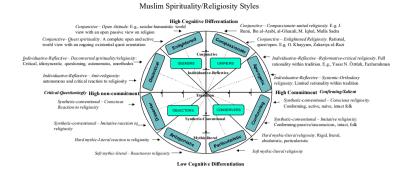


Figure 1: The adapted model of Muslim religiosity styles (cited from Ok - Gennerich, 2024b)

It was proposed that two main dimensions of religiosity – commitment vs. noncommitment 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 nonhierarchical 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:

Eight main	Details of the two					
mimensions of	subdimensions of the	Constructs/measures that are assumed to measure the main religiosity styles				
religiosity styles	eight main religiosity					
	styles	Openness in religiosity				
	Religious openness	Religious pluralism				
Enlightened	Ougat raligious	Religious relativism				
Zimgiiteirea	Quest religious orientation	Quest religious orientation (Ok, 2008;				
	onentation	2012)				
		Religious conflict and uncertainty				
	Deconversion	Deconversion				
Dialectical		Atheism				
	Anti-religiosity	Religious autonomy				
		Historical reduction (Ok, 2006)				
Compassionato	Compassionate-united	(not developed thus far but introduced				
Compassionate	Enlightened religiosity	in this study)				
Apologotic	Reformative-critical	Historicist hermeneutics (reformative)				
Apologetic	Systemic-orthodoxy	(Ok, 2009)				
	Conscious religiosity	Religious attitude (Ok, 2011)				
Conforming	- Conscious rengiosity	Religious saliency (Ok, 2008)				
	Imitative religiosity	Conservatism (Ok - Gören, 2018)				
	immun e reingroom	Conventionalism (Ok, 2008)				
	Conscious reaction to					
	religiosity (i.e., anti-	(No scale available)				
Dissent	religiosity)					
	Imitative reaction to					
	religiosity					
	** 1 11 10 1	Absolutism (rigidity) and literalism				
	Hard mythic-literal	Mythic thinking				
	religiosity	Closed-mindedness (or need for				
Particularistic		closure)				
	0.6	Proselytizing tendency and				
	Soft mythic-literal	particularism (Ok, 2012).				
	religiosity	Right-wing authoritarianism (Ok -				
		Goren, 2018)				
	Hard mythic-literal	Left-wing authoritarianism (Ok - Goren,				
Antagonistic	reaction to religiosity	2018)				
	Soft mythic-literal	Unquestioned obedience to secular				
	reaction to religiosity	authority (Ok, 2008)				

Table 1: Religiosity scales and their theoretical associations with the dimensions of proposed religiosity styles in Islam

The table shows that different aspects of Hard Mythic religiosity can be measured by constructs such as absolutism (rigidity), literalism, mythic thinking, the need for closure, a 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, more broadly, the Religious Saliency Scale. The constructs of conservatism, as one of the dimensions of value orientation (Schwartz, 1992), and Conventionalism, as one of the subdimensions 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 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 studies using quantitative measurements.

Experiences such as questioning, reacting to, or protesting against conventional public religiosity are represented in empirical measurements by constructs such as (cognitive) uncertainty, deconversion, atheism, and questioning; these can be considered indicators of the Individuative-Reflective style of religiosity, at least in its initial stages. Similarly, the constructs of autonomous religiosity (Ok, 2006) and historicity in hermeneutics (*Taribselcilik* 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. These individuals 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 are 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.

The Enlightened religiosity style has been measured thus 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 traits of Openness (Costa - McCrae, 1985), Personal Growth, which is one of the aspects of well-being (Ryff - Singer, 1996), and the concept of open-mindedness (Rokeach, 1960).

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 the Apologetic, Dissent, and Antagonistic religiosity styles warrant further scale development studies. It is hypothesized that these aspects could be measured via newly formulated, purpose-driven items.

Notably, 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 example, people with strong mythic-literal religiosity may also exhibit a high level of Conforming Religiosity and vice versa.

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

1. Study 1³

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.

