

https://doi.org/10.24035/ijit.23.2023.257			
Received:	23 Oct. 2022	Accepted:	12 Mar. 2023
Revised:	11 Feb. 2023	Published:	15 June 2023
Volume & Pages:	23 (June): 65-78		

Development of the Theoretical Construction Model of Muslim Religious Character with Confirmatory Factor Analysis to Develop a Measurement Scale

MAMI HAJAROH*, SITI IRENE ASTUTI DWININGRUM & RUKIYATI¹

ABSTRACT

Religious character is a positively measured moral value based on a permanent educational process, to help create an ethical framework and act as a socialization agent. This helps in building positive values such as love, empathy, respect, and harmony. Therefore, this study aims to determine a theoretical religious character construction model, for the development of a measurement scale. A quantitative approach was used by empirically testing the hypothetical factors of this theoretical character. A total of 320 respondents were also utilized as the population, with data measurement using the Aiken's-V formula, Confirmatory Factor Analysis (CFA), and Structural Equation Modelling (SEM). The results showed that (1) The theoretical construction model for religious character was determined by 6 indicators, namely intellect, belief, commitment, ritual, experience, and consequence, which were subsequently identified as moral knowledge, feelings, and actions, (2) The theoretical construction of this variable was declared fit due to meeting the eligibility criteria for the goodness-of-fit model on the AFI (absolute fit indices), IFI (incremental fit indices), PFI (parsimony fit indices), and critical-N. This construction had a reliability of 0.95, confirming that the model was fit for utilization, based on the compilation of a scale to measure students' religious character. These analytical results also helped in developing a religious character learning model.

Keywords: *Islam, meta-analysis, religiosity, religiosity measurement scale.*

The formation of national character has not been optimally realized in supporting the achievement of learning goals, with this condition observed as an objective of the Indonesian educational sector, as stated in Article 3 No. 20 of 2003, concerning the National Education

¹ **Mami Hajaroh*** (Corresponding Author), M. Pd., Ph. D., Professor at Universitas Negeri Yogyakarta. l. Colombo Yogyakarta No.1, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281, INDONESIA. Email: mami_hajaroh@uny.ac.id; **Siti Irene Astuti Dwiningrum**, M. Si., Ph. D., Professor at Universitas Negeri Yogyakarta. l. Colombo Yogyakarta No.1, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281, INDONESIA. Email: ireneastuti@uny.ac.id; **Rukiyati**, M. Hum. Ph. D., Universitas Negeri Yogyakarta. l. Colombo Yogyakarta No.1, Karang Malang, Caturtunggal, Kec. Depok, Kabupaten Sleman, Daerah Istimewa Yogyakarta 55281, INDONESIA. Email: rukiyati@uny.ac.id

System. This leads to the issuance of an educational movement, based on Presidential Decree Number 87 of 2017, concerning Strengthening Character Education. The achievement of character learning is also carried out through the harmonization of heart, taste, thought, and sports, as well as the involvement and cooperation of educational units, families, and communities. In schools, the strengthening of character learning is integrated into all subjects and cultures, with some lessons being morally prioritized, such as Citizenship and Religious Education (CE & RE). This exhibits RE as a responsibility towards the practice of the first precepts of the Pancasila State, namely Belief in One God. However, the role of this education does not play an important role in shaping religious character in every part of the country. Besides this, religiosity is also part of the main values in strengthening character education, accompanied by nationalism, cooperation, integrity, and independence.

The efforts to achieve success in Indonesian character education were carried out with various strategies, although the results were not maximized due to the existence of numerous factors, such as the absence of theoretical constructs, concepts, and core indicators. This was based on an academic debate about the construction of religious character theory, which has become a scientific polemic because of the multidimensionality of religiosity and attribute. Therefore, overcoming these debates requires accuracy and thoroughness in analyzing and critiquing various scientific sources, according to the existing theories and concepts producing measurable indicators of moral character. This is based on the provision of appropriate indicators when developing the theoretical construct of religious character. Another problem involves the non-assessment of this character through valid and reliable instruments. This is because the importance of studying and developing analytical instruments is seriously based on the theoretical constructs, concepts, and indicators of structural religiosity. According to previous reports, the developed instrument became standardized for measuring religious character, as well as meeting the validity and reliability requirements, due to the analyzed theoretical construct in the goodness-of-fit method. With a valid and reliable measurement instrument used for students' assessment, this character was accurately measured. In this condition, learning was also developed to strengthen religious character.

The measurement of religiosity has reportedly been studied globally by experts, especially in Indonesia. These studies included (1) the relationship between religiosity and death anxiety (Muthoharoh & Andriani 2014), (2) Islamic religiosity and happiness (Mayasari 2014), (3) moral behavior and religiosity (Azizah 2015), (4) religiosity, self-control, and delinquency (Aviyah & Farid, 2014), (5) the impact of religiosity on the use of hijab in women (Wibowo, 2017), (6) the influence of religiosity on economic behavior (Ma'zumi et al. 2017), and (7) religious orientation and radical behavior (Aryani 2020). These studies generally examined the religiosity of various disciplines, namely psychology, economics religious education, gender, and moral learning, although the theory of RC (religious character) was not referenced. Therefore, this study aims to empirically determine the theoretical concept of a religious character, for the development of a measurement scale. In this condition, the information on students' religious character needs to be obtained for the development of a learning model, to achieve the objectives of the Character Education Strengthening Program.

