Research article

Ramadan: the month of fasting for muslim and social cohesion—mapping the unexplored effect

Nurus Shalihin [a], Muhammad Sholihin [b],[*]

[a] Department of Religious Studies, Faculty of Ushuluddin and Religious Studies, UIN Imam Bonjol, Padang, Indonesia
[b] Department of Islamic Economics, Institut Agama Islam Negeri (IAIN) Curup, Indonesia

ABSTRACT

For Muslims, Ramadan is a month in which the fasting ritual is observed and interpreted as an event for fostering social cohesion. Therefore, this study examined the relationship between mechanical solidarity and social cohesion mediated by generosity during Ramadan. The relationships between variables were tested through PLS-SEM using data collected from 600 respondents located separately in Yogyakarta and West Sumatra. The finding showed that mechanical solidarity and social cohesion are more significant when mediated by generosity. In practice, the dimensions of charity (*alms* and *infaq*) strengthen mechanical solidarity, i.e., collective consciousness and cooperation spirit, to influence social cohesion. Furthermore, generosity activities supported mechanical solidarity in strengthening the social cohesion among Muslims in Yogyakarta and West Sumatra, Indonesia. The elaboration on the factors accelerating social cohesion is an important issue for social and religious studies. It is useful for transforming the dimensions of Islamic rituals into social impacts and determining harmony between religious communities in the future.

1. Introduction

As a specific epoch of the religious journey of the Muslim community (Shalihin et al., 2020), Ramadan has a variety of privileges selected for religious piety (Hellman, 2008). Among the specialties is the presence of glory and blessings, where the gates of heaven are wide open (Imam Ahmad: 6851), forgiveness (Sunan Abu Daud: 1165), prayers are granted (Thabrani: 1423), and goodness doubled (Muslim; 1266). Belief in Ramadan as a month of glory and blessings encouraged Muslims to conduct good deeds to obtain the promised piety (QS.2: 183), increasing the frequency of worship (Moller, 2005; Hellman, 2008; Schielke, 2009; Shalihin et al., 2020). Intensification of various activities and rituals, such as *ruwahan, tarawih, nuzul Qur'an, i'tikaf* (Moller, 2005), grave pilgrimage, and *tadarus,* illustrate that Ramadan is the most important Islamic ritual obligation (Blankinship, 1996) and a critical part of the spiritual life (Odabasi and Argan, 2009). In addition to the intensification of religious rituals, human relations enter a new kind of social relationship with each other with an increasing sense of brotherhood, unity, and solidarity among believers (Odabasi and Argan, 2009; Shalihin et al., 2020). Ramadan contains universal values that apply to all Muslims, including religious benefits, purification, strengthening the *ummah*

(Buitelaar, 1993; Hellman, 2008), generosity, food habits, social patterns, and dress code (Antoun, 1986; Hellman, 2008). However, the local context also strongly influences the practice and meaning. Studies of Buitelaar (1993) and Østergaard et al. (1996) in Morocco, Antoun (1986) in Jordan, Yocum (1992) in Turkey, Yamani (1987) in Saudi Arabia, Schielke (2009) in Egypt, Frankl (1996) in Swahili, as well as Moller (2005) and Hellman (2006; 2008) in Indonesia showed that the local context also colors and gave the characteristics of how Ramadan is practiced and interpreted. Kapteijns (2008) showed that class, gender, and social position influence the way the month is celebrated.

There are two tendencies of studies on Ramadan, first is the radical perspective. Few works can be traced to this point of view in some detail, except for Buitelaar (1993) and Antoun (1986). They described Ramadan as a form of annual oppression of the Muslim community. The month is also attributed to a state of suffering that cannot be enjoyed by those who practice it, specifically women who are burdened with the practice of oppression. Second, analyzing Ramadan in a functionalist approach is mainly in the social aspects, such as solidarity, economy, and social capital formation (Moller, 2005; Bialkowski et al., 2010). In Indonesia, there have been only six studies related to Ramadan. Jorge Hellman's reflections on local discourse and the meaning of fasting as

empowerment, obedience, and self-control (2006) and changes in the definition of eating (2008). Moller's studies are centered on the practice of fasting and various cultural rituals (2005), as well as *tarawih* rituals and prayers for the Muslim community. Schmidt (2012) surveyed the transformation of space (*shopping mall*) into an ideological sphere filled with religious symbols moving through social imagination and negotiating Islamic modernity. Shalihin et al. (2020) investigated the influence of Ramadan on increasing social solidarity and generosity.

In addition to covering the above studies that have not paid particular attention to the Muslim community's cohesiveness during Ramadan, this study covers a variety of findings demonstrating that Islam's religious rites and practices improve social cohesion (Kasmo et al., 2015). Furthermore, it is based on a field study conducted in West Sumatra and Yogyakarta Provinces to examine factors influencing social cohesion during Ramadan. These factors are grouped into several groups of variables. For example, mechanical solidarity is the exogenous variable with the dimensions of collective consciousness and cooperation spirit, while generosity is a mediator variable consisting of infaq and *alms*. Social cohesion is the endogenous variable with five dimensions of moral feeling, tolerance, sense of belonging, and social harmony. Mechanical solidarity is tested directly on social cohesion to analyze the impact when this variable is mediated by generosity. This study is important based on two arguments. First, Ramadan is interpreted as a mere moment of spirituality and not seen as a momentum where social change can be promoted through various religious rituals (Shalihin et al., 2020). This study identifies that through the spiritual practices of fasting and acts of generosity, Ramadan can promote social cohesion (Moller, 2005; Shalihin et al., 2020). Second, Yogyakarta and West Sumatra, as two provinces where people are full of religious and cultural values, are selected as fields (Moller, 2005; Asril, 2013) to become an empirical prototype of the assumptions that will be verified.

2. Theoretical background

2.1. Social cohesion: concepts and its mechanism

Ramadan in social studies is not only understood as mere time or momentum but also interpreted as a social arena where change is formed through various religious rites and rituals practiced by Muslims (Moller, 2005). In this situation, several studies have been carried out by social scholars. However, they remained significantly limited in examining social changes caused by the increase of spirituality in the social behavior of Muslims. Among the literature is the study conducted by Mujtaba (2016) concerning Ramadan, identifying how it has become a momentum for the rise in religiosity-based tourism. During Ramadan, various tourism industries, such as hotels and restaurants, are transformed into spaces highlighting Islamic accessories and religiosity (Ahmad and Goel, 2012; Mujtaba, 2016).

In addition to being related to the economy, Ramadan certainly impacts social life, as identified by the following several studies. Ahmad and Goel (2012) recognized that the month encourages adaptation to economic institutions, markets, and social cohesiveness. This is indicated by the increase in charitable activities, such as the upper social class (*qāniyun*) giving alms to the lower social community (*masākin*). The increase is believed as an instrument to foster and strengthen social cohesiveness (Ahmad and Goel, 2012). This study has increasingly confirmed the perspective that Ramadan is a sphere where social change occurs, though temporal and cyclical (Oosterbeek and Klaauw, 2013). This theory becomes the foundation to assert that Ramadan has become a "field study" where various factors can be identified and positioned as indicators of social change at the community level (i.e., ummah). Therefore, it is necessary to identify the factors responsible for the change concerning social cohesion.

Social cohesion is defined as "a process of valuing, expressing, and promoting love, trust, admiration, peace, harmony, respect, generosity and equity upon other people in any particular society regardless of national origin, weight, marital status, ethnicity, color, gender, race, age and occupation" (Sharma, 2015). Therefore, it theorizes individuals in a community to "being social", a process where there is coexistence without considering the identity formed through cultural and religious ties. Sharma (2015) introduced the theory of developing social harmony through two levels. Building social cohesion at these two levels is inseparable from efforts to promote the underlying values and principles.

The first level is a process that occurs at the individual level. At this level, strengthening social cohesion can be conducted through several stages. First, developing empathy refers to behavior in which individuals try to deeply understand other people's feelings or empathize with the problems faced by others (Sharma, 2015). Fard et al. (2016) understood this concept as the meaning of cooperation, consensus, and unity. The Islamic tradition also teaches that empathy is a pillar of unity, social cohesion, and harmony (Fard et al., 2016). In this context, Islam offers an essential and valuable instrument to foster this concept for others (Riyadi, 2016). The instrument comprises all movements of generosity recommended and even obligatory in Islam, such as giving *alms* and *infaq*. Second, grouping for friendship, and at this stage, social cohesion can grow by strengthening the communities or groups to increase amity (Sharma, 2015). Gatherings can promote social cohesion as a community will increase the sense of security among the members (Wills-herrera, 2011).

Third, developing social cohesion at the individual level is "strengthening mutually". Every human being has specific talents, skills, and abilities. These advantages can be used in covering and supporting the existentialism of others with disadvantages. Humans will be promoted to cooperate and share knowledge and benefits with others at this stage. This process is believed to strengthen social cohesion (Sharma, 2015), as Moller (2005) identified in Islamic communities. During the momentum of Ramadan, "mutually strengthening" occurs through various social activities (Moller, 2005). For example, giving food to each other, giving charity, and sharing knowledge related to Islam. Fourth is acquiring allies, and at this stage, the community demonstrates trust, cares for others, and uses knowledge to support the increased awareness of the importance of social harmony (Sharma, 2015).