1.1. Method

1.1.1. Participants

In Study 1, participants were selected from among 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 via purposive quota sampling to ensure diverse representation in terms of year of study, gender, age, and academic department.

1.1.2. Instruments

Overview: In the 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 ensure that the expressions aligned with the theory of faith development, the word "religion" was replaced with the phrase "faith or worldview" in the wording of the 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 nonreligious faiths or worldviews.

All the variables were rated on a 5-point Likert scale: do not agree at all, 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 a relatively low score of .62.

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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.

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 for the Measurement of Religiousity in the 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). An example item is "I believe in the fundamental thoughts and values of Islam". As indicated above, this scale is assumed to be primarily related to the synthetic-conventional (conscious or imitative) style of religiosity; 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 completely negative attitude toward these items reflects all forms of secular noncommitment faith styles. *Absolute & Literal Religiosity Scale*: The schema of absolute faith measures one's interpretation of religion as irreplaceable firm and

Absolute & Literal Religiosity Scale: The schema of absolute faith measures one's interpretation of religion as irreplaceable, firm, and unchangeable. Sample items include "The values of my faith or worldview are correct word for word" and "Values underlying my faith or worldview are 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: This scale measures an individual's tendency to avoid incorporating new ideas into their existing faith (or neophobia and closure). In the psychology 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). Sample items include "Hearing new comments constantly on my faith and worldview disturbs me" and "I do not enjoy adding new comments on what I know 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 nonreligious), 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. Sample 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 individuative-reflective faith; therefore, it could be considered part of the Individuative-Reflective style, such as dialectical spirituality/religiosity.

Uncertainty in Faith Scale. This scale aims to measure cognitive discord regarding religion at two points in time: in the past and at present. To this end, 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 present?" Sample items include "Contradiction (past) in faith or worldview" and "Doubt (present) in faith or worldview". As in the concept of deconversion, the scale is intended to capture a transitional

period from conventional faith to postconventional 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 mysteries of life and existential matters, remaining unsatisfied with the ready responses provided by religious authorities. Sample items are "Ouestions are far more central to my faith or worldview experience than answers" and "It might be said that I value doubts and uncertainties in my faith or worldview". Although it overlaps overwhelmingly with transitory faith (i.e., doubt, conflict, etc.), which is evaluated as a schema of individuative-reflective reasoning, as discussed above, the scale is primarily assumed to measure Conjunctive faith in both its committed (the enlightened religiosity of Compassion) and uncommitted (the Quest Spirituality and Open Attitude of Enlightened) forms.

Plural Faith Scale: This scale is used 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. Sample items include "There is no problem with the diversity of faith or worldviews" and "People who have different faiths or worldviews, such as Judaism, Christianity, atheism, and 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 conditionally accept religious openness and pluralism.

1.1.3. Data Collection Procedure

The survey, which covers the items of the scales mentioned above, along with an 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. The survey 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.

1.2. Findings

All the items were subjected to exploratory component analysis via 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), 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.

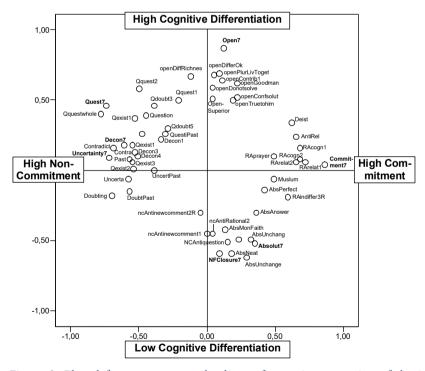


Figure 2: Plotted factor component loadings after varimax rotation of the items constituting the religious schema scales

Note: Expansion of some of the abbreviations: ncAntinewcomment=Need for closure being against new comments; Qdoubt=doubt item of questioning; doubtPast=had experienced doubt in the past; openGoodman=there can be good people among atheists and 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.