CONSTRUCTION OF THE RELIGIOSITY THEORY

Dimensions of Religiosity

Religiosity is a complex and difficult concept to define due to the following reasons (Holdcroft, 2006), (1) the numerous synonyms for religious, namely orthodoxy, faith, belief, piousness, devotion, and holiness. This shows the existence of many religiosity studies with various dimensions, and (2) the concept of religiosity crosses various academic disciplines with different interactive perspectives. This explains that different scientific fields broadly observe this concept based on religious orientation and involvement, including experiential, ritualistic, ideological,

intellectual, consequential, belief, communal, doctrinal, moral, and cultural dimensions. To understand religiosity, a multidimensional approach was initiated by Allport & Fichter in the 1950s (De Jong et al. 1976). According to Glock (1962), this multidimensionality described five dimensions of religiosity, namely: belief, ritual, intellectual, experiential, and consequential. Furthermore, Fukuyama (1961) developed 4 measurement dimensions, with Lenski (Davis 1963) also using a multidimensional approach. Based on King & Hunt (1969), ten religiosity dimensions were observed, with other subsequent reports utilizing 6 measurement approaches (King & Hunt 1972). This was in line with De Jong et al. (1976), where 6 dimensions were utilized. Davidson & Knudsen, (1977) also examined two commitment dimensions, namely the interaction between religious awareness and participation. Additionally, Cornwall et al. (1986) tested 7 religiosity approaches, with Stolz (2009) presenting a theoretical model that reconstructs and integrates the most important concepts, namely deprivation, regulation, socialization, cultural production, and ethnicity. These served as complementary causal mechanisms in an action-based rational framework. Iddagoda & Opatha (2017) also compiled the concept of religiosity from 3 components, namely piety, practice, and participation, as Pearce et al. (2017) measured this variable with 5 measurement approaches.

Based on these literature reviews, Glock and Stark were found to be influential in defining and building the theoretical construct of religiosity through 5 multidimensional dimensions, namely experiential, ritualistic, ideological, intellectual, and consequential. In this condition, many measurements were developed in various religions, although these 5 dimensions did not explain commitment, which had a different concept from belief or ideology. Commitment is an attitude tendency that fosters individual intention to manifest belief into the ritualistic dimension of behavior. It is also an important intermediate variable between belief and ritual. Therefore, religiosity has 6 dimensions, namely intellectual (cognitive), ideological (belief), commitment, ritual (practice), experience, and consequences, according to multidimensional study experts. With these dimensions, commitment becomes comprehensive as a construct of religiosity, for the development of character education. The intellectual dimension relates to the assumption that religious people have the knowledge and understanding of basic faith and scriptural teachings. The formation of the ideological dimension is also based on the expectation that religious people often adhere to specific beliefs or doctrines, with the ritualistic realm involving the experience of worship in a spiritual community. Meanwhile, the experiential dimension emphasizes personal faith or transcendental experiences, with the consequential aspect referencing the individual behavior occurring due to the encouragement of belief and commitment to religious teachings. Based on these dimensions, a theoretical construct of a religious character was developed with other concepts, namely Islamic religiosity, and character. This indicated that the relationship between these theoretical concepts, as well as Islamic teachings and character, constructed a conceptual religious theory. Subsequent analysis was also conducted on the theoretical construct of Muslim religious character, to determine its empirical suitability as a reference in developing a scale of religiosity measurement.

Development of Islamic Religiosity Measurement Scale

The measurement of religiosity is often difficult to perform, due to the requirement of a valid and reliable measurement scale for effective analyses. The development of this scale is reportedly related to various previous studies, which conducted basic analyses on the creation of theoretical religiosity constructs and indicators. According to these variables, several relevant theories utilized the concept of religious dimensions, where various instruments were developed in the fields of psychology, sociology, and religiosity. In this condition, a measurement scale was also created regarding the concept of Islamic religion and theories developed by experts. Based on Albelakhi (1997), this scale was developed with 6 dimensions, namely religious practice, social values, belief, personal need, guidance, and acceptance.

The measurement scale was subsequently developed by Wade et al. (2003), using *The Religious Commitment Inventory (CI-10)* created by Worthington (1988). Krauss et al. (2005) also

developed *The Muslim Religiosity-Personality Inventory (MRPI)* through 2 dimensions, namely the Islamic worldview and religious personality. Meanwhile, Krauss et al. (2007) adapted this Islamic scale with four religiosity dimensions of religiosity. According to Jana-Masri & Priester (2007), an Islamic religiosity scale was also developed through two dimensions, namely Beliefs and Behavioral Practices. Using two techniques, i.e., Organizational Approach and Individual Ritual Participation, another measuring scale was developed (Khraim 2010). These techniques were subsequently degraded into 6 dimensions, namely member/nonmember dichotomy, major religious families, denominational affiliation, individual prayer life; and individualistic religion importance. In addition, the development of the theoretical construct of Islamic religiosity was also carried out by Salleh (2012). Based on Huber & Huber (2012), the *CRS (Centrality of Religiosity Scale)* was also developed, measuring the general intensity of the five theories obtained from the core aspects of religiosity, namely public and private practices, experience, ideology, and intellectual dimensions. These were considered to represent the entirety of religious life, with CRS being suitable for the analysis of interfaith religiosity. This specifically presented the modified versions of the extensions developed for Buddhist, Hindu, and Muslim studies, as El-Menouar (2014) used the five dimensions to develop a measurement instrument for Islamic religiosity. Based on the concepts of Islam, faith, and *ihsan*, this scale was subsequently developed by Mahudin et al. (2016). For Salleh (2012), this development was achieved through four dimensions, namely belief, practice, altruism, and enrichment. Khan (2014) also used internal and external dimensions, with El-Menouar (2014) using belief, ritual, devotion, experience, knowledge, and consequences. According to Usman (2015), a measurement scale used to measure the relationship between religiosity and Islamic bank selections was developed using consequences, tolerance, enrichment, contradiction, and belief. Meanwhile, another development was observed based on 2 dimensions, namely religious practice, and belief (Saffari et al. 2016). Yeniaras & Akarsu (2017) also created a scale of Islamic religiosity through 5 aspects, namely ideological, ritualistic, intellectual, consequential, and experiential dimensions. To measure Islamic commitment and observe its effect on the decision patterns of the younger generation (consumers), a scale was subsequently (Aliman et al. 2018). Based on Mohd Dali et al. (2019), the development of a religiosity scale found 2 dimensions, namely religious belief, as well as commitment and practice.