Two aspects support social cohesion in this context. The first aspect is the growth of moral feeling, a sense of morality, moral action (Hindun, 2014), and a sense of belonging. Therefore, moral feelings and a sense of belonging are meaningful in acquiring allies to support social cohesion. The last support is bridging the gap (Sharma, 2015). In the Islamic tradition, various schemes are offered to bridge the gap, such as movements of generosity and the institutionalization of respect for others (Kusuma, 2016; Shaikh et al., 2017). The second aspect is promoting social cohesion at the institutional level (Sharma, 2015). At this stage, the government and organizations, such as NGOs, play an essential role in promoting relational well-being and social cohesion.

The concept proposed by Dragolov et al. (2016) related to social cohesion also needs to be underlined to identify and understand social cohesion. It is necessary to identify domains inherent in cohesion, namely social relations, connectedness, and focus on the common good (Dragolov et al., 2016). In addition, several studies proposed a set of factors determining this concept. Social cohesion in this context is conceptually complex. Schiefer and van der Noll (2016) presented the meaning as a multidimensional construct consisting of phenomena at the micro-level (i.e., individual attitudes and orientations), the Meso-level (i.e., features of communities and groups), and the macro-level (i.e., attributes of societal institutions level). Social cohesion arises automatically from "the natural harmony of individual interests". In this condition, social cohesion is an unintended product of individual behavior (Green and Janmaat, 2011). Schiefer and van der Noll (2016) introduced the six most common dimensions, as illustrated in Figure 1.

According to Schiefer and van der Noll (2016), social relations among groups and individuals are an important concept. From a classical social-psychological perspective, this component highlights the group's attraction to community members as an important aspect. In this regard,
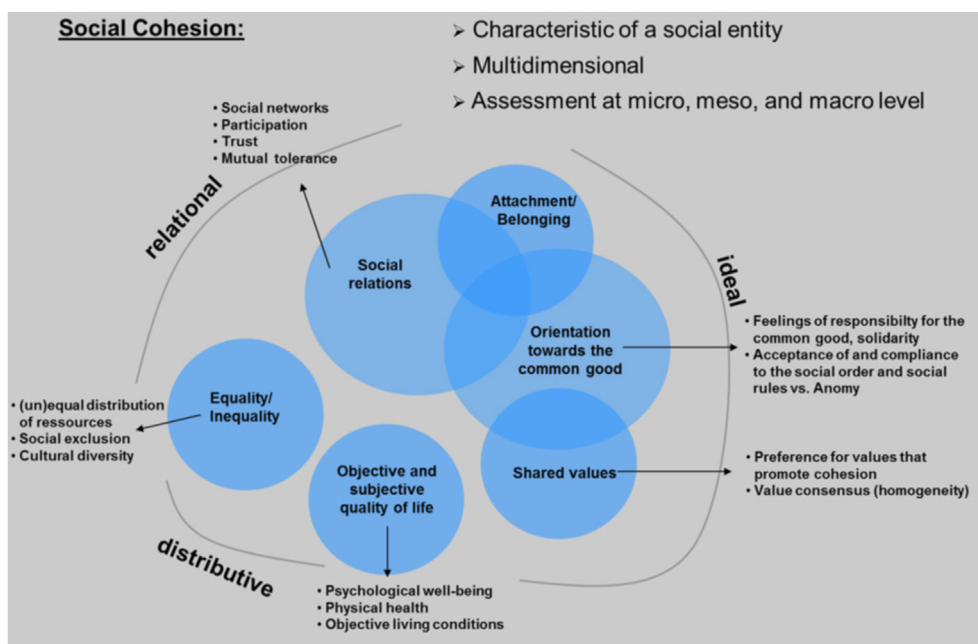
Figure 1. The dimensions of social cohesion. Note (Schiefer and van der Noll, 2016).

social relationships allow people to survive in community groups (Schiefer and van der Noll, 2016). In his theory, Schiefer and van der Noll (2016) introduced a set of functional dimensions of social cohesion: First is social relations in which the quality and strength of the bonds between one individual and another, i.e., families, friends, and broader communities, is an essential element of social cohesion (Trewin and Hall, 2005; Schiefer and van der Noll, 2016). The second is the identification which is understood as a set of social processes instilled in individuals. In this regard, the sense of belonging to the same community and the feeling of being recognized as community members are the product of identification (Jenson, 2010). The third is an orientation to the common good. This results in the character of individuals having responsibility and obedience to social rules and norms. The fourth is shared values; where these values are important for social cohesion because they allow community members to identify common goals, plans, and frameworks of shared behaviour in social interactions (Kearns and Forrest, 2000; Botterman et al., 2012; Schiefer and van der Noll, 2016). Fifth is inequality, which refers to at least two essential components: the unequal distribution of material and immaterial resources among all members of society and cultural inequality, ethnic, religious and social distribution. The sixth is the objective and subjective qualities inherent in the community's ability to maintain the quality of the welfare of its members (Schiefer and van der Noll, 2016). In this regard, this study formulates two variables to identify social cohesion in Ramadan: generosity and mechanical solidarity. Meanwhile, social cohesion has at least five dimensions: moral feeling, tolerance, sense of belonging, sense of security, and social harmony.

2.2. Study framework: model and a set of hypotheses

Based on the social cohesion theory, this study applied "path analysis" to explore the effects of the exogenous variable when mediated by generosity on moral feeling, social harmony, sense of belonging, and tolerance of social cohesion during Ramadan in Yogyakarta and West Sumatra. This relationship is rare and has not been modeled by previous social scholars. Therefore, the theoretical basis used as a foundation remains significantly minimal, and this study employed a path analysis approach with an exploratory paradigm.

The path analysis was selected based on several theoretical arguments that social cohesion has complex dimensions in social theory. Parsons (1937) understood that social cohesion allows for a broad and interdisciplinary investigation due to the complexity of the dimensions (Addeo et al., 2017). Social scientists have variations and debates regarding the dimensions of social cohesion. It is no exaggeration that Schiefer and van der Noll (2016) presented six dimensions of social cohesion. Fenger (2012) introduced economic, social, and political dimensions. The economic extent includes indicators such as social solidarity and reduction in wealth disparities, inclusion, differences and divisions, absence of exclusion, and equality. The cultural dimension has shared values and a civic culture, place attachment and identity, belonging, ties that bind, shared values, communities of interpretation, and shared loyalty and solidarity. Social dimensions include order and control, network and capital, recognition, glue, interaction, and connections. The political dimension includes participation and legitimacy (Fenger, 2012). This study developed a unique framework to identify which variables affect the dimensions of social cohesion in Ramadan.

There are two dimensions of the exogenous variable, namely collective consciousness and cooperation spirit, with positions as predictors of moral feeling, tolerance, sense of belonging, and social harmony. The mediator variable has two dimensions, consisting infaq and alms. This model is formulated with several arguments i) other social analyses have not fully modeled the relationship between the various selected variables. This allows this study to use a design path analysis with an exploratory paradigm (Sholihin and Ratmono, 2020). ii) Ramadan for Muslims in various places becomes a social space to identify spiritual quality and as a forum for strengthening social piety (Moller, 2005). In this context, it is possible to test the effects of the independent and mediator variables on social cohesion in Yogyakarta and West Sumatra.

This study will explore thirty-six hypotheses for possible relationships (Figure 2). These hypotheses are classified into two characteristics, first, the direct effect or path coefficients among exogenous, endogenous, and mediator variables. The premises grouped into this classification are (1) Alms affect moral feeling, (2) Alms affect the sense of belonging, (3) Alms affect social harmony, (4) Alms affect tolerance, (5) collective consciousness affects *alms,* (6) collective consciousness moral feeling, (7) collective consciousness affects the sense of belonging, (8) collective
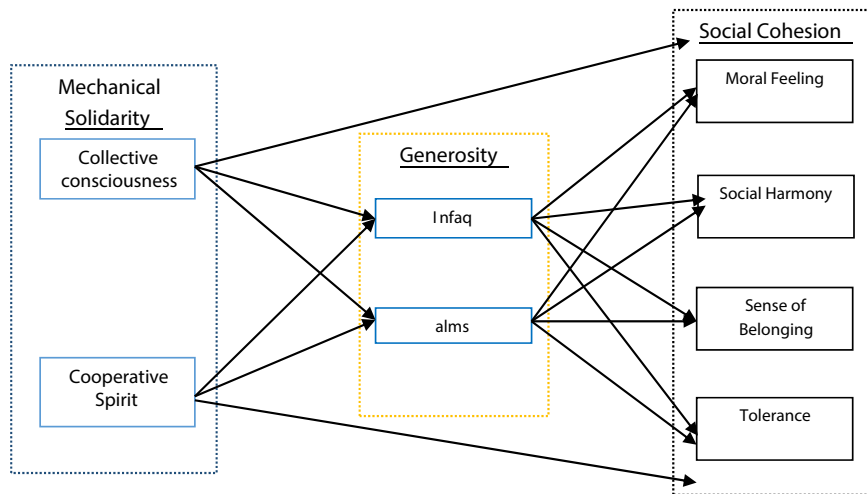
Figure 2. Study model and hypothesis.

consciousness affects social harmony, (9) collective consciousness affects tolerance, (10) *infaq* affects the moral feeling, (11) *infaq* affects the sense of belonging, (12) *infaq* affects the social harmony, (13) *infaq* affects the tolerance, (14) the cooperative sprite affects the *alms*, (15) the cooperative sprite affects the *infaq*, (16) the cooperative sprite affects the moral feeling, (17) the cooperative sprite affects the sense of belonging, (18) the cooperative sprite affects the social harmony, (19) the cooperative sprite affects the tolerance, and (20) collective consciousness affects the *infaq*.