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 noncommitment, whereas 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 distribution of the items and schemas across space confirms four types of religiosity orientations (domains): seekers, unifiers, conservers, and objectors. In this way, the model aligns well overall with the theoretical expectations outlined above. The descriptive features and intercorrelations of the constructs of religiosity are presented in Table 3.

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

Table 3: Inter-Correlations of Religious Schemas ***p < .001, **p < .01, *p < .05

The variables related to the committed mythic-literal and syntheticconventional religiosity styles (Conservers), such as absolute faith, the 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 disconnect could be that the need for closure, owing 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 commitmentare negatively connected with uncertainty, deconversion, and the Quest, except for the connection between the need for closure and deconversion, which is 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 lack of correlation of these two variables could be due to people with conventional faith showing a type of "artificial" openness, largely due to social desirability, toward "others" in discourse, but this may not reflect 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 is positively correlated with the 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.

In summary, while the religiosity constructs confirm the proposed model, the constructed scales are clearly not specific enough to provide a clearer picture of religiosity styles.

2. 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 via 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 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.

2.1. Methods

2.1.1. Participants and Procedures

The sample consisted of 165 nonrandom participants, including 54 men and 111 women. Their ages ranged from 17 to 64 years, with a mean age of 28.27 years (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). The participants completed the questionnaire by marking their chosen options with an (X) or by coloring the selected option in the Word document.

2.1.2. Instruments

Religiosity Styles-Islam: This 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 noncommitment to religion, Sufism, antireligion 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 modified to express them in the third person. An example of the question format can be seen in Figure 3:

	Completely harmful and	Mostly harmful and needless	Rarely harmful and needless	No answer, neuter, does not know, does not suit me	Rarely beneficial and needed	Mostly beneficial and needed	Completely beneficial and needed	
Sees religion as harmful and needless for people	0	0	0	0	0	0	0	Sees religion as beneficial and a need for people

Figure 3: Scaling format of the Religiosity Styles-Islam instrument

After the data were gathered, the items underwent exploratory factor analysis, followed by item analyses.

2.2. Findings

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

Committed/Religious vs. Secular-Atheistic Religiosity/faith: This dimension is assumed to primarily measure conforming vs. dialectical religiosity/spirituality. Sample items include "Does not care whether his or her life aligns with religious values" vs. "Cares whether his or 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. Sample items include "There was a period in the past when his or her religiosity was seriously questioned" versus "He or she has remained committed

to his or her pure and intact faith". "At one point in his or her life, he or she experienced a period of serious doubt" versus "He or she has remained committed to his or her pure and intact faith".

Symbolic vs. Literal Religiosity: This dimension is assumed to measure primarily conjunctive-enlightened religiosity versus hard mythic-literal religiosity. Sample 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. contradicts with the spirit of religiosity" and "The verse in the Qur'ān 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 the hard-mythic-literal and soft-mythic-literal forms) versus two forms of dialectical religiosity. Sample items include "He or she believes that religious miracles actually occurred vs. did not occur in reality" and "He or she believes that prayer causes rain vs. does not cause rain".

Sufism vs. Individualistic-Rational/Critical Religiosity: This dimension is assumed to measure religiosity primarily as Unifiers vs. Objectors. Sample items include "He or she contemplates religious matters in a gnostic ('irfānī) manner, far beyond a rational approach" vs. "He or she approaches religious matters autonomously and rationally". Another example is "The ideal form of religiosity is the one modeled by Jalāl al-Dīn al-Rūmī or Yūnus Emre, prominent figures in Islamic mysticism" vs. "The ideal way of practicing religion is to live according to the principles derived from the Qur'ān or Hadith".