In developing this religious scale, various previous reviews reportedly show that Islamic religiosity is multidimensional. From the numerous dimensions observed, belief (ideological) was the main focus, accompanied by practice (ritual). This indicates that both dimensions are the main elements of Islamic religiosity. Subsequently, the other observations were the intellectual (cognitive), commitment, experience, and consequential aspects, indicating a total of 6 dimensions, which are explained as follows, (1) Intellectual (cognitive), which is the willingness and ability to learn Islamic teachings from various sources, (2) Belief (ideology, "*aqidah*"), which is based on the action of a person towards God, (3) Practice (ritual, worship, and *mu'amalah*), the act of worshipping God and social relations with human beings, (4) Commitment (attitude, attention, or intention), the act of practicing worship, *mu'amalah*, and noble behavior, (5) Experience, a distinctive feeling of sadness, discomfort, and happiness, due to religious beliefs and practices, and (6) Consequence, which is observed in the emergence of good behavior or noble character in daily life, based on belief, commitment, and religious experience. This proves that the theoretical framework of the Islamic religiosity scale emphasizes the development of religious character, which requires an empirical variable, as one of the Indonesian educational system goals. From this theoretical construct, the development of a religious character measurement scale is also expected, as an assessment or evaluation of learning outcomes. In addition, the measurement needs to be used for developing character education.

Development of Islamic Character Indicators

Character is a set of personal traits or dispositions capable of producing specific moral emotions, encouraging motivation, and guiding behavior. This is often equated with personality, attributes, and temperament, with Hill (2002) stating that it also determined a person's thoughts and actions (Kamaruddin 2012). Furthermore, good character is an inner motivation to carry out suitable performances, according to the highest standards of behavior in every situation. According to Shields (2011), the performance of character was related to dispositions, virtues, or personal qualities, towards the achievement of intentions and goals. Lickona (1997) also stated that character was "a reliable inner disposition to morally respond to specific situations", due to 3 interrelated parts, namely moral knowledge, feelings, and actions. This was in line with Lickona (1999), where the variable contained three aspects, namely knowledge, love, and good performance.

The character also involves the knowledge and feelings of confidence and approval, which promotes intention and commitment towards good performances. This indicates the involvement of internal and external factors, which forms a personal character as an integrated, consistent, and sustainable unit. These internal factors include knowledge, perspective, beliefs, attitudes, attention, and commitment, the external variables containing behavior and skills. Moreover, the knowledge of goodness is found to shape perspectives, foster belief, as well as create an attitude of agreement and commitment towards the manifestation of appropriate behavior. Commitment is also manifested in good behavior, as well as continuously, permanently, and constantly carried out to obtain appropriate skills. In this condition, a person is often known as a good character, which is subsequently formed through knowledge, belief, and commitment continuously and consistently manifested in behavior. This leads to the formation of a personal character, according to the consistent internal conditions of an individual. Kindness is also represented in good attitudes and actions, as an earnest effort to form an appropriate behavior is known as character education. This is in line with the religious character formed by internal and external factors or moral knowledge, feeling, and action. Based on these conditions, Islamic religiosity is multidimensional with 6 dimensions, namely intellectual, belief, practice, experience, commitment, and consequence. It also has a multidimensional character, including moral knowledge, feeling, and action. The components of Muslim character formation are described in Table 1.

Table 1: Tabulation of Religiosity and Character Dimensions

Religiosity Dimensions	Character Dimension		
	Moral Knowing	Moral Feeling	Moral Action
Glock (1960).	Intellectual.	Belief.	Ritual, experiential, consequential.
Davidson & Knudsen (1977).	Intellectual inclination.	Vertical and horizontal beliefs.	Religious experience and experiential desirability.
Cornwall et al. (1986).	Specific orthodoxy.	Spiritual, commitment and traditional orthodoxy.	General religious behavior and Home observance.
Holdcroft (2006).	Religious knowledge: intellectual dimension.	Extrinsic/intrinsic dimension.	Consequences of religious.
Albelaikhi (1997).	Reliance on practical guidance.	belief in central tenets, personal need for religion, societal religious values, and unquestioning acceptance.	Religious dimensions of practice.
Krauss et al. (2005).	Islamic worldview.	Religious personality.	-

Religiosity Dimensions	Character Dimension		
	Moral Knowing	Moral Feeling	Moral Action
Jana-Masri & Priester (2007)		Islamic beliefs.	Islamic behavioral practices.
El-Menouar (2014).	Knowledge.	Belief and devotion.	Experience, ritual, and Consequences.
Yeniaras & Akarsu (2017)	Intellectual.	Ideological.	Ritualistic, consequential, and experiential dimensions.
Iddagoda & Opatha (2017).	Reverence.	Belief.	Practice, regular participatory worship, and social activity involvement.
Mohd Dali et al. (2019).	-	Beliefs and commitment.	Practice.
Mami Hajaroh et al. (2023).	Intellectual.	Beliefs and commitment.	Ritual, experiential, and consequential dimension.

The developed hypothetical concept is theoretically defined as follows, (1) Intellectual (moral knowing) is the willingness to understand Islamic teachings, as indicated by the intensity of reading the Qur'an and hadith, as well as studying various resourceful teachings, (2) Faith (moral feeling) is the belief in the existence, oneness, and words of God, the angels, the Prophet's messenger, the last day, as well as *qadla* and *qadar*, (3) Commitment (moral feeling) is the attitude tendencies and attention/intentions to carry out worship, *mu'amalah*, and noble behavior, (4) Worship (moral action) is an activity in carrying out obligatory performances, including prayer, fasting, paying *zakat* and hajj, as well as performing *mu'amalah* or social worship practices, (5) Religious experience (moral action) is the distinctive feeling of sadness, discomfort, happiness, as well as the emotion observed based on beliefs, experiences, and practices, and (6) Consequence (moral action) is good behavior or noble character in daily life, based on intellect, belief, commitment, and religious experience.