Second, the specific indirect effects among exogenous, endogenous, and mediator variables. The hypotheses grouped into this classification are (1) The relationship between Collective Consciousness (CC) and moral feeling is mediated by the variable *alms*, (2) The relationship between spirit of cooperative (SC) and moral feeling is mediated by the variable *alms*, (3) The relationship between collective consciousne (CC) and moral fealing is mediated by the variable *infaq*, (4) The relationship between cooperative spirite (SC) and moral feeling is mediated by the variable *infaq*, (5) The relationship between collective consciousness (CC) and sense of beloging (SB) is mediated by the variable *alms*, (6) The relationship between cooperative spirit (SC) and sense of belonging (SB) is mediated by the variable *infaq*, (7) The relationship between collective consciousness (CC) and social harmony (SH) is mediated by the variable *alms*, (8) The relationship between cooperative spirite (SC) and social harmony (SH) is mediated by the variable *infaq*, (9) The relationship between collective consciousness (CC) and social harmony (SH) is mediated by the variable *alms*, (10) The relationship between cooperative spirite (SC) and social harmony (SH) is mediated by the variable *alms*, (11) The relationship between collective consciousness (CC) and social harmony (SH) is mediated by the variable *infaq*, (12) The relationship between cooperative spirite (SC) and social harmony (SH) is mediated by the variable *infaq*, (13) The relationship between collective consciousness (CC) and tolerance (T) is mediated by the variable *alms*, (14) The relationship between cooperative spirit (SC) and tolerance (T) is mediated by the variable *alms*, (15) The relationship between collective consciousness (CC) and tolerance (T) is mediated by the variable *infaq*, (16) The relationship between cooperative spirit (SC) and tolerance (T) is mediated by the variable *infaq*.

3. Study methods

3.1. Study design

This study applied path analysis as part of the Structural Equation Modeling approach to identify which variables affect the dimensions of social cohesion in Yogyakarta and West Sumatra. It is needed to

determine the rule of a set of measurements of generosity as a mediator toward collective consciousness, cooperative spirit, and social cohesion. It is possible to use path analysis because it is based on the principle of multiple regression (Streiner, 2005), allowing a complex model to be understood and generated through the path analysis approach (Sullivan, 2012), as this study involves complex dimensions of variables. Mechanical solidarity has two sizes, while social cohesion has four dimensions. Similarly, generosity has two dimensions, and the complexity of the model becomes the argument for selecting path analysis. This study also employed a multiple regression approach to producing a strong conclusion. This approach is used to perform regression with four combinations of two groups of the independent variable combined with two interactions. The combination observes the consistency of the model with the changes in the group of variables (Alexopoulos, 2010; Variyath and Brobbey, 2020). This is a fundamental part of multiple regression to produce a strong conclusion.

3.2. Measures

This study's endogenous variable has four dimensions in the measurement context. Each size is measured through specific items (Table 1) with a Likert scale, i) four-question items measure moral feeling, including "Ramadan strengthens faith", "an inspiration to maintain the applicable values and norms in the community", and "the activities assist individuals in being a good person", and "an incentive to behave in the best way possible", ii) sense of belonging is measured through three-question items, namely "Ramadan lowers the importance of coexistence", "The activities disrupt personal life", and "Ignorance of this month as life continues as usual", iii) tolerance is measured by two question

Table 1. List of variables.

Variables	Dimensions	Scale
Endogeneous Variable:		
Social Cohesion	1 = Moral Feeling	Likert Scale 1-4
	2 = Sense of Belonging	Likert Scale 1-4
	3 = Tolerance	Likert Scale 1-4
	4 = Social harmony	Likert Scale 1-4
Mediator Variable:		
Generosity	1 = *Infaq*	Likert Scale 1-4
	2 = Alms	Likert Scale 1-4
Exogenous Variable:		
Mechanic Solidarity	1 = Collective Consciousness	Likert Scale 1-4
	2 = Cooperation Spirit	Likert Scale 1-4

items, such as "Respect for the ideas, thoughts, and creativity of an individual and other groups with different views, ethnicities, and religions, and an individual cannot coexist with people of different beliefs", and iv) "social harmony is measured through four items related to the ability of people to coexist". Theoretically, this dimension refers to several measures introduced by social scholars, particularly Bon (1987), which identified social cohesion as having a psychological size (Fonseca et al., 2019). The four dimensions of social cohesion proposed have psychological characteristics.

The mediator and the exogenous variable also have specifically designed dimensions. Generosity is measured through two dimensions, namely *infaq* and alms. These dimensions are derived from great traditions in Islam that become an annual rite every Ramadan. They are believed to influence social behavior and increase the social piety of Muslims (Andreoni, 2006; Hackney, 2009; Azam et al., 2019). Mechanic solidarity is measured through two dimensions, namely collective consciousness and cooperation spirit. Some variables are designed to refer to the meaning and foundation of mechanical solidarity introduced by (Schiermer, 2014). This is marked by the increase in social cohesion among the communities. In this context, Ramadan is believed to be a space where mechanical solidarity grows through various religious activities with a social dimension.

3.3. Data analysis

In analyzing the data, this study applied two analytical approaches to identify the effects of mechanical solidarity and generosity on social cohesion. The first approach used is path analysis through SmartPLS 3.0 software. It is selected to identify the complexity of the model and explore the various hypotheses resulting from the relationships of the exogenous, mediator, and endogenous variables. In this situation, the function of path analysis is the ability to compare the robustness of Structural Equation Modeling and the Croon method in one model (Devlieger and Rosseel, 2017). Breen (1983) stated that path analysis can identify statistical relationships in the Structural Equation Model (Breen, 1983). This approach can inform the statistical value of the relationship between the variables in the Structural Equation Model.

This study adopted data analysis using path analysis conceptualized by Kite and Whitley (2018) that requires five stages as follows i) model specification, 2) model identification, iii) estimation, iv) test of fit, and v) re-specification (Kite and Whitley, 2018). By applying these five stages of data analysis, this study produced a fit model to explain the effects of mechanical solidarity and generosity on social cohesion. To create a conclusion that follows the principle of robustness, this study complemented path analysis with multiple regression using Stata 16.0 by combining various variables. It is possible to identify the consistency of the relationship between the variables created and then compare it with the results of path analysis. This design allows the identification of the effects and relationships between independent and dependent variables in a complex manner (Anderson, 1958).

3.4. Ethical approval

This study was evaluated by the consortium of the Institute for Research and Community Service, Imam Bonjol State Islamic University (UIN), Padang, Indonesia. It has no human subjects, and informed consent is not applicable. In addition, all respondents' identities are anonymous and not included in the report.

4. Result

This study aims to determine the effect of mechanical solidarity, such as collective consciousness and cooperative spirit, on the dimension of social cohesion. In addition, it identifies the mediation effects of the generosity dimension, such as *alms* and *infaq,* on the relationship

between mechanical solidarity and social cohesion among Muslims in Yogyakarta and West Sumatra (Figure 3).

4.1. Descriptive statistics

The mean and standard deviation values for all scales are presented in Table 2. The mean values of descriptive statistics are not different from those generated in studies related to social cohesion by other social scholars (Green and Unwin, 2011; McKenna et al., 2018). The measurement items show normal statistical values, evident in the standard deviation generated by the descriptive statistical test. The dominant factor causing the normality of the data is the proportional distribution of respondents between men and women, namely 50%. The balanced distribution applies to respondents by province, where the deviation value is 0. The number of respondents is equal, or 50% (300) respondents from Yogyakarta and 50% (300) from West Sumatra, amounting to 600 respondents.

The measurement items can be used to explore data (Table 2) from respondents living in Yogyakarta and West Sumatra, Indonesia. The empirical data related to the variables are important and useful for building the study model and essential to be the foundation for verifying the correlation between various variables.

4.2. Measurement models

Model measurements are formulated by assessing the reliability and validity of the instrument. The indicators were determined with three heights 1) indicator loading and internal consistency reliability, 2) convergent validity, and 3) discriminant validity (Hair et al., 2019).

4.3. Indicator loading and internal consistency reliability

The result of path analysis as a part of the PLS-SEM approach was applied to estimate the indicator. It can be identified from Table 3, in which the loading detail was exhibited. There are four indicators, or latent variables of collective consciousness (CC1, CC2, CC3, CC4), three hands of cooperative spirit (SC2, SC3, SC4), four indicators of alms (S1, S2, S3, S4), four indicators of *infaq* (I1, I2, I3, I4). In addition, dimensions of social cohesion consist of moral feelings with four hands (MF1, MF2, MF3, MF4), four indicators of tolerance (T3, T4), three indicators of the sense of belonging (SB2, SB3, SB4), and three indicators of social harmony (SH2, SH3, SH4). These indicators resulted from fitting models considering loading values introduced by Samuels (2016), in which for a sample size of more than 300 respondents, the minimum is 0.62 (Samuels, 2016). The internal consistency reliability should be reported through Cronbach's alpha (α) and composite reliability (CR). The value of α (0.60–0.70) is minimally acceptable, and the values of CR are considered 0.70 and above. In addition, the less value of AVE (0.40) can be accepted when CR values more than 0.70 (Hair et al., 2017; Dakduk et al., 2019). In this situation, Table 3 indicates the details of both measure values.