The number of items in each scale, the Cronbach's alpha scores indicating the internal consistency of the scale items, the means and standard deviations and the intercorrelations of these scales can be seen in Table 4 below. Additionally, with these five scales, a new component analysis was conducted. The eigenvalues of 1.28, 1.28, .86, .58, and .45 clearly indicate a two-dimensional solution, which explains 62.1% of the variance. The varimax-rotated component loadings are presented in Figure 4:

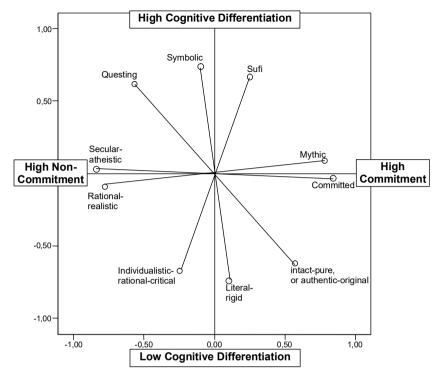


Figure 4: Component loadings of the religiosity style scales in two-dimensional space

As shown in Figure 4, the new conceptualization of the items works 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				
Dimensions	Item numbers	Alpba	M	QS	Committed	Questing	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	

Table 4: Descriptive characteristics and intercorrelations of Religiosity Styles-Islam ***p < .001, *p < .05, †p < .10.

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 exhibits a low consistency of .49. The mean score indicates that the religious commitment of the sample is above average, whereas the level of mythical thinking is moderate. The levels of symbolic thinking and Sufism are low, at 2.80 and 2.26, respectively.

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

3. 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 noncommitment 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, through this adaptation, it is comprehensive and valid within the Muslim context. 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 represent 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); and mythic (vs. nonmythic-rational).
- (b) *Conforming religiosity schemas* (Synthetic-conventional): Religious commitment (vs. secular, irreligious, or atheistic).
- (c) *Dialectical religiosity schemas* (Individuative-reflective): Conflict/uncertainty (vs. certainty); and deconversion (vs. intact/unquestioned belief).
- (d) *Enlightened and compassionate schemas* (Conjunctive religiosity): Openness/pluralism (vs. particularism); Quest (vs. intact/pure faith); symbolic (vs. literal); and 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 antireligiosity; (b) Synthetic-conventional - Conscious anti-religiosity; Synthetic-conventional - Imitative anti-religiosity; and Synthetic-conventional - Conscious religiosity; (c) Individuative-Reflective - Systemic-orthodoxy religiosity; Individuative-Reflective - Reformative-critical religiosity; and Individuative-Reflective - Anti-religiosity; and (d) Conjunctive - Open attitude toward religiosity; and Conjunctive - Compassionate - united religiosity.

It has been confirmed for the second time that the Compassionate-Unifier's religiosity, which is assumed to represent an advanced form of the 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 nonreligious (uncommitted) reactions to religion, as well as symbolic and mythic-literal forms of religiosity, similar to postcritical 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 nonreligious 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, although 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 demonstrated yet owing to the lack of representative samples and instruments. In line with the hypothesis of the study, what has been considered a "mature" form of religiosity in studies conducted thus far, including the present one, has turned out to be correlated with aspects of secularism or indifference to religion rather than reflecting 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 lifespan theory of development. According to Baltes et al. (1998), lifespan 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 style 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 example, 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 stages of faith 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 the commonality of these religiosity styles among public people, it seems plausible to argue that the religiosity styles model and its instruments, particularly those associated with the commitment dimension, could be considered more meaningful 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).

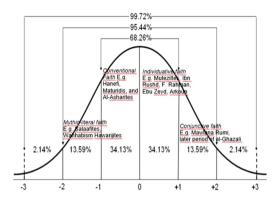


Figure 5: Theoretical distribution of stages of faith on a normal distribution curve

Although the validity of the normal distribution of social behaviors and attitudes, such as religious schemas or religiosity styles, remains debatable, many statistical operations are predicated on this assumption. Theoretically, 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. Notably, 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 may 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 nonreligious values? This study identified distinct religiosity styles based on several related variables, aligning with the Muslim adaptation of the theory of styles of faith. In subsequent research, the instruments developed for Study 2 –namely, the religiosity style scales– can be further refined and improved.

DISCLOSURE STATEMENT

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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" were followed. None of the actions listed under the second section of the regulation, titled "Actions Contrary to Scientific Research and Publication Ethics", were 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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