From these conceptual definitions, various items were developed as indicators for each dimension, which explained religious character based on Islamic teachings or Muslim religious moral behavior. These indicators then formed a theoretical structure of the religiosity dimensions within the moral character. Furthermore, the basic idea of the 6 dimensions became a determinant of character competence. This was based on the assumption that the 6 indicators covered the 3-character dimensions, i.e., knowledge, feeling, and action. The concept was then developed into a theoretical construct design of 32 descriptors, which were found to be empirically analyzed.

Study Method

A quantitative method was used to examine the theoretical construction of religious character through 3 stages, namely (1) The validity test on the interrater, to examine the construct viability, (2) The empirical validity test uses *Confirmatory Factor Analysis (CFA)*, to examine the effectiveness and reliability of the constructs, and (3) The Structural Equation Modeling (SEM) test, to examine the model suitability, i.e., the goodness-of-fit (GOF) analysis (Hair et al., 2019). In addition, the interrater validity analysis used the viability coefficient of Aiken's-V (Aiken 1985), which involved 6 experts as raters, with the assessment process using a 5-scale instrument. Besides the validity test, the CFA analysis Joseph F. Hair et al. (2019) also examined the reliability of the construct. In this condition, the estimated reliability and validity and reliability were related to the delta and lambda coefficients, which specifically stated that a greater loading factor (LF) led to more indicator viability as a measurement instrument for the latent variable. This confirmed that 0.50 LF weight or more was considered to have a highly significant validity, to

explain the latent construct. Meanwhile, Sharma (1996) showed that the required weakest LF was 0.40.

According to Joseph F. Hair et al. (2019), the reliability test was described in the CFA analysis, including the CR and AVE (Construct Reliability and Average Variance Extracted). This revealed that good reliability is observed when the CR value ≥ 0.7 . Meanwhile, the value between 0.6 and 0.7 indicated acceptable reliability, provided that the indicator had an appropriate loading factor to the criteria. Internal consistency was also measured using the estimation of Average Variance Extracted (AVE), whose recommended value is greater than 0.5. At this estimation, the indicators are found to appropriately measure the targeted latent constructs only. Based on Fornell, C., & Larcker (2016) and Sharma (1996), a latent construct had satisfactory discriminant validity when the AVE value was greater than the quadratic correlation of the latent construct. Subsequently, the goodness-of-fit (GOF) analytical criteria were used to assess the fitness levels of the Religious Character Construct Model. The use of 4-5 GOF criteria was also sufficiently considered to assess the feasibility of a model, provided that each criterion was represented, such as AFI (absolute fit indices), IFI (incremental fit indices), and PFI (parsimony fit indices). According to the CFA and SEM tests, a student population 10 times the number of items were used, as stated by Barclay et al. (1995) in Memon et al. (2020). In Joseph F. Hair et al. (2019), the PLS-SEM rule recommended that the minimum sample size should be equal to or greater than the following, (a) 10 times the largest number of formative indicators used to measure a single construct, or (b) 10 times the largest number of paths directed at a specific latent construct in the structural model. In addition, Table 2 shows the hypothetical construction of the developed and analyzed Islamic religious character.

Table 2: Development of Muslim Religious Character Indicators and Items

No.	Indicator
1	Intellectuality-Moral Knowing
IN1	Reading the Quran daily
IN2	Adding the Islamic teaching knowledge from various media daily, such as books, the internet, and social media.
IN3	Participating in religious studies from various media, such as recitation groups, TV broadcasts, Youtube, and others.
IN4	Studying various views and thoughts in Islam.
IN5	Reading the translation and interpretation of the Qur'an.
The intensity of this dimension is expressed by the following, (1) Never, (2) Rarely, (3) Sometimes, (4) Often, and (5) Always	
2	Faith-Moral Feeling
BE1	God exists, and Allah is God Almighty
BE2	Magical creatures (angels and jinn) are true, and they live with humans in the world
BE3	There are no more Prophets and Messengers after Muhammad SAW, due to being the last one
BE4	The last word of Allah is the Quran, after that no more revelations are revealed to humans
BE5	There is life again after human death
BE6	Every human being has a role in determining the destiny of life with their efforts
This dimension is expressed by the intensity of the following, (1) Very unsure, (2) Not sure, (3) Uncertain, (4) Sure, and (5) Very sure	
3	Religious Commitment-Moral feeling
CM1	Every Muslim should pray on time
CM2	A Muslim should accept the existence of differences in understanding Islamic teachings
CM3	A Muslim should be good to everyone without discriminating and comparing
CM4	A Muslim should leave things that are forbidden (drunk, gambling, adultery, haram food, etc.)
CM5	A Muslim should not believe in the power of other beings with the ability to provide benefits to humans
The intensity of this dimension is stated by the following, (1) Strongly disagree, (2) Disagree, (3) Doubtful, (4) Agree, and (5) Strongly agree	