4.4. Convergent validity

Convergent validity checks the high-low relationship between indicators that measure the same construct. In this situation, the study applied the SmartPLS software to analyze the instrument measurement. A set of indicators that did not meet the convergent validity was removed based on this criterion. The remaining indicators met the convergent validity shown in Table 4. Besides the Fornell-Larcker criterion (Table 4), in which the AVE of each construct is greater than the value of correlation between the items and other constructs (Fornell and Larcker, 1981), the reliability can be tracked from the selected item greater than 0.70 (Table 3). Fornell and Larcker (1981) stated that AVE is less than 0.50, but composite reliability is higher than 0.6, the construct validity is still adequate (Fornell and Larcker, 1981).
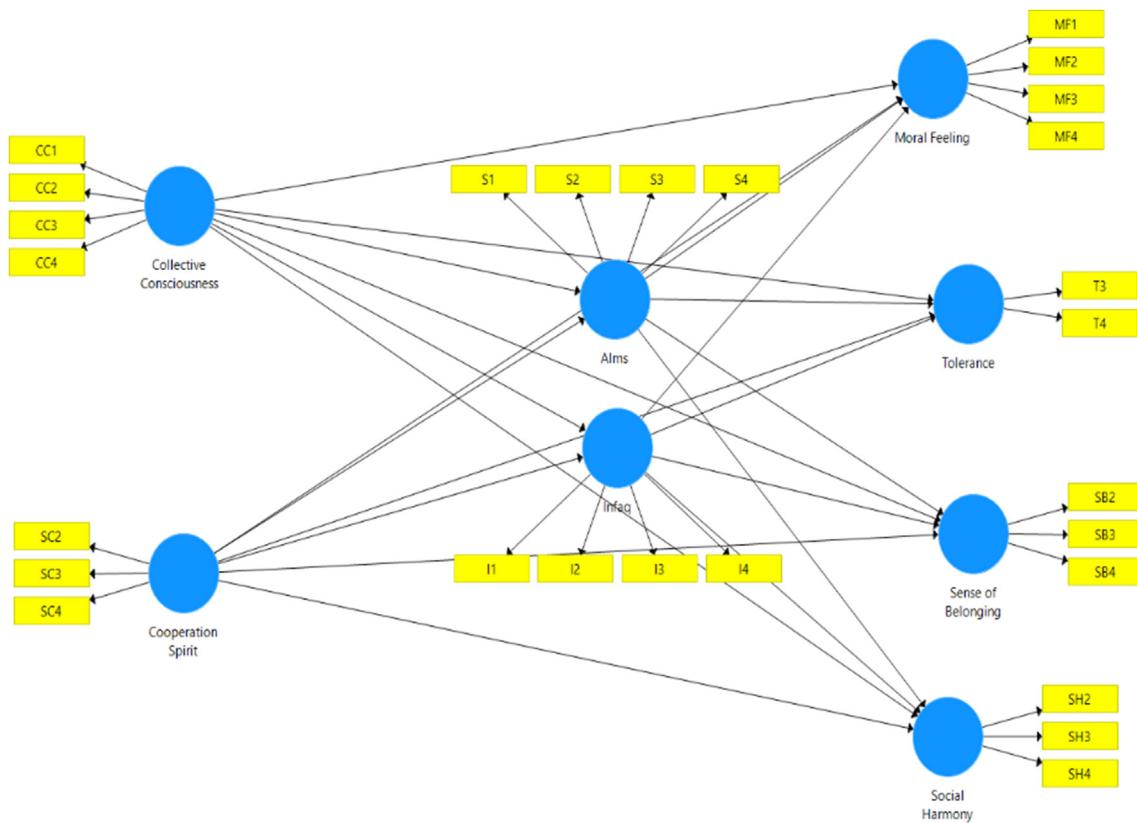
Figure 3. Proposed model.

Table 2. Mean and deviation of all measures.

Variable	Obs	Mean	Std. Dev.	Min	Max
Gender	600	0.500	0.500	0	1
Generosity					
Alms	600	13.973	1.62	7	16
Infaq	600	12.923	1.766	5	16
Social Cohesion					
Tolerance	600	10.783	2.015	6	16
Sense of Belonging	600	9.34	2.564	4	16
Moral Feeling	600	13.577	1.804	5	16
Social Harmony	600	13.207	1.847	7	16
Mechanical Solidarity					
Collective Consciousness	600	13.28	1.713	8	16
Cooperation Spirit	600	13.115	1.724	6	16

Table 4 reveals that a set of selected variables indicate a good discriminant validity based on Fornell and Larcker's (1981) criterion (Fornell and Larcker, 1981). However, various dimensions will show a significant effect when tested through path analysis. The effects of variables that other social scholars do not explore can be identified using path analysis. However, the loading factor is significant in determining the impact of various variables. Hair et al. (2019) emphasized that the loading factor is significant in the structural equation models approach. This is because the loading factor identifies each element's ability to explain each item's variance (Hair et al., 2019). In this context, the highest and lowest outer loading (Table 3) is obtained by dimension (SB2) of sense of belonging (0.90) and (S1) of alms (0.62).

4.5. Discriminant validity

Discriminant validity is analyzed from the Fornell-Larcker Criterion (Table 4) and can also be identified from cross-loadings. Furthermore, discriminant validity is reached when a construct's loading value is larger than all of its cross-loading values on the other constructs (Henseler et al., 2015). Table 5 exhibits all indicator values of outer loading of every construct above their cross-loadings (Bold) on the other construct, therefore, discriminant validity was reached. On the HTMT criterion, validity can emerge when values are less than 0.90 (Henseler et al., 2015). Table 6 confirmed that the HTMT values are less than 0.90, indicating that the discriminant validity is good and meets the criterion.

Table 3. Reflective indicator loadings and internal consistency reliability.

	Items	Loading	α	CR	AVE	VIF
Collective consciousness	CC1	0.71	0.68	0.78	0.51	1.20
	CC2	0.68				1.28
	CC3	0.74				1.36
	CC4	0.72				1.33
Spirit of Cooperation	SC2	0.83	0.74	0.85	0.65	1.38
	SC3	0.84				1.67
	SC4	0.75				1.49
Alms	S1	0.62	0.64	0.78	0.48	1.17
	S2	0.65				1.24
	S3	0.74				1.32
	S4	0.74				1.25
Infaq (Islamic Charity)	I1	0.66	0.62	0.78	0.47	1.19
	I2	0.68				1.23
	I3	0.63				1.19
	I4	0.75				1.26
Moral Feelings	MF1	0.76	0.71	0.82	0.82	1.44
	MF2	0.73				1.37
	MF3	0.74				1.35
	MF4	0.68				1.23
Sense of Belonging	SB2	0.80	0.83	0.89	0.89	1.63
	SB3	0.90				2.41
	SB4	0.87				2.15
Social Harmony	SH2	0.71	0.63	0.80	0.80	1.22
	SH3	0.81				1.36
	SH4	0.74				1.23
Tolerance	T3	0.88	0.76	0.89	0.89	1.60
	T4	0.90				1.60

4.6. Structural model assessment

There is a set of procedures for measuring the structural model, (1) calculating the collinearity with the variance inflation factor (VIF) values (Table 2), (2) the relationship is determined with the test in the second stage, (3) calculating the coefficient determination (R^2), (4) estimating f^2 to determine the relevance of the construct, and explain the selected endogenous construct. The R^2 value and effect size of f^2 was calculated using a blindfolding procedure to identify the Q^2 (Hair et al., 2017).

4.7. Collinearity issue

A collinearity test is applied to determine the model's visibility when used, which is indicated by VIF values (Table 3). The VIF value is a standard for evaluation that should be less than 3 for the inner model,

while the outer model is smaller than 10 (Wong, 2013). Table 3 shows that there have been no collinearity issues because the criterion has been met.

4.8. Structural model relationship

Coefficient path calculation between exogenous, endogenous, and mediator construct was performed with 300 bootstrap subsamples as the default setting of SmartPLS (Figure 4) with a significance level of 5% (one-tailed). In this situation, Table 7 is observed from the final model offered, and several relationships between variables can be explored. At a later stage, the model is a result of reducing a set of variables that cannot explain social cohesion. Before the final model is introduced, it is initially preceded by a regression test between exogenous and endogenous variables without involving mediator variables.