No.	Indicator
4	Worship-Moral Action
RI1	I pray 5 times a day
RI2	I do fasting for a whole month in Ramadan
RI3	I have a plan to perform Hajj
RI4	I use money (zakat, <i>infaq</i> , alms) for the poor, mosques, and other social activities
RI5	I dress to cover my nakedness
RI6	I left usury money
The intensity of this dimension is as follows, (1) Never, (2) Rarely, (3) Sometimes, (4) Often and (5) Always	
5	Religious Experience (Moral Action)
EX1	Feeling restless when you leave prayer even when it is only once
EX2	Feeling calm when reading or listening to the recitation of the Quran
EX3	Feeling guilty when cheating or hurting other people
EX4	Feeling happiness after providing something (alms, gifts) to others
EX5	Feel uncomfortable when other people are more diligent in worshipping
This dimension is expressed by the following intensity, (1) Never, (2) Rarely, (3) Sometimes, (4) Often, and (5) Always.	
6	Consequences of Religion (Moral Action)
CN1	Respecting everyone based on equality, regardless of wealth, position, title, status, or job
CN2	Helping others regardless of religious background, culture, skin color, and other differences
CN3	Forgiving everyone even when they hurt me
CN4	Be humble to everyone I meet regardless of their background
CN5	Feeling content with what I have and not overestimating everything beyond my capabilities
This dimension is expressed by the following intensity, (1) Never, (2) Rarely, (3) Sometimes, (4) Often, and (5) Always	

Results and Discussion

The conceptual construct of a religious character was empirically analyzed to determine the validity, reliability, and suitability of the model. This was conducted with field conditions through the Structural Equation Modelling (SEM) test, with the results observed as follows,

Interrater Validity Test

The interrater instrument validity test involved 6 experts, where a 5-scale assessment tool and the formula from Aiken, (1985) were utilized. In this formula, the item validity standard involved 6 raters and a rating scale of 5, at an error level and Aiken index coefficient of 5% and 0.79, respectively. This indicated that when the index estimation is above 0.79, the item is subsequently declared valid. Additionally, the analytical results showed that 2 items (IN1 and BE6) need to be revised due to the Aiken index being less than 0.79.

Construct Validity Test using Confirmatory Factor Analysis

In this analysis, 6 religious character indicators were tested, namely Intellectual (IN1, IN2, IN3, IN4, IN5), Belief (BE1, BE2, BE3, BE4, BE5, BE6), Commitment (CM1, CM2, CM3, CM4, CM5), Rituals (RI1, RI2, RI3, RI4, RI5, RI6), Experience (EX1, EX2, EX3, EX4, EX5); and Consequence (CN1, CN2, CN3, CN4, CN5).

Item validity in Religious Character Indicator: Based on the first-order CFA analysis, the item validity of intellectuality, belief, commitment, ritual, experience, and consequences was observed. This indicated that the loading factors of all Intellectuality and Consequence items were greater than 0.5, verifying a validity status. For Belief, the failures of 2 items were observed, based on

having a loading factor of 0.41 (BE5) and 0.49 (BE). However, an LF of 0.4 was acceptable according to the criteria of Sherma. Validity was also confirmed for Commitment, which showed that 5 items had a loading factor > 0.5, while 3 and 1 determinants had LF < 0.5 for Ritual and Experience, i.e., RI2 (0.38), RI4 (0.40), and RI6 (0.49), as well as EX6 (0.21), respectively. Based on these results, 6 items were found to be insignificant as dimensional indicators. Additionally, a second-order test was conducted to validate the indicators of a religious character, although did not involve insignificant items. These analytical results are shown in Figs. 1 and 2, where the loading factor magnitude of each dimension was observed (Fig. 1), namely Intellectual (0.43), Belief (0.59), Commitment (0.70), Ritual (0.58), Experience (0.75), and Consequence (0.63). This indicated that the Intellectual Dimension was not valid when using the LF criterion (>0.5). However, it becomes the weakest indicator when using the Sharma (1996) criteria. The significance of the path test was also observed from the t-value (> 1.96) of the 6 indicators (Fig. 2), where all the items were relevant in determining the religious character.

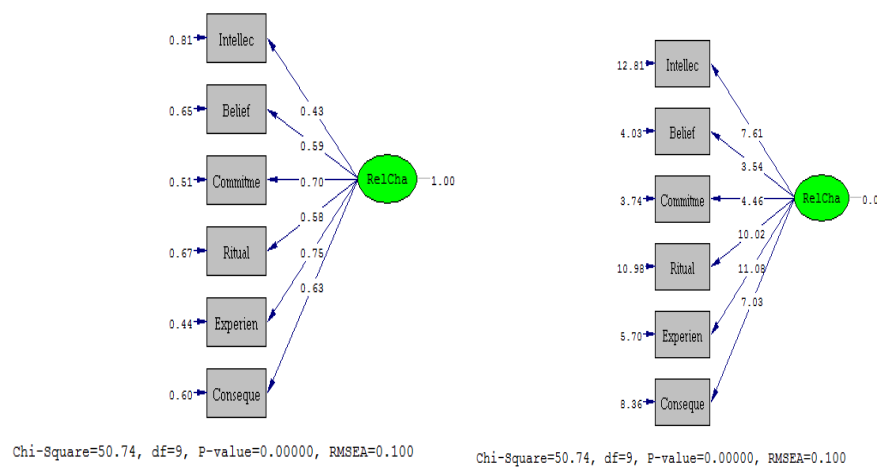


Figure 1. The Standardized CFA-based Solution of Religious Character Figure 2. The CFA-based T-Values of Religious Character

Reliability Test of Religious Character Indicators and Variables: The reliability of the indicators and variables is observed from the obtained CR value, which exhibits an appropriate status when greater than or equal to 0.7. Meanwhile, CR between 0.6 and 0.7 indicates acceptable reliability, provided that the loading factor indicators meet the criteria. Based on the religious character, good reliability was observed at a CR value of 0.95 reliability, accompanied by intellectual, belief, commitment, ritual, experience, and consequence at 0.79, 0.87, 0.83, 0.51, 0.77, and 0.81, respectively. This showed that only rituals had a low-reliability level, i.e., CR < 0.6/0.7. According to Fornell, C., & Larcker (2016), satisfactory discriminant validity was observed when AVE was greater than the quadratic correlation of the latent construct. In this present report, the Intellectual, Belief, Commitment, Ritual, Experience, and Consequence indicators had the AVE and latent construct correlation values of 0.44/(0.43)²; 0.195, 0.62/(0.59)²; 0.348, 0.51/(0.70)²; 0.49, 0.26/(0.58)²; 0.33, 0.46/(0.75)²; 0.56, and 0.47/(0.63)²; 0.39, respectively. Based on these results, the AVE coefficient was greater than the quadratic correlation between latent constructs, where 4 and 2 indicators had satisfactory and unsatisfactory discriminant validity. These unsatisfactory constructs were ritual (0.33 > 0.26) and religious experience (0.56 > 0.46), which are expected to futuristically improve with subsequent studies.

Model Good Fit of Test

At this stage, a fitness test was conducted to assess the suitability of the Religious Construct Model, using the GOF criteria. In this analysis, an expert was not required to meet all the criteria, although the results need to depend on their judgment. According to Joseph F. Hair et al. (2019),

the use of 4-5 criteria was sufficiently considered to assess the feasibility of a model, with each criterion appropriately represented, such as the AFI (absolute fit indices), IFI (incremental fit indices), and PFI (parsimony fit indices). In addition, the analytical results are shown in Table 3

Table 3: Model Fit of Test

No.	Size for Good Fit of Test	Fit Level Target	Estimated Results	Fit Level
A. Absolute Fit Indices				
1	Chi-Square P	The smallest value P > 0.05	Chi-square = 274.51 P = 0.0000	-
2	Estimated Non-centrality Parameter (NCP)	The smaller the NCP, the better	Estimated Non- Centrality Parameter = 41.74 90% Confidence Interval = (23.01; 67.97)	Good fit.
3	Root Mean Square Residual (RMR)	Standardized RMR < 0.05	RMR = 0.10	-
4	Root Mean Square Error of Approximation (RMSEA)	RMSEA < 0.08 = fit RMSEA < 0.50 = close fit	RMSEA = 0.100 P = 0.0011	-
5	The goodness of Fit Index (GFI)	> 0.90: good. 0.8-0.9: marginal fit	GFI = 0.83	Marginal fit.
6	Expected Cross-Validation Index (ECVI)	The Model (M) value is closer to the Saturated (S) value than the M-value with the Independent (I) value	EC-VI = 0.16 S = 0.090 I = 2.45	Good fit.
B. Incremental Fit Indices				
7	Normed Fit Index (NFI)	> 0.90: good. 0.8-0.9: marginal fit	NFI = 0.96	Good fit.
8	Non-Normed Fit Index (NNFI)	> 0.90: good. 0.8-0.9: marginal fit	NNFI = 0.94	Good fit.
9	Comparative Fit Index (CFI)	> 0.90: good. 0.8-0.9: marginal fit	CFI = 0.96	Good fit.
10	Incremental Fit Index (IFI)	> 0.90: good. 0.8-0.9: marginal fit	IFI = 0.96	Good fit.
11	Relative Fit Index (RFI)	> 0.90: good. 0.8-0.9: marginal fit	RFI = 0.93	Good fit.
12	Adjusted Goodness of Fit Index (AGFI)	> 0.90: good. 0.8-0.9: marginal fit	AGFI = 0.61	Bad fit.
C. Parsimony Fit Indices				
13	Akaike Information Criterion (AIC)	The Model (M) value is closer to the Saturated (S) value than the M-value with the Independent (I) value	I = 1142.70 M = 74.74 S = 42.00	Good fit.
14	Consistent Akaike Information Criterion (CAIC)	The Model (M) value is closer to the Saturated (S) value than the M-value with the Independent (I) value	I = 1173.59 M = 136.52 S = 150.12	Good fit.
D. Other criteria				
15	Critical N (CN)	CN > 200	CN = 200.43	Good fit.

Based on Table 3, the theoretical constructed model of the religious character was suitable according to the 5 required criteria. This indicated that the Absolute Fit Indices showed fitness on NCP, GFI, and ECVI, with eligibility significantly observed on only 1 target. Meanwhile, only 1 IFI requirement was not met within the AGFI criteria, with all fitness levels accomplished within the PFI and other standards.

Religiosity is an important aspect of human life, due to being a positive predictor of individual subjective well-being and spirituality (Villani et al., 2019). It is also different from one person to another based on their respective religious beliefs. However, each of these religions helps shape the character of all individuals and the level by which spirituality predicts their subjective well-being. In this condition, the determination of religious character construction becomes an important aspect in developing a person's welfare.

This study showed that the theoretical concept of religious character met the standard of validity according to the expert, empirical viability, and CFA tests. The results proved that the 6 indicators were the appropriate determinants in the theoretical construction of Islamic character. Each indicator also had large contributions to this behavior, for instance, Experience (0.75), Commitment (0.70), Consequences (0.63), Belief (0.59), Ritual (0.58), and Intellectual (0.43). Furthermore, the acceptance of the validity coefficient focused on the criteria proposed by Joseph F. Hair et al. (2019), where a loading factor of 0.50 or more was considered to be significantly valid in explaining latent constructs. Despite this standard, Sharma (1996) still explained that the weakest acceptable LF was 0.40. This was then strengthened by the results of the SEM test, with the criteria of a GOF analysis on AFI, IFI, PFI, and other criteria ($CN > 200$). The results revealed that the Islamic construction model met the target level of compatibility, although subsequent analyses were broadly needed in determining more convincing theoretical constructs.