Table 4. Fornell-Larcker criterion.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Alms	0.695							
(2) Collective Consciousness (CC)	0.302	0.717						
(3) Infaq	0.406	0.375	0.687					
(4) Moral Feeling (MF)	0.373	0.380	0.374	0.734				
(5) Sense of Belonging (SB)	-0.011	0.023	0.156	-0.139	0.865			
(6) Cooperation Spirit (SC)	0.084	0.100	0.168	-0.056	0.552	0.809		
(7) Social Harmony (SH)	0.325	0.490	0.367	0.432	-0.105	-0.001	0.762	
(8) Tolerance (T)	-0.021	-0.096	0.116	-0.131	0.617	0.444	-0.139	0.898

Note: the square root value of the AVE of each construct is greater than the value of the correlation between the constructs and other constructs in the model; hence, the model has a good discriminant validity value. The dimensions of social cohesion are "tolerance (T)," "sense of belonging (SB)," "moral feeling (MF)," and "social harmony (SH)." The dimensions of generosity are "alms (A)" and "*infaq* (I)." The dimensions of mechanical solidarity are "collective consciousness (CC)" and "cooperation spirit (SC)."

Table 5. Cross loading.

	Alms	CC	CS	Infaq	MF	SB	SH	T
CC1	0.248	0.713	0.036	0.248	0.351	-0.026	0.405	-0.082
CC2	0.162	0.681	0.093	0.251	0.231	0.071	0.312	-0.020
CC3	0.253	0.745	0.088	0.289	0.267	-0.019	0.295	-0.120
CC4	0.193	0.728	0.078	0.290	0.227	0.051	0.381	-0.045
I1	0.318	0.234	0.152	0.668	0.254	0.154	0.222	0.114
I2	0.209	0.273	0.205	0.688	0.176	0.202	0.174	0.184
I3	0.263	0.241	0.053	0.637	0.221	0.041	0.249	0.030
I4	0.319	0.281	0.060	0.750	0.356	0.041	0.349	0.003
MF1	0.237	0.302	-0.080	0.279	0.768	-0.124	0.318	-0.108
MF2	0.259	0.265	-0.055	0.283	0.736	-0.159	0.287	-0.112
MF3	0.303	0.284	-0.054	0.263	0.748	-0.101	0.327	-0.077
MF4	0.297	0.264	0.029	0.274	0.681	-0.020	0.338	-0.087
S1	0.628	0.178	0.034	0.223	0.239	-0.043	0.210	0.008
S2	0.651	0.179	0.085	0.331	0.225	0.062	0.153	0.055
S3	0.749	0.195	0.057	0.296	0.298	-0.017	0.229	-0.026
S4	0.745	0.272	0.063	0.289	0.271	-0.020	0.289	-0.069
SB2	0.038	-0.009	0.433	0.127	-0.070	0.809	-0.070	0.499
SB3	-0.049	0.003	0.509	0.135	-0.163	0.907	-0.120	0.550
SB4	-0.010	0.063	0.488	0.142	-0.120	0.877	-0.077	0.550
SC2	0.055	0.058	0.830	0.098	-0.093	0.509	-0.086	0.461
SC3	0.086	0.059	0.842	0.161	-0.019	0.458	0.047	0.324
SC4	0.067	0.145	0.753	0.164	-0.008	0.349	0.067	0.260
SH2	0.229	0.374	-0.020	0.183	0.295	-0.135	0.719	-0.167
SH3	0.236	0.382	-0.046	0.344	0.353	-0.066	0.816	-0.077
SH4	0.278	0.365	0.067	0.302	0.337	-0.043	0.746	-0.080
T3	-0.025	-0.055	0.384	0.125	-0.104	0.557	-0.105	0.889
T4	-0.012	-0.115	0.413	0.084	-0.130	0.551	-0.143	0.907

Based on Table 7, there are several exciting trends when exploring the various relationships between the variables, and these relationships are grouped into two. First, there are three significant direct relationships between the dimensions of mechanical solidarity and social cohesion, namely the effect of collective consciousness on moral feeling, the impact of cooperation spirit on moral feeling, the impact of cooperation spirit or collective consciousness on tolerance and collective consciousness or cooperative spirit on social harmony. Meanwhile, these models show significant results indicated by a *p-value* < 0.05. Second, the relationship between the dimensions of mechanical solidarity is mediated by generosity on social cohesion. This model has two forms of effect, namely i) it is not significant due to lack of mediation. Table 7 is marked without the sig symbol of (***), ii) it is significantly based on the PLS-SEM test, and this is indicated by the sig of (***). Based on this empirical fact, the next stage is to conduct the "fitting of the model". Concerning the model case, the "fitting of model" process can be conducted using two methods, namely i) eliminating the dimensions without a significant relationship, ii) integrating the dimensions into one variable, after eliminating the dimensions causing the model not to fit. This was applied to the exogenous and dependent variables by eliminating individualism and a sense

of security, then integrated into one. Meanwhile, the mediating variable was merely integrated since the effect on the model is dynamic.

4.9. Coefficient of determination (R^2)

(Chin, 1998) introduced the range for the coefficient of determination (R^2). This range determines the variance proportion in endogenous variables predicted by exogenous variables. It was classified into three degrees, (1) 0.26 is substantial, (2) 0.13 is moderate, and (3) 0.02 is classified as weak (Cohen, 1988). Table 8 generates a set of pieces of information on the R^2. There is one weak variable (0.094) is alms, one moderate variable is *infaq* (0.15), and three other variables indicate the substantial variable, such as moral feeling, sense of belonging, social harmony, and tolerance.

4.10. Effect size (f^2) and predictive relevance (Q^2)

Suhan et al. (2018) introduced the range of effect size into three classifications 0.02 (small), 0.15 (medium), and 0.35 (significant effect). This range shows the substantive effect of the exogenous latent variables

Table 6. HTMT.

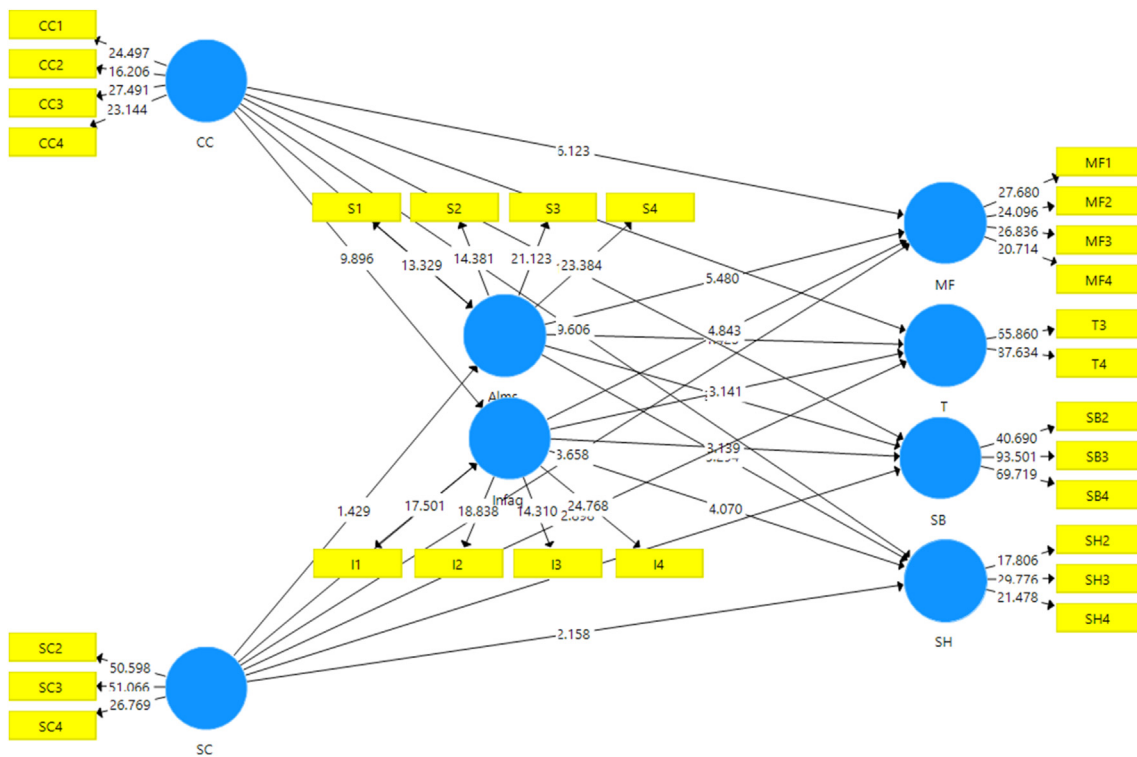|	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
(1) Alms								
(2) Collective Consciousness	0.439							
(3) Cooperation Spirit	0.126	0.165						
(4) Infaq	0.639	0.572	0.263					
(5) Moral Feeling	0.547	0.535	0.103	0.549				
(6) Sense of Belonging	0.093	0.091	0.687	0.221	0.196			
(7) Social Harmony	0.495	0.735	0.129	0.565	0.641	0.154		
(8) Tolerance	0.081	0.139	0.570	0.176	0.177	0.776	0.203	

Figure 4. Fit model of social cohesion.

Suhan et al. (2018). In addition, the Stone-Geisser test (Q^2) is popular to measure how well the observation value is generated by the model and the parameter (Henseler et al., 2009). In this situation, the Q^2 value greater than 0 indicates that the model predictive is relevant. However, the Q^2 value less than 0 indicates the model does not have predictive relevance.