This model was a holistic construct with 6 indicators, which were independent dimensions with different conceptual descriptions, although similar to one another. Based on this condition, belief was observed as an inseparable dimension of commitment. In Islamic teachings, the dimensions of belief (*'aqidah*), worship (*sharia*), and consequences (*akhlaq*) are often interrelated despite their differences (Marzuki 2012). From this present report, the theoretical construction of Islamic religious character had a CR value of 0.95, indicating that the model was appropriately reliable for utilization. When used as a reference in compiling the measurement scale, the results remained relatively constant even with the analysis of other subjects with equal characteristics. This proved that the model was reliable or suitable as a comprehensive theoretical concept. According to Intellectual Dimension, the willingness to learn Islamic teachings was described from the Quran and Sunnah, through various technological and traditional media, as well as the perspective of scholars. For belief, the strength and weakness of a Muslim's faith or *'aqidah* to the pillars of faith were described. These included the faith in the existence of one God, supernatural beings, life after death, and the human role in determining the *ghayr mutlaq* destiny. The indicator also has the capability of being a separate dimension, which provides an idea of the strength and weaknesses of a person's faith. This is due to being conceptually different from the other 5 dimensions. Additionally, the dimensions included 6 items, with 4 and 2 having loading factors > 0.5 and 0.4 , respectively. It also had a good reliability coefficient of 0.87.

Religious commitment is a part of affection (moral feeling) or predispositions to behavior (moral action), based on attitude tendencies, worship, experience, and consequences. It is also a moderate dimension between beliefs and behaviors. From an Islamic perspective, this is known as the intention or attention to worship, *mu'amalah*, and noble behavior. For instance, a strong belief without a commitment is often limited to the heart, with an influence on behavior or charity. This indicates that the dimension is moderately positioned between faith and charity. Faith is also ineffective when there is no commitment to manifest belief into deeds. Therefore, commitment is a very important religious character determinant. As a dimension, it is capable of theoretically standing alone, indicating the strength of one's intention to (1) pray on time, (2) acknowledge the existence of different Islamic knowledge, (3) exhibit good behaviors, (4) willingly abandon forbidden activities, and (5) encourage polytheism. In this dimension, 5 items

had a loading factor > 0.5 and a good CR value of 0.83. With the strength of one's commitment, prayer, fasting, paying *zakat* and alms, planning hajj (pilgrimage), covering the 'aurah, and leaving usury were observed to be very easy. Based on worship, 3 descriptors were declared invalid with a loading factor > 0.5. and, a CR value of 0.51.

Experience is also the highest determinant of a religious character, due to being a mental condition of a comfortable or uncomfortable person regarding the violation of spiritual prohibitions. However, it is different from religious and mystical feelings (Webb 2017). In this concept, the people that experience anxiety when they abandon prayer sessions are often found to feel guilty when they cheat or hurt others. A person is also likely to experience a calm situation when reading or listening to the recitation of the Quran or a situation of happiness when providing alms or gifts to others. Therefore, this determinant is very important based on religious character.

Consequences are the impacts appearing in people as good behaviors. In Beit-Hallahmi & Argyle (1997), the individual effects of religiosity were the development of compassion, honesty, altruism, happiness, quality of life, health, and mental care of a person (Holdcroft 2006). The dimension also describes a person having a noble character, based on being influenced by 'aqidah and worship in Islam (Marzuki 2012). However, 'aqidah and worship contribute to the formation of morality as an Islamic belief and ritual system, respectively. From this study, the dimension of consequence became the second-largest determinant after religious experience.

To conclude, the theoretical construction of religious character had a formula that was used to measure the religious profile of Muslim students, due to being determined by 6 spiritual dimensions, namely experience, commitment, consequence, belief, ritual, and intellectuality. These dimensions were subsequently identified as moral knowledge, feeling, and action. Based on the results, this theoretical construction was declared fit due to meeting the eligibility criteria of the GOF analysis, based assessment of AFI, IFI, PFI, and Critical N. Therefore, this theoretical model was used as an effective formula in developing a measurement scale for a religious character. This produced data capable of describing the profile of religious characters, whose strength levels are subsequently observed based on the identification of its indicators. Based on this profile, educators need to innovate learning models in various subjects, such as Islamic Religious and Citizenship Education, to strengthen the spiritual characteristics of students.

References

- Aiken, L. R. 1985. Three coefficients for analyzing the reliability and validity of ratings. *Educational and Psychological Measurement* 45(1): 131-142.
- Albelaikhi, A. A. 1997. Development of a Muslim religiosity scale. Ph.D Thesis. University of Rhode Island.
- Aliman, N. K., Ariffin, Z. Z., & Hashim, S. M. 2018. Religiosity commitment and decision-making styles among generation Y Muslim consumers in Malaysia. *International Journal of Academic Research in Business and Social Sciences* 8(1): 555-576.
- Aryani, S. A. 2020. Orientation of religiosity and radicalism: the dynamic of an ex-terrorist's religiosity. *Indonesian Journal of Islam and Muslim Societies* 10(2): 297-321.
- Aviyah, E., & Farid, M. 2014. Religiusitas, kontrol diri dan kenakalan remaja. *Persona: Jurnal Psikologi Indonesia* 3(02): 126-129.
- Azizah, N. 2015. Perilaku moral dan religiusitas siswa berlatar belakang pendidikan umum dan agama. *Jurnal Psikologi* 33(2): 1-9.
- Cornwall, M., Albrecht, S. L., Cunningham, P. H., & Pitcher, B. L. (1986). The dimensions of religiosity: a conceptual model with an empirical test. *Review of Religious Research* 27(3): 226-244.
- Davidson, J. D., & Knudsen, D. D. 1977. A new approach to religious commitment. *Sociological Focus* 10(2): 151-173.
- Davis, A. K. 1963. The religious factor by Gerhard Lenski: religion in American life. *Science & Society* 27(3): 354-357.

- De Jong, G. F., Faulkner, J. E., & Warland, R. H. 1976. Dimensions of religiosity reconsidered: evidence from a cross-cultural study. *Social Force* 54(4): 866–889.
- El-Menouar, Y. 2014. The five dimensions of Muslim religiosity: results of an empirical study. *Method, Data, Analyses* 8(1): 53–78.
- Fornell, C., & Larcker, D. F. 2016. Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research* 18(1): 39–50.
- Fukuyama, Y. 1961. The major dimensions of church membership author. *Religious Research Association, Inc.* 2(4): 154–161.
- Glock, C. Y. 1962. On the study of religious commitment. *Religious Education* 57(sup4): 98–110.
- Hair, J. F., Black, W. C., Barry J. Babin, & Anderson, R. E. 2019. *Multivariate Data Analysis*. Cengage Learning EMEA.
- Holdcroft, B. B. 2006. What is religiosity. *Journal of Catholic Education* 10(1): 89–103.
- Huber, S., & Huber, O. W. 2012. The Centrality of Religiosity Scale (CRS). *Religions* 3(3): 710–724.
- Iddagoda, Y. A., & Opatha, H. H. D. N. P. 2017. Religiosity: towards a conceptualization and an operationalization. *Sri Lankan Journal of Human Resource Management* 7(1): 59–69.
- Jana-Masri, A., & Priester, P. E. 2007. The development and validation of a Qur'an-based instrument to assess Islamic religiosity: The religiosity of Islam scale. *Journal of Muslim Mental Health* 2(2): 177–188.
- Kamaruddin, S. A. 2012. Character education and students' social behavior. *Journal of Education and Learning (EduLearn)* 6(4): 223–230.
- Khan, M. J. 2014. Construction of Muslim religiosity scale. *Islamic Research Institute* 53(1): 67–81.
- Khraim, H. 2010. Measuring religiosity in consumer research from Islamic perspective. *International Journal of Marketing Studies* 2(2): 166–179.
- King, M. B., & Hunt, R. A. 1969. Measuring the religious variable: amended findings. *Journal for the Scientific Study of Religion* 8(2): 321–323.
- King, M. B., & Hunt, R. A. 1972. Measuring the religious variable: replication. *Journal for the Scientific Study of Religion* 11(3): 240–251.
- Krauss, S. E., Hamzah, A., & Idris, F. 2007. Adaptation of a Muslim religiosity scale for use with four different faith communities in Malaysia. *Review of Religious Research* 49(2): 147–164.
- Krauss, S. E., Hamzah, A., Juhari, R., & Abd. Hamid, J. (2005). The Muslim Religiosity-Personality Inventory (MRPI): towards understanding differences in the Islamic religiosity among the Malaysian Youth. *Pertanika Journal Social Science & Humanity* 13(2): 173–186.
- Lickona, T. 1997. The teacher's role in character education. *The Journal of Education* 179(2): 63–80.
- Lickona, T. 1999. Character education: the cultivation of virtue. *Instructional-Design Theories and Models* 2: 6–24.
- Mahudin, N. D. M., Noor, N. M., Dzulkifli, M. A., & Janon, N. S. 2016. Religiosity among Muslims: A scale development and validation study. *Makara Human Behavior Studies in Asia* 20(2): 109.
- Marzuki. 2012. Kerangka dasar ajaran Islam. pp. 75–84. In, *Pendidikan Agama Islam*. Yogyakarta: Universitas Negeri Yogyakarta Press.
- Mayasari, R. 2014. Religiusitas Islam dan kebahagiaan (Sebuah telaah dengan perspektif psikologi). *Al-Munzir* 7(2): 81–100.
- Ma'zumi, M., Taswiyah, T., & Najmudin, N. 2017. Pengaruh religiusitas terhadap perilaku ekonomi masyarakat pasar tradisional. *Alqalam* 34(2): 277.
- Memon, M. A., Ting, H., Cheah, J.-H., Thurasamy, R., Chuah, F., & Cham, T. H. (2020). Sample size for survey research: review and recommendations. *Journal of Applied Structural Equation Modeling* 4(2): i–xx.
- Mohd Dali, N. R. S., Yousafzai, S., & Abdul Hamid, H. 2019. Religiosity scale development. *Journal of Islamic Marketing* 10(1): 227–248.
- Muthoharoh, S., & Andriani, F. 2014. Hubungan antara religiusitas dengan kecemasan kematian pada dewasa tengah. *Jurnal Psikologi Kepribadian dan Sosial* 03(01): 23–29.
- Pearce, L. D., Hayward, G. M., & Pearlman, J. A. 2017. Measuring five dimensions of religiosity across adolescence. *Review of Religious Research* 59(3): 367–393.

- Saffari, M., Pakpour, A. H., Mortazavi, S. F., & Koenig, H. G. 2016. Psychometric characteristics of the Muslim religiosity scale in Iranian patients with cancer. *Palliative and Supportive Care* 14(6): 612–620.
- Salleh, M. S. 2012. Religiosity in development: A theoretical construct of an Islamic-based development. *International Journal of Humanities and Social Science* 2(14): 266–274.
- Sharma, S. 1996. *Applied Multivariate Techniques*. New York: John Willey & Sons.
- Shields, D. L. 2011. Character as the aim of education. *The Phi Delta Kappan* 92(8): 48–53.
- Stolz, J. 2009. Explaining religiosity: Towards a unified theoretical model. *British Journal of Sociology* 60(2): 345–376.
- Usman, H. 2015. Islamic religiosity scale, and its applied on the relationship between religiosity and selection of Islamic bank. *Economics Journal of Distribution Science* 3(3): 1–13.
- Villani, D., Sorgente, A., Iannello, P., & Antonietti, A. 2019. The role of spirituality and religiosity in subjective well-being of individuals with different religious status. *Frontiers in Psychology* 10(July): 1–11.
- Wade, N. G., Ripley, J. S., McCullough, M. E., & Berry, J. 2003. The Religious Commitment Inventory-10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology* 50(1): 84–96.
- Wibowo, H. A. 2017. The Effects of Indonesia female religiosity on hijab - wearing behavior: an extended of theory of reasoned action. *International Review of Management and Business Research* 6(3):1040–1050.
- Yeniaras, V., & Akarsu, T. N. 2017. Religiosity and life satisfaction: a multi-dimensional approach. *Journal of Happiness Studies* 18(6): 1815–1840.