Table 9 indicates various information on effect size (f^2), First, the significant effect size (f^2), i.e., "effect size of spirit cooperation on the sense of belonging". Second, the medium effect size (f^2), i.e., the effect size of the spirit of cooperation on tolerance and collective consciousness on social harmony. Third, the small effect size (f^2), i.e., collective consciousness, affects moral feelings, sense of belonging, tolerance, and social harmony. Table 10 indicates small predictive relevance (i.e., alms, *infaq*, moral feelings) and medium of predictive significance (i.e., sense of belonging, social harmony, and tolerance).

4.11. Model fit

Figure 4 is a fit model with two dimensions of the independent variable "MC" (mechanical solidarity), collective consciousness, and cooperation spirit. The moderating variable "G" (generosity) is an integration of two dimensions (alms and *infaq*). The dependent variable "SC" (social cohesion) is an integration of four measurements (moral feeling, tolerance, sense of belonging, and social harmony). There are several arguments why the model in Figure 4 is called a good and valid model. First, the value of SRMR is 0.071, or less than 0.08, hence, the selected model has represented a good fit. Hox et al. (2015) asserted that the RMSEA value of <0.08 indicates that the model in Path Analysis is fit (Hameme et al., 2013; Hasman, 2015). In this situation, the standard fit index (NFI) value is 0.623, which strengthens the conclusion that the final model produced through Path Analysis is good (Streiner, 2005; Devlieger and Rosseel, 2017). Each relationship between variables and the accompanying dimensions can represent empirical facts, where two sizes of mechanical solidarity influence social cohesion. Similarly, the intervening variable generosity can strengthen the effect of the independent variable on the dependent.

4.12. The robustness principle

Table 11 confirms one robust conclusion, where the dimensions of mechanical solidarity affect social cohesion. It is evident from the matrix in Table 11 that cooperation spirit consistently affects social cohesion. Cooperation spirit significantly affects social cohesion even with the inclusion of an interaction variable. This is similar to the dimension of generosity, namely alms and *infaq*. The dimension is robust in influencing social cohesion in Yogyakarta and West Sumatra, as indicated by a p-value <0.05. However, there is a significant change with the inclusion of the interaction variable between social cohesion and mechanical solidarity in waqf into insignificant.

Furthermore, Table 11 information is the consistency of the influence of generosity on dynamic social cohesion, depending on the presence or absence of other variables capable of influencing Muslim communities. The spirit of cooperation has consistently influenced the social cohesion of the presence or absence of other variables in the regression model. Therefore, the nature of collaboration is a universal variable and presumably can be used as the main predictor of social cohesion in the Muslim community in Indonesia.

5. Discussion

5.1. Social cohesion in ramadan: an alternative explanation

Discussing why social cohesion during Ramadan is strengthened by mechanical solidarity through Islamic generosity is necessary. Social cohesion cannot be explained only by referring to the conventional theory, particularly with Islamic generosity as an intervening variable. This variable is unknown in the idea of social cohesion widely introduced in the social sciences, particularly sociology. Even the concept revision does not include and considers Islamic generosity as a moderating variable that strengthens the relationship between mechanical solidarity and social cohesion (Fonseca et al., 2019). This study provides an alternative explanation regarding social cohesion when Muslims carry out religious rites and rituals full of spiritual and social values (Moller, 2005; Shalihin

Table 7. Final result.

Parameters	B	t-statistics	p-value	Results
Path Coefficients				
Alms- > MF	0.224	5.838	0.000	Accepted***
Alms- > SB	-0.090	2.282	0.023	Accepted***
Alms- > SH	0.124	3.139	0.002	Accepted***
Alms- > T	-0.059	1.370	0.171	Rejected
CC- > Alms	0.296	7.409	0.000	Accepted***
CC- > Infaq	0.362	10.101	0.000	Accepted***
CC- > MF	0.246	6.042	0.000	Accepted***
CC- > SB	-0.049	1.318	0.188	Rejected
CC- > SH	0.388	9.261	0.000	Accepted***
CC- > T	-0.171	4.514	0.000	Accepted***
Infaq- > MF	0.214	4.777	0.000	Accepted***
Infaq- > SB	0.120	3.037	0.003	Accepted***
Infaq- > SH	0.178	3.821	0.000	Accepted***
Infaq- > T	0.129	2.965	0.003	Accepted***
SC- > Alms	0.055	1.417	0.157	Rejected
SC- > Infaq	0.132	3.076	0.002	Accepted***
SC- > MF	-0.135	3.616	0.000	Accepted***
SC- > SB	0.545	18.272	0.000	Accepted***
SC- > SH	-0.081	2.311	0.000	Accepted***
SC- > T	0.444	12.704	0.000	Accepted***
Specific Indirect Effects (Mediation Effects)				
Parameters		t-statistics	p-values	Results
CC- > Alms- > MF	0.066	4.733	0.000	Accepted***
SC- > Alms- > MF	0.012	1.377	0.169	Rejected
CC- > Infaq- > MF	0.077	4.296	0.000	Accepted***
SC- > Infaq- > MF	0.028	2.520	0.012	Accepted***
CC- > Alms- > SB	-0.027	2.166	0.031	Accepted***
SC- > Alms- > SB	-0.005	1.117	0.265	Rejected
CC- > Infaq- > SB	0.043	2.869	0.004	Accepted***
SC- > Infaq- > SB	0.016	1.978	0.048	Accepted***
CC- > Alms- > SH	0.042	2.890	0.004	Accepted***
SC- > Alms- > SH	0.008	1.280	0.201	Rejected
CC- > Infaq- > SH	0.064	3.445	0.001	Accepted***
SC- > Infaq- > SH	0.023	2.307	0.021	Accepted***
CC- > Alms- > T	-0.017	1.329	0.185	Rejected
SC- > Alms- > T	-0.003	0.004	0.847	Rejected
CC- > Infaq- > T	0.047	2.857	0.004	Accepted***
SC- > Infaq- > T	0.017	2.007	0.045	Accepted***

et al., 2020). Therefore, it is necessary to elaborate the theoretical explanation on two important issues i) how mechanical solidarity affects social cohesion and ii) how generosity strengthens mechanical solidarity to sustain social cohesion.

This study has identified two dimensions of mechanical solidarity that affect collective consciousness and cooperation spirit. Furthermore, collective consciousness directly affects moral feeling and social harmony. The cooperation spirit also directly affects moral feelings, as indicated by the p-value <0.05. It means that the effects of these two dimensions on social cohesion are highly significant. In this situation, Thijssen (2012)

Table 8. Coefficient determination (R^2).

	R Square	R Square Adjusted	Consideration
Alms	0.094	0.091	Weak
Infaq	0.158	0.155	Moderate
Moral Feeling	0.265	0.260	Substantial
Sense of Belonging	0.319	0.315	Substantial
Social Harmony	0.302	0.297	Substantial
Tolerance	0.230	0.224	Substantial

Table 9. f^2 Result.

	f^2	Effect size
CC- > MF	0.069	Small
CC- > SB	0.003	Small
CC- > T	0.032	Small
CC- > SH	0.249	Medium
SC- > MF	0.024	Small
SC- > SB	0.423	Large effect
SC- > T	0.249	Medium
SC- > SH	0.009	Small

Table 10. Predictive relevance.

	Q^2	Predictive relevance
Alms	0.043	Small
Infaq	0.072	Small
Moral Feelings	0.137	Small
Sense of Belonging	0.235	Medium
Social Harmony	0.170	Medium
Tolerance	0.178	Medium

understood that mechanical solidarity is related to the community's social processes. This process includes the integration of various symbolic and ritual relationships between culture and religion (Thijssen, 2012). Therefore, mechanical solidarity cannot automatically strengthen social cohesion. Mechanical solidarity grows through activities and rituals based on collective consciousness. In this context, the relationship between the collective consciousness and the dimensions of social cohesion can be verified and recognized as linear with the theory.

Pope and Johnson (1983) stated that mechanical solidarity consists of communality, similitudes, and likenesses (Pope and Johnson, 1983). It grows as a product of ongoing social identification, and the community carries out this identification to obtain common ground regarding structure, values, and identity. At this stage, solidarity can reduce the importance of individuality (Pope and Johnson, 1983) and replace it with collective consciousness. This concept becomes the foundation and increasingly confirms the empirical findings of why the collective

Table 11. Matrix effect of interaction variable on regression model.

Variables	Social Cohesion			
	Model 1	Model 2	Model 3	Model 4
Alms	0.370***	0.179	0.0283	0.0471**
	(0.121)	(0.117)	(0.0182)	(0.0232)
Infaq	0.910***	0.642***	0.0492***	0.0498**
	(0.117)	(0.116)	(0.0184)	(0.0235)
Cooperation Spirit		0.503***	0.0397**	-3.447***
		(0.124)	(0.0195)	(0.0410)
Collective Consciousness		0.351***	-3.455***	-0.0254
		(0.130)	(0.0318)	(0.0259)
Social_C*Collective Consciousness			0.0733***	0.0686***
			(0.000473)	(0.00159)
Social_C*Cooperation Spirit				0.0750***
				(0.000623)
Constant	20.96***	13.63***	45.01***	44.59***
	(1.821)	(1.955)	(0.365)	(0.465)
Observations	600	600	600	600
R-squared	0.289	0.364	0.985	0.975

Note: Standard errors in parentheses ***p < 0.01, **p < 0.05, *p < 0.10.

consciousness is an important part of mechanical solidarity. The context also explains why mechanical solidarity can be formed through religious momentum. Empirically, Ramadan for Muslims is not only a moment where religious rituals are carried out consistently. Instead, the traditions contain spiritual and social values (Hackney, 2009; Mujtaba, 2016). The consequences of increased religious rituals (fasting, tarawih prayers, and Qur'an *tadarus*) and the acceleration of social piety through religious activities such as alms and *infaq* promote the strengthening of mechanical solidarity. In the next stage, all activities contribute to social cohesion of Muslims, particularly in Yogyakarta and West Sumatra. Another meaning to highlight is that the concept in the relationship as co-factors with an impact on social cohesion is not autonomous. However, in the context of the Muslim community, all activities with the dimensions of generosity become a factor that mediates mechanical solidarity to strengthen the social cohesion of Muslims further.

Empirically, the dimensions of generosity (alms and *infaq*) have been identified to mediate mechanical solidarity and social cohesion. Through this study, generosity as an intervening variable is remembered to strengthen the effect of the concepts. Table 7 provides empirical findings and explains which dimensions of mechanical solidarity are significantly mediated by the dimensions of generosity influencing the various sizes of social cohesion. Therefore, several relationship patterns can be formulated between the dimensions of the exogenous, mediator, and endogenous variables. Two ways of relationships can be developed from the hypothesis test carried out, and the first is a direct-sided relationship of variables without mediator variables. In this case, there are twenty hypotheses, of which three show no significant relationship, namely (i) the influence of alms on tolerance is rejected seen from the *p-value* value > 0.05, (ii) the impact of the variable collective consciousness on the sense of belonging is also exercised since p-value>0.05, (iii) the influence of the spirit of cooperation on the alms shows the absence of impact. This is confirmed by a p-value of 0.157, greater than 0.05, and there are 17 accepted hypotheses (see Table 7). Second, the relationship of exogenous variables to endogenous is mediated by two dimensions of generosity, i.e., alms and *infaq*. In this case, there are 16 hypotheses, of which five are rejected:

(i) The relationship of SC (Spirit of Cooperation) mediated by *alms* to moral feeling shows an insignificant relationship. These two variables are not moderated by *charities* (*tzedakah*) confirmed through a p-value (0.169) > 0.05,

(ii) The generosity (alms) dimension also does not mediate the relationship of the spirit of cooperation (SC) to the sense of belonging. It is characterized by a p-value (0.265) greater than 0.05,

(iii) When the alms variable is used to mediate the relationship between the spirit of cooperation and social harmony. From the p-values (0.201) greater than 0.05, it means that this mediator variable is not able to mediate the relationship between the two variables,

(iv) The same is true of the hypothesis, where the alms variable does not moderate the influence of collective consciousness on tolerance as a mediator,

(v) The same is true in the relationship between the spirit of cooperation and tolerance, and the mediator variable being alms. The p-values > 0.05 indicate an insignificant relationship, meaning this hypothesis is rejected.

The ability of generosity (alms and *infaq*) to mediate the relationship between the various dimensions of mechanical solidarity and social cohesion can be explained in several arguments. First, Islam introduces instruments to develop social and economic life through generosity and philanthropic schemes. Several studies showed that charity in Islam could identify Muslims' quality of social life (Elesin, 2017). However, no social scholar explicitly identified the position of generosity in the quality of social life. This study verified that the scheme of generosity in Islam is an effective intervening variable, mediating mechanical solidarity and

social cohesion and mediating between other variables and Muslims' quality of social life. In this context, statistical estimates are robust and consistent, not even showing variations, which seems to argue that the data is only taken from populations with characteristics such as Muslims. Second, the effectiveness of generosity in mediating mechanical solidarity and social cohesion is supported by the momentum and institutionalization of religiosity through religious and social worship activities (Moller, 2005; Schielke, 2009; Campante and Yanagizawa-Drott, 2015). Even though mechanical solidarity can have a direct effect on social cohesion, various schemes of ritualized generosity are empirically able to strengthen the relationship between mechanical two variables. However, this has become an alternative explanation that religious momentum such as Ramadan will strengthen the mediating function of generosity to form the social cohesion of Muslims. The concepts of Schiefer and van der Noll (2016) and Dragolov et al. (2016) were further revised with the inclusion of generosity mediator variables. Therefore, social cohesion during Ramadan strengthening is caused by the generic domain of relations, connectedness, and a focus on the common good (Dragolov) or the six functional dimensions (Schiefer) and supported by strengthening philanthropic activities.

6. Conclusion

According to Warner et al. (2018), religion and state can become a force that can encourage an increase in the spirit of generosity among adherents of Islam and Catholic Christianity (Warner et al., 2018). This study does not elaborate on how generosity can magnify the impact of mechanical solidarity, such as collective consciousness and the spirit of collaboration on social cohesion. It seems to provide an alternative explanation of how generosity, such as waqf and almsgiving, can strengthen the dimensions of mechanical solidarity to identify and influence social cohesion in the people of Yogyakarta and West Sumatra. It is also the first to identify the effect of generosity as an intervening variable modulating the relationship between mechanical solidarity and social cohesion. It showed that generosity can strengthen the relationship between the two variables. This finding can certainly have several implications, such as i) theoretically offering novelty that schemes of generosity, i.e., alms, and *infaq*, have succeeded in strengthening the effect of mechanical solidarity on the social cohesion of the community, ii) becoming a reference for philanthropic institutions to create various schemes of generosity with philanthropic schemes such as zakat as capital to strengthen the social life of Muslims. However, one of the limitations is that the case is limited to the provinces of Yogyakarta and West Sumatra. This can be re-examined by involving a wider population, which is useful for testing the consistency of the model. At the same time, it becomes a policy foundation to strengthen the schemes of generosity as an instrument to identify the quality of social life of Muslims.

Declarations

References

Addeo, F., et al., 2017. Social cohesion in the time of crisis: an empirical research on EU member states. Athen. J. Social Sci. 4 (3), 229–248.

Ahmad, S., Goel, K., 2012. Psycho-social behaviour and health benefits of islamic fasting during the month of ramadan. J. Community Med. Health Educ. 2 (9).

Alexopoulos, E.C., 2010. Introduction to multivariate regression analysis. Hippokratia 14 (Suppl 1), 23–28. Available at: http://www.ncbi.nlm.nih.gov/pubmed/21487487.

Anderson, T.W., 1958. An Introduction to Multivariate Statistical Analysis. John Wiley & Sons, Ltd, New York.

Andreoni, J., 2006. Philanthropy. In: Kolm, S.-C., Ythier, J.M. (Eds.), Handbook of Giving, Reciprocity and Altruism. North Holland, Amsterdam, pp. 1201–1269.

Antoun, R.T., 1986. The social significance of ramadan in an arab village. Muslim World 8 (1), 36–42. & 95–104.

Asril, 2013. Perayaan tabuik dan tabot : jejak ritual keagamaan Islam syi'ah di Pesisir barat Sumatra. Panggung 23 (3), 309–320.

Azman, A.H.N., 2013. Structural equation modelling. In: Intellectual Capital and Public Sector Performance. Emerald, pp. 93–123.

Azam, M., Khalid, M.U., Zia, S.Z., 2019. Board diversity and corporate social responsibility: the moderating role of Shariah compliance. Corp. Govern. 19 (6), 1274–1288.

Bialkowski, J., Etebari, A., Wisniewski, T.P., 2010. Piety and Profits : Stock Market Anomaly during the Muslim Holy, Religion. No. 52/2010. New Zealand.

Blankinship, K.Y., 1996. Andrew rippin, Muslims: their religious beliefs and practices. Int. J. Middle East Stud. 28 (3), 422–423.

Bon, G.Le, 1987. The Crowd: A Study of the Popular Mind. The MacMillan Co., New Jersey.

Botterman, S., Hooghe, M., Reeskens, T., 2012. One size fits all"? An empirical study into the multidimensionality of social cohesion indicators in Belgian local communities. Urban Stud. 49 (1), 185–202.

Breen, R., 1983. Path analysis: an example. J. Agric. Econ. 34 (3), 417–425.

Buitelaar, M., 1993. Fasting and Feasting in Morocco: Women's Participation in Ramadan. Oxford & Providence: Berg Publisher, London.

Campante, F., Yanagizawa-Drott, D., 2015. Does religion affect economic growth and happiness? Evidence from Ramadan. Q. J. Econ. 130 (2), 615–658.

Chin, W.W., 1998. The partial least squares approach to structural equation modelling. In: Marcoulides, G.A. (Ed.), Modern Methods for Business Research (Vol. 295, Issue 2, pp. 295–336). Lawrence Erlbaum Associates.

Cohen, J., 1988. Statistical Power Analysis for the Behavioral Science. Lawrence Erlbaum Associates, Hillsdale, NJ.

Dakduk, S., González, Á., Portalanza, A., 2019. Learn about Structural Equation Modeling in SmartPLS with Data from the Customer Behavior in Electronic Commerce Study in Ecuador (2017), Learn about Structural Equation Modeling in SmartPLS with Data from the Customer Behavior in Electronic Commerce Study in Ecuador (2017). 1 Oliver's Yard, 55 City Road. SAGE Publications, Ltd, London EC1Y 1SP United Kingdom.

Devlieger, I., Rosseel, Y., 2017. Factor score path analysis. Methodology 13 (Supplement 1), 31–38.

Dragolov, G., et al., 2016. Social Cohesion in the Western World: what Holds Societies Together: Insights from the Social Cohesion Radar. Springer, Switzerland.

Elesin, A.M.J., 2017. The role of Al-awqāf (islamic endowments) in poverty alleviation and community development in the Nigerian context. J. Muslim Minority Aff. 37 (2), 223–232.

Fard, M.H.T., Noori, A., Shafie, A.M., 2016. Criteria of the Empathy and Compassion in the Muslim World from the Perspective of the Supreme Leader (His Shadow Highly Extended) Inspired by the Culture of Ghadir. International Journal Of Humanities and Cultural Studies, pp. 896–907.

Fenger, M., 2012. Deconstructing social cohesion: towards an analytical framework for assessing social cohesion policies. Corvinus J. Sociol. Social Pol. 2 (August), 39–54.

Fonseca, X., Lukosch, S., Brazier, F., 2019. Social cohesion revisited: a new definition and how to characterize it. Innovat. Eur. J. Soc. Sci. Res. 32 (2), 231–253.

Fornell, C., Larcker, D., 1981. Structural equation models with unobservable variables and measurement error: algebra and statistics. J. Market. Res. 18 (3), 382–388.

Frankl, P.J.L., 1996. The observance of ramadan in Swahili-Land: with special reference to Mombasa. J. Relig. Afr. 26 (4), 416.

Green, A., Janmaat, J.G., 2011. Regimes of Social Cohesion, Regimes of Social Cohesion. Palgrave Macmillan UK, London.

Green, A., Unwin, L., 2011. Regimes of Social Cohesion: Societies and the Crisis of Globalization. Palgrave Mc Millan, New York.

Hackney, A.B., 2009. Ramadan: Holidays and Celebrations. Chelsea House, New York.

Hair, J., et al., 2017. A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), Sage. SAGE Publications, Inc, London.

Hair, J.F., et al., 2019. When to use and how to report the results of PLS-SEM. Eur. Bus. Rev. 31 (1), 2–24.

Hasman, A., 2015. An introduction to structural equation modeling. Stud. Health Technol. Inf. 213, 3–6.

Hellman, J., 2006. Ritual Fasting on West Java: Empowerment, Submission, and Control. European Social Science Java Network 14th Work Shop, pp. 1–111.

Hellman, J., 2008. The significance of eating during ramadan: consumption and exchange of food in a village in West java. Food Foodw. 16 (3), 201–226.

Henseler, J., Ringle, C.M., Sarstedt, M., 2015. A new criterion for assessing discriminant validity in variance-based structural equation modeling. J. Acad. Market. Sci. 43, 115–135.

Henseler, J., Ringle, C.M., Sinkovics, R.R., 2009. The use of partial least squares path modeling in international marketing. In: Advances in International Marketing, pp. 277–319.

Hindun, 2014. The balance of moral knowing, moral feeling, and moral action in language learning. In: Proceeding of the Third International Seminar on Languages and Arts. Padang, pp. 227–230.

Hox, J.J., De Leeuw, E.D., Zijlmans, E.A.O., 2015. Measurement equivalence in mixed mode surveys. Front. Psychol. 6 (February), 1–11.

Jenson, J., 2010. Defining and Measuring Social Cohesion. UNRISD & Commonwealth Secretariat, London. Available at: https://www.files.ethz.ch/isn/151856/Jenson ebook.pdf.

Kapteijns, L., 2008. The disintegration of Somalia: a historiographical essay. Bildhaan Int. J. Somali Stud. 1, 11–52.

Kasmo, M.A., et al., 2015. The Role of Religion in Social Cohesion within the Contemporary Muslim Society in Malaysia: Revisited. Mediterranean Journal of Social Sciences.

Kearns, A., Forrest, R., 2000. Social cohesion and multilevel urban governance. Urban Stud. 37 (5–6), 995–1017.

Kite, M.E., Whitley, B.E., 2018. Factor Analysis, path analysis, and structural equation modeling. In: Principles of Research in Behavioral Science, fourth ed. Routledge, New York, pp. 466–495. 2018. Revised edition of Principles of research in behavioral science, 2013.: Routledge.

Kusuma, K., 2016. Zakah index: Islamic economics' welfare measurement. Indones. J. Islam Muslim Soc. 6 (2), 273–301.

McKenna, S., et al., 2018. Are diverse societies less cohesive? Testing contact and mediated contact theories. PLoS One 13 (3), e0193337. Edited by S. Lozano.

Moller, A., 2005. Ramadan in Java: the Joy and Jihad of Ritual Fasting. Department of History and Anthropology of Religions, Lund University, Lund, Sweden.

Mujtaba, U., 2016. Ramadan : the month of fasting for Muslims , and tourism studies — mapping the unexplored connection. TMP 19, 170–177.

Odabasi, Y., Argan, M., 2009. Aspects of underlying ramadan consumption patterns in Turkey. J. Int. Consum. Market. 21 (3), 203–218.

Oosterbeek, H., Klaauw, B. Van Der, 2013. Economics of education review ramadan , fasting and educational outcomes. Econ. Educ. Rev. 34, 219–226.

Østergaard, L., Weisskoff, R.M., Chesler, D.A., Gyldensted, C., Rosen, B.R., 1996. High resolution measurement of cerebral blood flow using intravascular tracer bolus passages. Part I: Mathematical approach and statistical analysis. Magn. Reson. Med. 36 (5), 715–725.

Parsons, T., 1937. *The Structure of Social Action. American Sociological Review*. McGrowHill, New York.

Pope, W., Johnson, B.D., 1983. Inside organic solidarity. Am. Socio. Rev. 48 (5), 681.

Riyadi, I., 2016. Emotional intelligence: the prescpective of daniel goleman and its relevance in islamic education. Ta'dib 20 (2), 221.

Samuels, P., 2016. Advice on exploratory factor Analysis, 5. Centre for Academic Success, Birmingham City University, p. 2 (June).

Schiefer, D., van der Noll, J., 2016. The essentials of social cohesion: a literature review. Soc. Indicat. Res. 132 (2), 579–603.

Schielke, S., 2009. Being good in Ramadan: ambivalence, fragmentation, and the moral self in the lives of young Egyptians. J. Roy. Anthropol. Inst. 15 (1), 24–40.

Schiermer, B., 2014. 'Durkheim's Concept of Mechanical Solidarity – where Did it Go?'. Durkheimian Studies · (March).

Schmidt, L., 2012. Urban Islamic Spectacles: Transforming the Space of the Shopping Mall During Ramadan in Indonesia. Inter-Asia Cultural Studies 13 (3), 384–407.

Shaikh, S.A., et al., 2017. Towards an integrative framework for understanding Muslim consumption behaviour. Humanomics 33 (2), 133–149.

Shalihin, N., et al., 2020. Ramadan and strengthening of the social capital of Indonesian Muslim communities. HTS Teologiese Studies/Theol. Stud. 76 (3), 1–9.

Sharma, M., 2015. Social harmony for being social. Global J. Hum. Soc. Sci.: C Sociol. Cult. 15 (6), 3–7.

Sholihin, M., Ratmono, D., 2020. Analisis SEM-PLS Dengan WarpPLS 7.0 Untuk Hubungan Nonlinier Dalam Penelitian Sosial Dan Bisnis, second ed. Penerbit Andi, Yogyakarta.

Streiner, D.L., 2005. Finding our way: an introduction to path analysis. Can. J. Psychiatr. 50 (2), 115–122.

Suhan, Samartha, V., Kodikal, R., 2018. Measuring the effect size of coefficient of determination and predictive relevance of exogenous latent variables on endogenous latent variables throught PLS-SEM. Int. J. Pure Appl. Math. 119 (18), 39–48. Available at: https://acadpubl.eu/hub/2018-119-18/1/4.pdf.

Sullivan, L., 2012. Path analysis. In: *The SAGE Glossary Of the Social And Behavioral Sciences*. 2455 Teller Road, Thousand Oaks California 91320 United States. SAGE Publications, Inc., pp. 1–4

Thijssen, P., 2012. From mechanical to organic solidarity, and back. Eur. J. Soc. Theor 15 (4), 454–470.

Trewin, D., Hall, J., 2005. Statistics, Knowledge and Policy, Statistics, Knowledge and Policy: Key Indicators to Inform Decision Making. OECD.

Variyath, A.M., Brobbey, A., 2020. Variable Selection in Multivariate Multiple Regression', PLOS ONE. Edited by F. Chen, 15(7), p. e0236067.

Warner, C.M., et al., 2018. Generating Generosity in Catholicism and Islam: Beliefs, Institutions, and Public Goods Provisions. Cambridge University Press, UK.

Wills-herrera, E., 2011. Feeling safe. In: Encyclopedia Od Quality of Life and Subjective Wellbeing Research. Springer, New York.

Wong, K.K., 2013. Partial least squares structural equation modeling (PLS-SEM) techniques using SmartPLS. Market. Bull. 24 (1), 1–32.

Yocum, A.M., O'Brien, W.F., 1992. Separated Flow in a Low Speed Two-Dimensional Cascade: Part I — Flow Visualization and Time-Mean Velocity Measurements. Volume 1: Turbomachinery, 1.